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АНГЛІЙСЬКА МОВА ДЛЯ ІНФОРМАЦІЙНИХ ТЕХНОЛОГІЙ

**Навчальний посібник
1 курс**

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АНГЛІЙСЬКА МОВА ДЛЯ ІНФОРМАЦІЙНИХ ТЕХНОЛОГІЙ / Навчальний посібник з англійської мови для студентів 1 курсу спеціальності “Кібербезпека та захист інформації” / Гольцева М. І., Мельник О. В. – Київ: ФО-П Білецький Р.Г., 2025. – 280 с.

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Навчальний посібник призначений студентам 1 курсу спеціальності “Кібербезпека та захист інформації” для реалізації практичних занять та самостійної роботи. Посібник містить інформативні навчальні тексти, практичні завдання, матеріали для самостійної роботи, блоки професійних ідіом та словник термінів, призначені для розвитку й вдосконалення навичок та вмінь усного та писемного спілкування англійською мовою на основні теми інформаційних технологій та кібербезпеки. Усі тексти посібника відібрано з сучасних автентичних джерел. Посібник рекомендовано для користувачів з рівнем володіння англійською мовою не нижче B1 (Intermediate), що дозволяє ефективно працювати з автентичними матеріалами та спеціалізованою лексикою у галузі цифрових технологій.

Для студентів 1 курсу навчання немовних відділень вищих навчальних закладів, перекладачів, викладачів та науковців, яких цікавлять сучасні інформаційні технології, а також просто для охочих зануритись у захоплюючий англomовний світ цифрової грамотності.

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ПЕРЕДМОВА

Навчальний посібник “Англійська мова для інформаційних технологій” розроблений для студентів I курсу спеціальності “Кібербезпека та захист інформації” і розрахований на 148 годин практичних занять. Посібник може використовуватись також і для заочної форми навчання. Посібник рекомендовано для користувачів з рівнем володіння англійською мовою не нижче B1 (Intermediate), що дозволяє ефективно працювати з автентичними матеріалами та спеціалізованою лексикою у галузі цифрових технологій.

Основною метою посібника є поглиблення мовної компетенції студентів, поповнення їхнього словникового запасу з інформаційної термінології, тренування й розвиток вмінь та навичок спілкування англійською мовою на професійні теми з інформаційних технологій та кібербезпеки, а також вдосконалення навичок та вмінь усного та письмового перекладу фахової літератури з цифрової тематики.

Навчальний посібник складається з 30 уроків, розрахованих на 2 семестри навчання, блоку завдань для самостійної роботи, списку професійно-спрямованих ідіом з українським перекладом, глосарію термінів та акронімів, списку використаних джерел.

Всі завдання спрямовані на закріплення знань професійної лексики й розвиток навичок та вмінь професійного спілкування, а також навичок та вмінь усного і письмового перекладу.

Тематика текстів охоплює різні галузі цифрової грамотності та висвітлює актуальні питання з інформаційних технологій кібербезпеки, що допомагають студентам значно збагатити свій лексичний запас, закріпити свої мовні знання та удосконалити свої професійно-орієнтовані англомовні мовленнєві навички.

Базові тексти, відібрані з автентичних джерел, розташовані у певній послідовності відповідно до їхнього рівня складності та лексичного наповнення з метою, щоб студенти мали змогу систематично повторювати й засвоювати терміни інформаційних технологій, розвивати й вдосконалювати навички усного й писемного мовлення та перекладу професійної літератури.

PART I

UNIT 1. A Foreign language in the field of information technologies

TASKS:

1. Read the text and briefly discuss (write down) its main ideas.



For several reasons, English has become a vital language in Information and Communication Technology (ICT) and cybersecurity. Its role is so critical that it's often considered the global lingua franca of these domains. Here's why English is essential for ICT and cybersecurity professionals:

1. *Global Communication*

- Collaboration with international teams: Many ICT and cybersecurity projects involve teams from different countries. English serves as the common language for professionals across the globe, enabling collaboration between diverse cultures and regions.
- Conferences and workshops: Major ICT and cybersecurity conferences, training sessions, and certifications are conducted in English, ensuring professionals stay updated with the latest technologies and trends.

2. *Access to Information and Resources*

- Technical documentation: A vast majority of programming languages, software development kits (SDKs), and technical manuals are written in English. Mastering the language makes it easier for professionals to understand and apply the latest advancements.
- Research papers and publications: Most academic research in ICT and cybersecurity is published in English. To stay current with new developments, professionals need to be proficient in reading and understanding these resources.

3. *Industry Standards and Certifications*

- Certifications: Industry-standard certifications like CISSP (Certified Information Systems Security Professional), CEH (Certified Ethical Hacker), and CompTIA Security+ are mostly available in English. Gaining these qualifications requires fluency in the language, as both the study material and exams are often in English.

- Standards and protocols: Cybersecurity standards such as ISO/IEC 27001, NIST, and frameworks like GDPR compliance documentation are published primarily in English, and understanding them is crucial for compliance.

4. Cybersecurity Threat Intelligence

- Global Threat Reports: Many threats intelligence reports, malware analysis, and security advisories are published in English. Proficiency in the language ensures professionals can quickly access and respond to new threats.

- Cybercrime and Hacking Communities: English is the dominant language used in global hacking forums and communities. Cybersecurity professionals need to monitor these channels to gather intelligence and stay informed about emerging threats.

5. Programming and Software Development

- Programming languages: Almost all major programming languages, like Python, Java, and C++, use English keywords and syntax. A strong grasp of English simplifies coding and understanding technical concepts.

- Online resources and troubleshooting the vast majority of software development resources, tutorials, forums (like Stack Overflow), and online communities communicate in English. This helps in problem-solving and debugging code efficiently.

6. Cybersecurity Tools and Software

- User interfaces of security tools: Tools like Wireshark, Metasploit, and Kali Linux are primarily developed with English-language interfaces. Proficiency in English helps users understand commands, logs, and configurations effectively.

- Reporting and communication: Cybersecurity incidents often require professionals to write detailed reports and communicate with stakeholders, which usually happens in English, particularly in multinational organizations.

7. Job Market and Career Growth

- International job opportunities: Many ICT and cybersecurity positions, especially at the global level, require strong English language skills to communicate with clients and colleagues and to read technical documents. Mastery of English can open doors to job markets around the world.

- Professional networking Platforms like LinkedIn, GitHub, and industry-specific forums often function predominantly in English, making it essential for building a professional network.

For ICT and cybersecurity professionals, English isn't just an advantage – it's a necessity. Proficiency in the language enhances their ability to learn, communicate, and collaborate effectively, making them more competitive in the global job market. From accessing technical resources to staying ahead of cybersecurity threats, English enables professionals to engage fully with the ever-evolving tech landscape.

2. Answer these questions.

1) What types of educational institutions are discussed in the article regarding the use of information and communication technologies in language training?

2) What aspect of language education does the article focus on concerning information and communication technologies?

3) How do information and communication technologies contribute to the formation of language skills?

4) What are the key stages in the introduction of information and computer technologies in language teaching as characterized in the article?

5) What are the primary benefits of using computer-assisted language learning tools as described in the article?

3. State whether the following sentences are True or False (underline the correct option after the sentences). Be ready to provide your arguments.

1) The article deals with modern means of information and communication technologies in the process of language training of students.

2) The main lingua didactic tasks solved by the introduction of information and communication technologies in language education are not defined in the article.

3) The article reveals the potential of information and computer technologies in teaching only grammar.

4) The stages of work on the introduction of information and computer technologies in the process of language teaching are characterized in the article.

5) The keywords mentioned in the article are information and communication technologies, computer-assisted language learning, and language training.

6) The article does not discuss the use of information technologies in higher educational institutions.

4. Translate the following English units into Ukrainian.

1) *foreign language* - _____

2) *Coding in tongues* - _____

3) *Digital polyglot* - _____

4) *Byte by byte, word by word* - _____

5) *Coding without borders* - _____

6) *Syntax and semantics* - _____

5. Give synonyms to the words in bold type.

1) Which **Anglophone** regions in the tech industry do you know?

2) What is his **mother tongue**?

3) To know **a foreign language** is very important nowadays.

4) He is fluent in French, **a valuable skill** in tech collaborations.

5) Can you interpret this **code snippet**?

6. Translate from Ukrainian to English.

- Information and communication technologies- _____
- Computer-assisted language learning - _____
- Language training - _____

7. Explain this word in English without using the given word itself.

- *Code snippet* - _____
- *Second language* - _____
- *Collaboration* - _____

8. Fill in the blanks with the necessary words in the box.

<i>a foreign language</i>	<i>opportunities</i>
<i>International teams</i>	<i>multiple languages</i>

1) Learning _____ can significantly enhance your career _____ in the IT industry.

2) Proficiency in technical terminology is crucial when working with _____ on complex software projects.

3) Understanding _____ allows developers to read documentation and code snippets from various global sources.

9. Fill in the correct form of the present tense (Present Tense Simple and Progressive).

1. The programmer usually _____ (start) work at 9 a.m., but today he _____ (come) in early.
2. Our company _____ (develop) a new AI tool that _____ (help) with customer support.
3. I _____ (install) the latest version of the software right now.
4. She often _____ (forget) to update the project status in the tracking system.
5. The system _____ (not respond) because the server _____ (run) a backup.
6. We _____ (use) cloud computing more often these days to store sensitive data.
7. The IT support team _____ (answer) user queries at the moment.
8. He _____ (usually work) with Python, but this week he _____ (learn) JavaScript.
9. Our developers _____ (fix) the bugs that users _____ (report) in the latest update.
10. Why _____ you _____ (reset) the router again?
11. This software _____ (not support) the new operating system.
12. I _____ (check) the log files because the application _____ (crash) repeatedly.
13. She _____ (always test) her code before deployment.
14. The team _____ (not release) the new version until all modules _____ (pass) the tests.
15. We _____ (currently migrate) our database to a more secure platform.

10. Complete the sentences using the correct form of the present tense (Present Tense Simple and Progressive).

1. The software engineer usually _____ (work) remotely, but today she _____ (attend) a conference in person.
2. Our server regularly _____ (crash) when the traffic _____ (exceed) 10,000 users.
3. I _____ (try) to debug this script, but it still _____ (return) the wrong output.
4. Developers often _____ (use) version control systems like Git to manage code, and we _____ (introduce) it to new interns this week.
5. While the system _____ (compile), he usually _____ (check) his emails.
6. The IT department _____ (not respond) to queries quickly these days because they _____ (implement) a new helpdesk system.
7. Why _____ you _____ (update) the database manually? Our automation tool usually _____ (handle) that.
8. The network administrator _____ (run) a diagnostic now to check why the firewall _____ (block) internal traffic.
9. This framework normally _____ (support) multiple languages, but it _____ (not recognize) TypeScript correctly at the moment.

10. I _____ (not understand) why the algorithm _____ (fail) to sort the array properly.
11. You _____ (always install) third-party plugins without testing. That _____ (cause) problems!
12. At the moment, our team _____ (migrate) all user data to a secure cloud environment.
13. He frequently _____ (attend) webinars on cybersecurity, but he _____ (miss) today's session due to client meetings.
14. The app _____ (run) smoothly most of the time, but right now it _____ (consume) too much memory.
15. They _____ (test) the new feature now, but generally they _____ (deploy) only after full QA approval.

11. Fill in the missing prepositions:

1. The software is vulnerable ____ SQL injection.
2. Always log ____ using a secure password.
3. Developers must comply ____ industry standards.
4. He specializes ____ penetration testing.
5. They succeeded ____ restoring the system.
6. We need to protect sensitive data ____ unauthorized access.
7. She is responsible ____ managing the cloud infrastructure.
8. He's not familiar ____ the latest GDPR regulations.
9. The update is compatible ____ all major operating systems.
10. The technician apologized ____ the delay in restoring service.
11. Many users complain ____ frequent app crashes.
12. Cybersecurity experts warn ____ rising ransomware attacks.
13. This solution consists ____ several integrated modules.
14. I'm currently working ____ a project involving machine learning.
15. The company invested heavily ____ data encryption technologies.

12. Match the terms to their definitions (1–10).

Terms:

- A. Two-factor authentication
- B. Zero-day exploit
- C. Brute-force attack

- D. Social engineering
- E. Botnet
- F. Phishing
- G. Firewall
- H. Encryption
- I. Ransomware
- J. VPN

Definitions:

1. A security method that requires two types of identity verification.
2. A cyberattack that targets a vulnerability not yet known to the software vendor.
3. A method of repeatedly trying different passwords until the correct one is found.
4. A technique where attackers manipulate human behavior to gain unauthorized access.
5. A network of infected computers is controlled remotely to carry out coordinated attacks.
6. A fake communication designed to trick someone into revealing sensitive data.
7. A network security system that monitors and controls incoming and outgoing traffic.
8. A technique used to convert data into a secure, unreadable format.
9. Malicious software that locks data and demands payment to unlock it.
10. A secure connection that hides a user's IP address and encrypts internet traffic.

13. Fill in the blanks using appropriate vocabulary from the box.

open-source, documentation, certifications, collaborate, multilingual, vulnerabilities, compliance, encryption, firewall, infrastructure, credentials, malware, interface, backup, deployment

1. Many developers prefer using _____ tools to contribute and share their work.
2. Proficiency in English allows IT specialists to access up-to-date _____.
3. To work efficiently across borders, teams must be able to _____ smoothly.
4. Global _____ like CISSP are predominantly conducted in English.
5. A _____ platform makes the interface accessible to users from different regions.
6. Outdated software may contain serious security _____.
7. The company was fined due to non-_____ with data protection regulations.
8. Sensitive information must always be protected using strong _____.
9. The IT team configured the _____ to block suspicious traffic.
10. Cloud _____ requires constant monitoring and optimization.

11. Never share your login _____ with unauthorized users.
12. They isolated the system to prevent the spread of the _____.
13. A user-friendly _____ can significantly improve user experience.
14. It's critical to create a secure _____ before system upgrades.
15. The DevOps team scheduled the software _____ for midnight.

14. Complete the second sentence so that it has a similar meaning to the first, using the word in brackets.

1. It's necessary to update your password regularly. (**should**)
2. They are in the middle of running a vulnerability scan. (**currently**)
3. You mustn't share login credentials. (**allowed**)
4. This tool isn't compatible with macOS. (**work**)
5. It's rare for him to make coding errors. (**hardly**)
6. She is responsible for server maintenance. (**in charge**)
7. We started using the new software last month. (**been**)
8. They will finish the update before 6 PM. (**completed**)
9. The issue was more serious than we thought. (**as**)
10. The system failed because of a configuration error. (**due**)
11. I'm sure he didn't mean to delete that file. (**have**)
12. There's a strong possibility the data was leaked. (**may**)
13. We need to encrypt this file before sending it. (**has**)
14. She codes better than anyone else in the team. (**the best**)
15. I haven't finished the report yet. (**still**)

16. Rewrite the following text using formal academic style (50–60 words):

"Lots of IT people don't think that learning English is a big deal. But it's super important. If you don't know English, it's really hard to work in international teams, get a good job, or understand technical stuff."

17. Write a blog post about the role of English in the IT field and share 3 tips to improve technical English. (150–200 words).

UNIT 2. Computers. Use of computers

TASKS:

1. Read the text and briefly write its meaning.

Computers have become an integral part of modern life, revolutionizing the way we work, communicate, and entertain ourselves. Their versatility and power have made them indispensable tools across various fields, from education and business to science and the arts.

1) _____

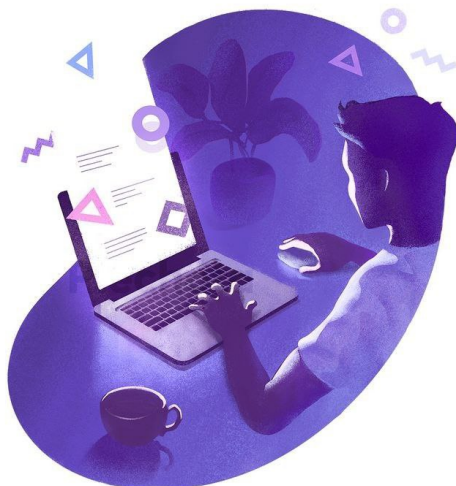
Computers play a pivotal role in education, providing students with access to a vast array of resources and learning tools. Educational software, online courses, and interactive simulations enhance the learning experience, making it more engaging and effective. Teachers use computers to prepare lesson plans, deliver presentations, and assess student progress.

2) _____

In the business world, computers streamline operations, improve productivity, and facilitate communication. From managing accounts and inventory to designing marketing campaigns and conducting virtual meetings, computers enable businesses to operate more efficiently and reach a global audience. Data analysis and management systems help companies make informed decisions and stay competitive.

3) _____

Computers are essential in scientific research, allowing scientists to process large datasets, run complex simulations, and model phenomena that would be impossible to



study otherwise. They enable breakthroughs in fields such as genetics, astronomy, and climate science by providing the computational power needed to analyze vast amounts of information.

4) _____

In our daily lives, computers serve a multitude of purposes. They are used for browsing the internet, communicating with friends and family, shopping online, and managing personal finances. Entertainment options such as gaming, streaming movies and music, and social media are also largely dependent on computers.

5) _____

The healthcare industry relies heavily on computers for managing patient records, utilizing diagnostic tools, and conducting research. Electronic health records (EHRs) enhance the accuracy and accessibility of patient information, while diagnostic software facilitates the detection of diseases and the planning of treatments. Computers also support telemedicine, allowing doctors to consult with patients remotely.

In summary, computers have transformed nearly every aspect of modern life. Their ability to process information quickly and accurately has made them essential tools in education, business, science, healthcare, and everyday activities. As technology continues to advance, the role of computers in our lives is likely to grow even more significant.

2. Match the headings (A-E) to paragraphs (1-5).

- A) In Education**
- B) In Business**
- C) In Daily Life**
- D) In Healthcare**
- E) In Science and Research**

3. Answer these questions.

1) How do computers contribute to education according to the text?

2) What role do computers play in the business world?

3) How are computers utilized in scientific research?

4) What are some of the everyday uses of computers mentioned in the text?

5) How do computers support the healthcare industry?

4. The sentence is True or False.

- 1) Computers are essential tools in education, according to the text.
- 2) In the business world, computers streamline operations but do not improve productivity.
- 3) Computers play a minor role in scientific research, primarily assisting with basic calculations.
- 4) Computers have limited use in daily life, mainly serving as communication devices.
- 5) Healthcare professionals do not rely on computers for patient records management or diagnostic tools.

5. Translate the following English units into Ukrainian.

- 1) *On the cutting edge of technology* - _____
- 2) *Byte-sized information* - _____
- 3) *The information superhighway* - _____
- 4) *Plug and play* - _____
- 5) *To crash* - _____
- 6) *In the digital age* - _____

6. Give synonyms to the words in bold type.

- 1) This **essential** safeguard must be retained.
-

- 2) This will help organize and **streamline** your actions.
-

- 3) The twentieth century was **pivotal** as regards children.
-

- 4) And he couldn't **engage** socially with people.
-

- 5) Domestic workers provide an **indispensable** contribution to society.
-

7. Translate Ukrainian to English:

- Миша (комп'ютерна) –
- Комп'ютер –
- Клавіатура –
- Монітор –
- Принтер –
- Сканер –
- Мережа –
- Програмне забезпечення –
- Апаратне забезпечення –
- Операційна система –
- Веб-браузер –
- Електронна пошта –
- Жорсткий диск –
- Хмарне сховище –
- Процесор –
- Флеш-накопичувач –
- Завантажити (файл) –
- Завантажити (на сервер) –
- Брандмауер –
- Антивірусна програма –

8. Explain this word in English without using the given word itself.

- *Information processing cycle (IPOS)* - _____

- *Motherboard* - _____

9. Fill in the blanks with the necessary words in the box.

<i>essential</i>	<i>streamlined</i>	<i>pivotal</i>
------------------	--------------------	----------------

1) Computers have become _____ tools in various fields, from education to business.

2) The use of computers has _____ operations and improved productivity in many industries.

3) Understanding how to operate a computer is _____ for success in today's digital age.

10. Fill in the correct form of the present perfect tense (Present Perfect or Present Perfect Continuous).

1. Our team _____ (complete) the migration to the new server architecture.
2. I _____ (try) to resolve this network issue for over two hours now.
3. She _____ (not update) the project documentation since last week.
4. We _____ (use) GitHub for version control for several years.
5. The developers _____ (work) on the UI redesign all morning.
6. They _____ (already deploy) the patch to the production environment.
7. Why _____ you _____ (ignore) the error logs in the system?
8. He ____ (test) the beta version for bugs, but hasn't found anything critical yet.
9. I _____ (just finish) writing the API integration module.
10. The system _____ (crash) three times this week due to memory leaks.
11. We _____ (monitor) the server performance since yesterday.
12. She _____ (not push) her latest changes to the repository yet.
13. Our IT department _____ (upgrade) the infrastructure since last month.
14. I _____ (notice) several unauthorized login attempts recently.
15. You ____ (download) large files again, which is slowing down the connection.

11. Complete each sentence using the most appropriate tense form (Present Simple / Present Continuous / Present Perfect / Present Perfect Continuous).

1. I _____ (use) this program for years, and it still works perfectly.
→ **use / am using / have used / have been using**
2. She usually _____ (search) for information using Google Scholar.
→ **searches / is searching / has searched / has been searching**
3. My computer _____ (crash) three times this week!
→ **crashes / is crashing / has crashed / has been crashing**
4. What _____ (you/do)? The screen is frozen!
→ **do you do / are you doing / have you done / have you been doing**
5. We _____ (not/save) any files since the last update.
→ **don't save / are not saving / haven't saved / haven't been saving**
6. The developers _____ (update) the software all night.
→ **update / are updating / have updated / have been updating**
7. He _____ (connect) the new printer to the system right now.
→ **connects / is connecting / has connected / has been connecting**

8. I _____ (install) this software twice already.
→ **install / am installing / have installed / have been installing**
9. Why _____ (this screen/not/work)? It was fine yesterday.
→ **does this screen not work / isn't this screen working / hasn't this screen worked / hasn't this screen been working**
10. They _____ (use) the same password for months without problems.
→ **use / are using / have used / have been using**

12. Complete each sentence with the correct tense (Present Simple / Present Continuous / Present Perfect / Present Perfect Continuous), and explain your choice briefly in brackets.

1. I _____ (save) my documents on a USB stick for years.
→ **(your answer)**
→ *(Why this tense?)* _____
2. She _____ (search) for her project file right now.
→ **(your answer)**
→ *(Why this tense?)* _____
3. He _____ (install) the update, so now everything works faster.
→ **(your answer)**
→ *(Why this tense?)* _____
4. We _____ (use) this website to study coding every day.
→ **(your answer)**
→ *(Why this tense?)* _____
5. I _____ (try) to fix this bug since this morning.
→ **(your answer)**
→ *(Why this tense?)* _____
6. My computer often _____ (crash) when I open too many apps.
→ **(your answer)**
→ *(Why this tense?)* _____
7. The students _____ (upload) their essays for over an hour now.
→ **(your answer)**
→ *(Why this tense?)* _____
8. We _____ (not/install) the program yet.
→ **(your answer)**
→ *(Why this tense?)* _____
9. She _____ (connect) to the server at the moment.
→ **(your answer)**
→ *(Why this tense?)* _____
10. I _____ (not/understand) how this new interface works.
→ **(your answer)**
→ *(Why this tense?)* _____

13. Match the beginnings (A) with the correct endings (B). Each sentence uses one of the four present tenses.

A

1. I've been trying
2. He's downloading
3. We usually connect
4. The system has just
5. My teacher is showing
6. They've never used
7. Why are you updating
8. I haven't logged in
9. She always saves
10. I am not using

B

- a. the Wi-Fi automatically at school.
- b. a program that blocks pop-ups.
- c. her files in a special folder.
- d. to fix this issue all day.
- e. since Monday because I forgot my password.
- f. a new app from the internet.
- g. their emails on a desktop computer.
- h. right now – the battery is dead.
- i. crashed again for no reason.
- j. your browser so often?

14. Find and correct the mistake in each sentence.

1. I am know how to update the software.
2. She has been upload files right now.
3. We didn't log in yet.
4. He have installed the latest version.
5. They uses the same password every time.
6. What do you doing with my computer?
7. My screen freezes all morning.
8. The students are used their phones for research.
9. I download music at the moment.
10. He has working on the coding task all day.

15. Complete the dialogues using the correct tense and vocabulary. Use a different tense each time.

1.

A: Why is the internet so slow?

B: I _____ (upload) a large video file.

2.

A: _____ (you/save) the document?

B: Not yet! I'll do it now.

3.

A: What _____ (he/do)?

B: He's updating the system software.

4.

A: I can't find my files!

B: Maybe you _____ (not/log in) properly.

5.

A: _____ (you/ever/use) that 3D design program?

B: No, never. Is it good?

16. Use the words to write full sentences. Change the tense and form of the verbs as needed.

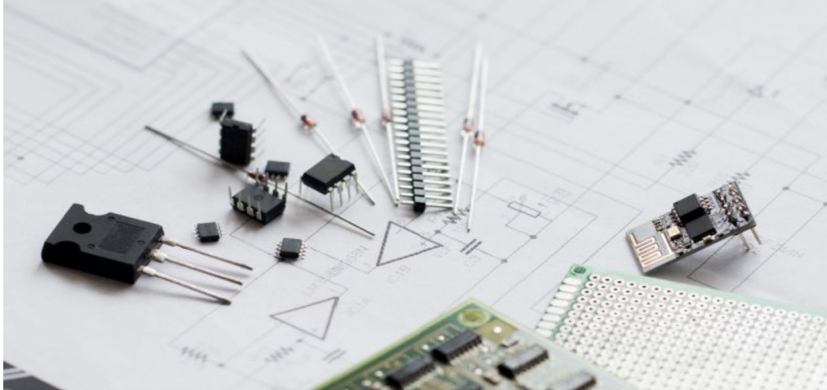
1. we / not / install / any updates / yet
2. she / use / this keyboard / every day
3. I / try / fix / the crash / for hours
4. he / currently / search / some files
5. the laptop / freeze / three times / this week
6. I / connect / the printer / at the moment
7. they / never / use / this app before
8. my friend / upload / files / all afternoon
9. the technician / not / finish / update / yet
10. what / you / usually / do / when / computer crash?

17. Write an opinion paragraph about how computers help or harm productivity in different workplaces. Support your ideas with examples. Word count: 150–200 words.

UNIT 3. Computer architecture

TASKS:

1. Read the text and briefly write its meaning.



Computer architecture describes the overall blueprint of a computer system, outlining how various components work together to achieve the device's primary function – data processing – without delving into the specific technical construction.

Today, computers play a fundamental role in nearly every organization's infrastructure. This includes everything from desktop machines in office environments to mobile devices and smart wearables used for remote work. Despite their diversity in size and form, all computers are built upon fundamental concepts that dictate how hardware and software interact. These guiding principles are collectively referred to as computer architecture. At its core, computer architecture defines how the system's internal elements are structured and how they collaborate to perform operations. It also establishes the framework upon which both programming languages and processors are developed. Two key paradigms dominate processor design: the Complex Instruction Set Computer (CISC) and the Reduced Instruction Set Computer (RISC) architectures.

CISC-based systems typically feature a single processing unit, additional memory for support, and a compact register set with a wide array of specialized instructions. These processors are capable of completing tasks using individual, complex commands. This design simplifies programming efforts, as fewer instructions are needed, but it can result in slower execution times due to the complexity of the operations.

In contrast, the emergence of RISC architecture was driven by a need for faster, more efficient computing. RISC systems are built around the idea of simplifying hardware and speeding up operations by using straightforward instructions to perform even complex tasks, often requiring more commands but executing them more rapidly.

2. Answer these questions.

1) What does the term "computer architecture" refer to?

2) How are computers described in terms of their significance within organizations?

3) What foundational principles underlie all computers, regardless of their size?

4) How is computer architecture defined in the text?

5) What are the two predominant approaches to computer architecture mentioned in the text?

6) How do CISC processors differ from RISC processors in terms of instruction execution?

7) What led to the development of high-performance computers based on the RISC architecture?

8) Can you explain the difference between a complex instruction set computer (CISC) and a reduced instruction set computer (RISC)?

9) How does the choice of architecture affect the functioning of computer processors?

10) What are some characteristics of RISC-based hardware mentioned in the text?

2. The sentence is True or False.

- Computing devices form a critical part of modern organizational systems, encompassing everything from office desktops to mobile gadgets and smart accessories used for remote tasks.
- Every computing system, whether large or small, operates based on core concepts that define how its physical components and software interact to enable functionality.
- Reevaluating existing systems paved the way for the development of advanced computing solutions built upon the RISC model.
- CISC-based processors are structured with a single core, additional memory support, and a compact set of registers capable of handling numerous specialized instructions.
- The two main architectural philosophies shaping processor operation are the CISC model, which uses complex instructions, and the RISC model, which relies on simpler, more streamlined commands.
- RISC-based high-speed computer systems feature minimalistic hardware engineered for speed, enabling the execution of complex tasks using straightforward instructions.

4. Translate the following English units into Ukrainian.

- 1) Building on solid foundations-_____
- 2) Turning the tide-_____
- 3) Cutting through the complexity-_____

5. Give synonyms to the words in **bold** type.

- 1) **The processor** is what determines the speed and performance of your laptop.
-

- 2) **Interrupts** can slightly disrupt the timing of code, however, and may be disabled for particularly critical sections of code.
-

- 3) The Electronic **Control Unit** (ECU) controls the fuel injection system and the ignition timing of almost any modern engine.
-

6. Translate Ukrainian to English.

- Монітор-_____
- Клавіатура-_____
- Транзистор-_____
- Акумулятор-_____
- Поєднання клавіш-_____
- Камера-_____
- Чин-_____

7. Explain this word in English without using the given word itself.

- Instruction Set-_____
- Memory-_____
- Registers-_____

8. Fill in the blanks with the necessary words in the box.

<i>Cache</i>	<i>algorithm</i>	<i>motherboard</i>
<i>clock speed</i>	<i>input data</i>	<i>Virtual Memory</i>

- 1) Why the slower _____ on the A7?
- 2) If you want to build the IP _____ yourself, then clear this checkbox.
- 3) Authors may be asked to provide _____ for the editorial review.
- 4) The _____ serves to connect all of the parts of the computer.
- 5) _____ is divided into kernel space and the user space.

9. Choose between Present Simple, Present Continuous, Present Perfect, or Present Perfect Continuous.

1. The CPU _____ (process) information faster than ever before.
→ use: _____
2. I _____ (read) about how the control unit works since this morning.
→ use: _____
3. A computer usually _____ (perform) millions of operations per second.
→ use: _____
4. The student _____ (not/understand) how the components connect to the motherboard.
→ use: _____
5. Look! The technician _____ (install) a new power supply right now.
→ use: _____
6. Our IT team _____ (replace) damaged parts all week.
→ use: _____

7. My teacher _____ (explain) the function of RAM in every lesson.
→ use: _____
8. She _____ (not/use) external ports for additional storage yet.
→ use: _____
9. Why _____ (the system / crash) every time we try to access the hard drive?
→ use: _____
10. They _____ (transfer) data between two systems at the moment.
→ use: _____

10. Each sentence has one grammar mistake related to tense. Correct it.

1. The processor is perform thousands of calculations per second.
2. I work on this diagram since last night.
3. They have install the hard drive incorrectly.
4. What do you connecting to the motherboard?
5. RAM stores temporary data while you are used the system.
6. He has explained the data flow model right now.
7. The students is testing different power supplies.
8. We not used the new control unit yet.
9. Why has the computer crashing every hour?
10. I have been download drivers for the last 30 minutes.

11. Complete the dialogue using the correct tense and vocabulary. Use different tenses in each gap.

A: Hi, I need help with my computer. It _____ (not/perform) well lately.

B: What's the problem exactly?

A: The system _____ (crash) several times today.

B: Hmm... Let me check. Oh, the power supply _____ (not/connect) properly.

A: I see. I _____ (try) to fix it myself, but I wasn't sure.

B: No worries. I _____ (replace) a similar part right now on another computer. I'll help you next.

12. Choose the correct verb tense in context.

1. The computer (**a. processes** / **b. is processing** / **c. has processed** / **d. has been processing**) data non-stop since 9 a.m.
2. Our IT technician (**a. updates** / **b. is updating** / **c. has updated** / **d. has been updating**) the motherboard drivers right now.

3. This port (**a. connects / b. is connecting / c. has connected / d. has been connecting**) external devices to the CPU.
4. I (**a. don't use / b. am not using / c. haven't used / d. haven't been using**) my hard drive since I changed computers.
5. Why (**a. do you check / b. are you checking / c. have you checked / d. have you been checking**) the system logs for the last 10 minutes?
6. She (**a. always configures / b. is always configuring / c. has always configured / d. has been always configuring**) the network incorrectly.
7. The students (**a. run / b. are running / c. have run / d. have been running**) simulations every week.
8. I (**a. transfer / b. am transferring / c. have transferred / d. have been transferring**) large files since morning.
9. We (**a. don't open / b. aren't opening / c. haven't opened / d. haven't been opening**) this case yet.
10. The control unit (**a. controls / b. is controlling / c. has controlled / d. has been controlling**) the data flow automatically.

13. Fill in the blanks in the IT technician's journal using appropriate present tenses.

System Check – Technician's Log

Today I _____ (start) with a review of the main components.

I _____ (check) the RAM usage every hour.

So far, the CPU _____ (handle) the tasks efficiently.

I _____ (transfer) large files between the hard drives since noon.

The motherboard _____ (connect) all other parts with no issues.

Right now, I _____ (install) an updated version of the BIOS.

I _____ (not/finish) the backup process yet.

Users _____ (report) slower boot times recently.

Our team _____ (not/find) any hardware damage so far.

We _____ (test) multiple output ports to ensure stable connections.

14. Match and make sentences. Choose the appropriate present tense.

Actions:

1. I (install) a new CPU
2. The students (test) the ports
3. She (not/save) the changes
4. He (study) computer architecture for weeks
5. We (use) flash storage now

6. They (not/understand) data buses
7. My PC (crash) since morning
8. You (connect) the cables incorrectly
9. I (learn) how the power supply works
10. We (not/finish) the wiring yet

Results (match to actions):

- a. so we can't move to the next task.
- b. and the old one is removed.
- c. and we can test the storage.
- d. so the system keeps failing.
- e. so she lost her work.
- f. because it's a bit confusing.
- g. and I feel more confident now.
- h. so they know how they work now.
- i. so nothing works properly.
- j. because we needed something faster.

15. Dialogue completion – Fill in the appropriate present tense.

1.
A: _____ (you/test) the new motherboard?
B: Yes, I _____ (just/finish) that.
2.
A: What _____ (she/do) now?
B: She _____ (connect) the new RAM module.
3.
A: I _____ (study) CPU speed this week.
B: Oh, I _____ (study) that too!
4.
A: My PC _____ (not/respond) lately.
B: Maybe the power supply _____ (fail).
5.
A: How long _____ (they/work) on this model?
B: Since Monday.
6.
A: The control unit _____ (not/work) again!
B: That's the third time it _____ (crash) today!
7.
A: I _____ (use) the same storage device for years.
B: Really? I _____ (change) mine twice already.
8.
A: _____ (you/ever/learn) how buses transfer data?
B: No, but I _____ (plan) to.
- 9.

A: Why _____ (you/always/test) the same component?

B: Because it _____ (fail) randomly.

10.

A: We _____ (look) at the internal parts.

B: Cool! I _____ (watch) a video about that too.

16. Write a 5–7 sentence report about a computer repair process. Use all four present tenses at least once. Include vocabulary from the unit.

Example:

Today I'm repairing a desktop computer. I have already replaced the power supply, and I'm now testing the data ports...

17. Write a comparison report of two types of computer architecture and recommend the best option for a budget-friendly PC. Word count: 180–220 words.

UNIT 4. Operating System. Software

TASKS:

1. Read the text and briefly write its meaning.



An operating system is the essential software layer that governs the computer's hardware and ensures the smooth operation of application programs. It functions as a mediator between physical components and the software used by end users, handling communication and resource coordination. One of its core responsibilities is managing hardware resources – such as the CPU, memory, and peripheral devices – by distributing them efficiently among different programs and users. It also oversees process execution, organizing and controlling multiple tasks by scheduling and synchronizing them to allow for multitasking. In terms of memory, the operating system is in charge of allocating and

freeing memory space for applications, as well as managing virtual memory to simulate more capacity than the physical memory provides. Additionally, it administers the file system by organizing, storing, retrieving, and securing files, while also maintaining directory structures. To facilitate user interaction, the OS offers various interfaces, including graphical and command-line environments, through which users can operate and manage the system.

Software

Software encompasses a broad range of programs, applications, and data that enable users to perform specific tasks on a computer system. It includes:

System Software: System software includes the operating system itself, as well as utility programs that facilitate system maintenance, such as disk management tools, antivirus software, and device drivers.

Application Software: Application software refers to programs designed to perform specific tasks or functions for end-users, such as word processors, web browsers, multimedia players, and productivity suites.

Programming Software: Programming software provides tools and environments for software developers to create, debug, and maintain computer programs. Examples include integrated development environments (IDEs), compilers, and debuggers.

Middleware: Middleware acts as a bridge between application software and system software, providing services such as database management, communication protocols, and transaction processing for distributed systems.

Data: Data refers to information stored and processed by software applications, including text documents, images, databases, and multimedia files.

Importance of Operating Systems and Software

Operating systems and software play critical roles in enabling computer systems to perform various tasks and functions efficiently. They provide the necessary infrastructure, tools, and interfaces for users to interact with computer hardware and accomplish their goals. Whether managing system resources, running applications, or processing data, operating systems and software are essential components of modern computing environments. Their continuous development and improvement drive innovation and productivity across various industries and domains.

2. Answer these questions.

1) How does an operating system manage system resources?

2) What are some key functions of operating systems?

3) Can you give examples of system software and application software?

4) What role does middleware play in software architecture?

5) Why are operating systems and software considered essential components of modern computing environments?

3. The sentence is True or False.

1) An operating system serves as the foundational software that manages computer hardware and provides essential services for running applications.

2) Operating systems primarily focus on managing peripheral devices such as printers and scanners.

3) Application software encompasses a broad range of programs, applications, and data that enable users to perform specific tasks on a computer system.

4) Programming software refers to programs designed to perform specific tasks or functions for end-users, such as word processors and web browsers.

5) Middleware acts as a bridge between application software and system software, providing services such as database management and communication protocols.

4. Translate the following English units into Ukrainian.

1) *The backbone of computing*-_____

2) *A user-friendly interface*-_____

3) *Navigating the digital landscape*-_____

4) *Pushing the boundaries of technology*-_____

5) *Behind the scenes*-_____

5. Give synonyms to the words in bold type.

1) **Innovation** may concern products or processes.

2) **Critical** analysis is impossible without admissible input.

3) **Foundational** and institutional capacity has been strengthened at the national level in some countries, and also at the regional and global levels.

4) Popular **Integral** Glazing Pleated Blinds in Glass.

5) Active aging **encompasses** all three of these things.

6. Translate Ukrainian to English.

- *Операційна система* - _____
- *Програмне забезпечення* - _____
- *Помилка в програмі* - _____
- *Дизайн* - _____
- *Код* - _____
- *Підтримка* - _____

7. Explain this word in English without using the given word itself.

- *Maintenance* - _____

- *Evaluation* - _____

- *Software development* - _____

8. Fill in the blanks with the necessary words in the box.

<i>requirements</i>	<i>developers</i>	<i>documentation</i>	<i>information</i>
---------------------	-------------------	----------------------	--------------------

- 1) _____ specification is the first phase in a software development process.
- 2) Software applications are the result of lines of code that have been written and compiled by _____ to provide instructions to computer systems
- 3) Relevant content must be transformed into concise _____ that describes how the software application will fulfill the requirements listed in the previous phase.

9. Complete the sentences using the correct forms of the adjectives.

1. This new software is much _____ (efficient) than the previous version.
2. Our latest update provides a _____ (secure) environment for data storage.
3. The server response time is _____ (fast) than we expected during peak hours.
4. Cloud computing offers a more _____ (flexible) solution compared to traditional servers.
5. This algorithm is one of the most _____ (complex) in the entire system.
6. The interface of the application is more _____ (user-friendly) after the recent redesign.
7. Compared to last year, the network is significantly _____ (stable) now.

8. The new programming language is _____ (powerful) but also more difficult to learn.
9. Our team's approach to cybersecurity is _____ (comprehensive) than before.
10. This device is _____ (compact) and easier to carry than the older models.
11. The AI system provides _____ (accurate) predictions after training with more data.
12. The upgrade makes the database _____ (reliable) and less prone to crashes.
13. This software is _____ (compatible) with multiple operating systems.
14. The latest processor is _____ (efficient) in energy consumption than the previous generation.
15. Their technical support is the _____ (responsive) among all service providers we've tried.

10. Fill in the correct form: Adjective or Adverb.

1. The software runs _____ (efficient/efficiently) on most operating systems.
2. She explained the new protocol very _____ (clear/clearly) during the meeting.
3. This program is _____ (secure/securely) designed to protect user data.
4. The server performed _____ (stable/stably) throughout the stress test.
5. Developers are _____ (quick/quickly) adapting to the updated coding standards.
6. The user interface looks _____ (modern/modernly) compared to the previous version.
7. The new update installs _____ (automatic/automatically) without user intervention.
8. He is a _____ (reliable/reliably) technician who always solves problems fast.
9. The application is _____ (compatible/compatibly) with both Mac and Windows systems.
10. The program crashed _____ (sudden/suddenly) during the demo presentation.
11. The network traffic is managed _____ (efficient/efficiently) to avoid congestion.
12. The system administrator responded _____ (prompt/promptly) to the security breach.
13. This cloud service is highly _____ (scalable/scalably) for large enterprises.
14. The new encryption algorithm works _____ (secure/securely) under various conditions.
15. She writes code very _____ (clean/cleanly), which reduces bugs.

11. Each sentence contains one error related to adjective comparison.

1. Windows is more faster than Linux.
2. This version is the goodest so far.
3. Mac is as more stable than Ubuntu.
4. That system is most secured.
5. It's one of the more expensive software.

6. This update is the less useful.
7. My system isn't so newer as yours.
8. It's the baddest interface I've seen.
9. This OS is much user-friendlier.
10. Linux is the most safest operating system.

12. Build mini-dialogues with comparisons

Use **adjectives like: fast, stable, good, secure, friendly, compatible, useful, modern, efficient, popular.**

1.
A: Is Windows faster than Linux?
B: Yes, but Linux is _____ in terms of updates.
2.
A: Which system is more user-friendly?
B: I think _____ is the most user-friendly.
3.
A: This interface looks better.
B: Yes, it's _____ and _____ than before.
4.
A: I need a secure OS.
B: Try _____ – it's the _____ I've used.
5.
A: Which antivirus is better?
B: _____ is much _____ than the free one.
(Continue for 5 more dialogues)

13. Write 10 sentences comparing any two systems (e.g., Windows vs Mac, Linux vs Chrome OS). Use adjectives such as:

- fast, stable, efficient, secure, flexible, expensive, helpful, compatible, modern, intuitive

Example:

Windows is more flexible than Mac OS, but Mac OS is more stable. The Windows interface is more customizable, but the Mac interface is cleaner...

14. Rewrite the sentence using a superlative form

1. No other program is as fast as this one.
→ This is _____
2. I haven't seen an installation more complicated than this.
→ This is _____
3. That system is better than all the others.
→ That is _____
4. None of the tools were as useful as this.
→ This tool was _____

5. Other updates were less stable than this one.
→ This was _____
6. No previous version was as clear as this.
→ This is _____
7. I've never used an app more intuitive than this.
→ This is _____
8. The new layout is nicer than all the previous ones.
→ It's _____
9. I haven't seen a worse error than this.
→ This is _____
10. All other systems are cheaper than this.
→ This is _____

15. For each sentence, choose the correct comparative or superlative form of the adjective provided in parentheses.

1. Keeping your operating system updated is (important) _____ for security than just having an antivirus program; it patches vulnerabilities.
2. Viruses are a (serious) _____ threat to data security than minor software bugs, potentially leading to identity theft.
3. Some software vulnerabilities are (dangerous) _____ than others, potentially allowing remote access to your system.
4. Regular security patches make your system (safe) _____ against new, evolving threats.
5. The (recent) _____ security update fixed several critical vulnerabilities in the system, preventing potential attacks.
6. Using strong, unique passwords is (effective) _____ for online security than using easily guessed ones.
7. Two-factor authentication adds an (extra) _____ layer of security to your accounts.
8. Public Wi-Fi networks are generally (risky) _____ for sensitive transactions than private, secure networks.
9. Outdated software is often (vulnerable) _____ to attacks than updated versions.
10. The (common) _____ way malware spreads is through suspicious email attachments.
11. Firewall protection is (crucial) _____ for preventing unauthorized access to your computer.
12. Being aware of phishing scams is (necessary) _____ for online safety.
13. Encrypting your data makes it (difficult) _____ for unauthorized parties to access.
14. Some security suites offer (comprehensive) _____ protection than basic antivirus software.

15. It is (wise) _____ to back up your data regularly to protect against data loss from security breaches.

16. Complete the sentences to compare and contrast different operating systems based on their characteristics.

1. Modern operating systems are (complex) _____ than older ones, which were often quite basic.
2. Among all the options, Windows is probably the (popular) _____ operating system in the world, used by billions.
3. For many new users, macOS is (easy) _____ to learn than Linux, especially its command-line interface.
4. Linux distributions are often (customizable) _____ than commercial operating systems, offering more freedom.
5. A new operating system usually offers (good) _____ security features than an outdated one, protecting users better.
6. Some argue that mobile operating systems are now (powerful) _____ than desktop operating systems were a decade ago.
7. Android is one of the (flexible) _____ mobile operating systems available on various devices.
8. ChromeOS is generally considered (lightweight) _____ than Windows, making it ideal for budget laptops.
9. Choosing the (appropriate) _____ operating system depends entirely on your specific needs and hardware.
10. The user interface of an operating system can make it feel (intuitive) _____ or (difficult) _____ to navigate.
11. Historically, DOS was much (minimalist) _____ than any current graphical user interface.
12. Linux often provides a (stable) _____ environment for servers compared to some other operating systems.
13. The (recent) _____ versions of Windows have shown significant improvements in speed and efficiency.
14. It's often (wise) _____ to consider user reviews when selecting a new operating system.
15. Some niche operating systems are much (specific) _____ in their use than general-purpose ones.

17. Write an email to a startup client explaining which operating system (Windows, macOS, or Linux) is best for their business and why. Word count: 150–180 words.

UNIT 5. Peripheral equipment of computers

TASKS:

1. Read the text and briefly write its meaning.

Peripheral equipment refers to external devices that connect to and interact with a computer, expanding its capabilities and functionality. These peripherals can be broadly classified into input devices, output devices, storage devices, and communication devices. Each type plays a critical role in the overall operation and user experience of a computer system. Let's delve into the various categories and examples of peripheral equipment.



Peripheral equipment is essential for maximizing the functionality and versatility of computers. They enable user interaction, enhance multimedia experiences, provide additional storage options, and facilitate connectivity and communication. As technology advances, the variety and capability of peripheral devices continue to grow, offering more specialized and sophisticated options to meet the evolving needs of users.

In conclusion, peripheral equipment plays a pivotal role in the computing ecosystem, extending the capabilities of computers beyond their core functions. Understanding and selecting the right peripherals can significantly enhance productivity, user experience, and the overall utility of a computer system.

2. Answer these questions.

1) What is peripheral equipment in the context of computers?

2) Into which main categories can peripheral devices be classified?

3) Why is peripheral equipment important for computers?

4) How do advancements in technology affect peripheral devices?

5) What are some examples of specialized peripherals and their uses?

3. The sentence is True or False.

4.

1) Peripheral equipment refers to internal devices that are part of the computer's core system.

2) Input devices include keyboards, mice, scanners, microphones, and webcams.

3) Output devices convey information from the computer to the user, such as monitors and printers.

4) Storage devices cannot be external.

5) Communication devices like modems and Wi-Fi adapters enable computers to connect to networks.

6) Peripheral equipment does not affect the overall user experience of a computer system.

4. Translate the following English units into Ukrainian.

1) *Hot-swappable*-_____

2) *Peripheral interface*-_____

3) *Peripheral connectivity*-_____

4) *User interaction*-_____

5. Give synonyms to the words in bold type.

1) This design has two additional pins to provide extra power to the **peripheral device**.

2) What Is Google's New "Next Generation Personal **Communication Device**"?

3) Further **speakers** at the conference will be announced later.

4) **Webcam** interlocutor can show only what he wants.

5) All modern **connectivity options** are included in the mix as well.

6. Translate Ukrainian to English:

- *Сканер*-_____
- *Планишет*-_____
- *Термінал точки продажу*-_____
- *Пристрій виводу*-_____
- *Пристрій введення*-_____

7. Explain this word in English without using the given word itself.

- *Wi-Fi*-_____
- *HDMI (High-Definition Multimedia Interface)*-_____
- *External Hard Drive*-_____

8. Fill in the blanks with the necessary words in the box.

<i>keyboard</i> <i>Hot-swappable</i>	<i>communication</i> <i>HDMI</i>	<i>external</i> <i>POS</i>
---	-------------------------------------	-------------------------------

1. The _____ offers multiple connectivity options, including Bluetooth and a USB dongle.
- 2) A _____ interface is a standard for transmitting audio and video data.
- 3) _____ devices like modems and Wi-Fi adapters enable computers to connect to networks.
- 4) _____ storage solutions are often used for additional backup and data transfer.
- 5) _____ devices can be added or removed without shutting down the computer.
- 6) A _____ terminal is used in retail environments to process sales transactions.

9. Translate the following sentences into Ukrainian.

- 1) Our University was founded in 1967.

2) An interesting problem was discussed in the lecture.

3) All calculations will be performed by a computer.

4) English is spoken all over the world.

5) This University is well-known in Ukraine.

10. Fill in the correct form of the past tense (Past Simple or Past Continuous).

1. While the system _____ (crash), the team _____ (try) to restore the backup.
2. I _____ (install) the new software when the power _____ (go) out.
3. They _____ (fix) the bug all day yesterday.
4. When the server _____ (stop) responding, the technician _____ (run) diagnostics.
5. She _____ (update) the database while I _____ (monitor) the network.
6. The developers _____ (work) on the code when the client suddenly _____ (call).
7. Yesterday, the firewall _____ (block) unauthorized access attempts several times.
8. While the backup process _____ (run), the users _____ (experience) slow performance.
9. He _____ (not receive) the error report because his email _____ (not work).
10. The IT team _____ (set up) the new servers when the outage _____ (occur).
11. The application _____ (freeze) while I _____ (submit) the report.
12. When I _____ (check) the logs, I _____ (notice) several unusual activities.
13. The support team _____ (resolve) the issue before the meeting _____ (start).
14. While the system _____ (update), the users _____ (complain) about downtime.
15. The programmer _____ (debug) the code when the system unexpectedly _____ (reboot).

11. Choose the correct verb form (Past Simple or Past Continuous)

1. I (used / was using) the printer when it suddenly stopped working.
2. They (installed / were installing) the webcam all afternoon.
3. While she (adjusted / was adjusting) the monitor, the lights went out.
4. He (didn't hear / wasn't hearing) me because he (wore / was wearing) headphones.
5. We (tested / were testing) the speakers when the system crashed.
6. I (plugged in / was plugging in) the USB stick while the antivirus (scanned / was scanning) the system.
7. She (calibrated / was calibrating) the touchscreen while I (connected / was connecting) the projector.
8. I (tried / was trying) to fix the mouse, but I (didn't have / wasn't having) the right tools.
9. The technician (explained / was explaining) the setup while I (took / was taking) notes.
10. While we (were updating / updated) the drivers, the screen (froze / was freezing).

12. Fill in the correct form of Gerund or Infinitive (with or without to).

1. He decided _____ (update) the software before the deadline.
2. The team avoided _____ (restart) the server during peak hours.
3. We plan _____ (migrate) the database next month.
4. She suggested _____ (test) the application thoroughly before release.
5. They promised _____ (fix) the bugs by the end of the week.
6. I enjoy _____ (debug) complex code problems.
7. The manager encouraged the developers _____ (learn) new programming languages.
8. The system failed _____ (connect) to the network after the update.
9. Our goal is _____ (improve) system security continuously.
10. He admitted _____ (make) mistakes in the earlier version of the software.
11. We expect _____ (receive) the new hardware by Friday.
12. The technician postponed _____ (install) the new patches due to the outage.
13. It's important _____ (document) all changes accurately.
14. They started _____ (develop) a new feature last week.

15. The IT department needs _____ (train) staff on the new protocols.

13. Write a short 10-sentence story about a time when someone had problems setting up or using compute peripherals (printer, webcam, speakers, mouse, etc.). Use at least:

- 3 Past Simple
- 2 Past Continuous
- 2 Gerunds as subject/object
- 1 Gerund after a preposition
- 2 Active voice constructions

14. Choose the correct form (gerund or infinitive) of the verb in brackets.

1. He tried _____ (reconnect / reconnecting) the printer, but it didn't work.
2. I decided _____ (replace / replacing) the broken mouse.
3. She enjoys _____ (use / using) a graphics tablet for design.
4. They plan _____ (upgrade / upgrading) the speakers next week.
5. I avoided _____ (touch / touching) the USB cable during the transfer.
6. He suggested _____ (test / testing) the projector before class.
7. We hope _____ (fix / fixing) the webcam by Friday.
8. I finished _____ (install / installing) the software this morning.
9. They offered _____ (help / helping) me with the calibration.
10. She refused _____ (adjust / adjusting) the brightness again.

15. Complete the sentences using the correct form of the verb. Fill in the blanks with the correct form of the verbs provided in parentheses.

1. She avoided _____ (click / clicking) on suspicious links to protect her computer.
2. We need _____ (choose / choosing) a reliable Internet service provider.
3. He enjoys _____ (browse / browsing) the web for interesting articles.
4. They suggested _____ (create / creating) a new email address for privacy.
5. I stopped _____ (use / using) outdated software to prevent security risks.
6. We plan _____ (connect / connecting) the router to the modem this evening.
7. She finished _____ (download / downloading) the updates before the meeting.
8. I decided _____ (subscribe / subscribing) to a faster Internet plan.
9. He refused _____ (share / sharing) his username and password with anyone.
10. They offered _____ (assist / assisting) in setting up the new office network.

16. Fill in the blanks with the correct form of the verb in parentheses

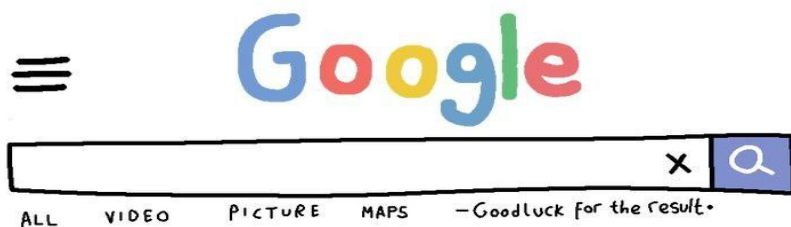
1. He relies on _____ (search / searching) engines to find quick answers online.
2. We enjoy _____ (explore / exploring) new websites that offer educational resources.
3. They prefer _____ (connect / connecting) to Wi-Fi instead of using mobile data.
4. She avoided _____ (download / downloading) files from untrusted sources.
5. I recommend _____ (use / using) strong passwords for all online accounts.
6. They continued _____ (stream / streaming) the lecture despite the slow Internet speed.
7. He learned _____ (navigate / navigating) the World Wide Web efficiently.
8. She hesitated _____ (register / registering) on the website without reading its privacy policy.
9. We suggest _____ (update / updating) software regularly to improve security.
10. He stopped _____ (visit / visiting) outdated websites that offer incorrect information.

17. Write a recommendation list for the peripheral equipment needed in a shared office space. Explain how each item supports daily tasks. Word count: 150–180 words.

UNIT 6. Internet and Websites

TASKS:

1. Read the text and briefly write



The Internet and Information Revolution

Back in 1969, a U.S. government agency called DARPA created a way for computers to communicate over phone lines, which led to the development of a network called ARPANET. Later, in 1984, the National Science Foundation built another system called NSNET, linking five powerful supercomputers. As more people and organizations wanted to connect, NSNET evolved into what we now call the Internet.

Today, millions of computers around the world are connected to this global network. One of its most widely used parts is the World Wide Web – a huge collection of documents that include text, images, and sounds from all over the world.

The Internet provides access to an enormous amount of information on nearly any subject. Every day, millions of people use it, and it has become the largest information source on Earth. It's also becoming an essential tool for students and teachers alike.

To get online, you need an Internet service provider, which connects your computer to the Internet through your phone line. If you already know the website you want to visit, you just type in the address and go straight there. If not, you can use a search engine or a directory – like Yahoo!, AltaVista, or Infoseek – to help you find what you're looking for. You can search by categories or by typing in specific words related to your topic.

2. Answer these questions.

1) What is exactly the Internet?

2) What kind of information can you find there?

3) How can you access the information?

4) In what country did the Internet start?

5) What was the original purpose?

3. The sentence is True or False.

1) DARPA NET was created in 1969 by the US Defence Advanced Research Projects Agency for computers to communicate via the telephone.

2) The NSNET network was started by the US National Science Foundation in 1984 and involved five supercomputer centers.

3) NSNET was immediately known as the Internet.

4) The World Wide Web is the only area of the Internet.

5) To access the Internet, you need a service provider to connect your computer to the Internet.

6) If you have a specific website address, you can type it to arrive at the page you want directly or use directories and search engines like Alta Vista, Yahoo!, or Infoseek to find information.

4. Translate the following English units into Ukrainian:

- 1) *Leave a digital footprint*-_____
- 2) *Get caught in the web*-_____
- 3) *Virtual world*-_____
- 4) *Mixed emotions site*-_____
- 5) *Search network*-_____
- 6) *Virtual journey*-_____
- 7) *Webcams everywhere*-_____
- 8) *Get tangled in the web*-_____

5. Give synonyms to the words in **bold type**.

- 1) Make sure that you are making payments over the internet to a **secure website**.

- 2) We must **protect** ourselves from them

- 3) Now, check out the winner's **username**.

- 4) The **domain** that contains the user account.

5) You can see how my Chrome **address bar** calls attention to the differences in security.

6. Translate Ukrainian to English.

- *Пароль*-_____
- *Акаунт*-_____
- *Зайти на свій акаунт*-_____
- *Домашня сторінка*-_____
- *Браузер*-_____
- *Вікно*-_____
- *Згорнути*-_____
- *Вебсайт*-_____

- *Повернуться (назад)*-_____
- *Повернуться (вперед)*-_____
- *Вкладка*-_____
- *Курсор*-_____

7. Explain this word in English without using the given word itself.

- *www*.- _____

- *.edu*-_____

- *.org*-_____

- *.com*-_____

- *.gov*-_____

8. Fill in the blanks with the necessary words from below:

<i>back</i>	<i>forward</i>	<i>homepage (2)</i>
<i>websites</i>	<i>scroll</i>	<i>tabs</i>

1) I set my favorite website as my browser's _____, so it opens every time I start my browser.

2) If you want to return to the previous page, just click the _____ button on your browser.

3) I like to keep multiple _____ open in my browser so I can easily switch between different _____.

4) After going back, you can navigate forward again by clicking the _____ button.

5) To view more content on the page, you can _____ down using the scrollbar on the right side of the screen.

9. Fill in the correct form of the Future Tense. In some sentences, several forms are possible.

1. By next month, the team _____ (complete) the software migration.
2. I think the developers _____ (fix) the bug by the time you arrive.
3. At 3 PM tomorrow, we _____ (test) the new security features.

4. She _____ (update) the system automatically as soon as the new version is released.
5. By the end of this year, the company _____ (invest) heavily in cloud technologies.
6. Tomorrow at this time, the server _____ (handle) thousands of requests simultaneously.
7. We _____ (launch) the new application next week unless there are unexpected delays.
8. By the time the meeting starts, he _____ (prepare) the final presentation.
9. They _____ (not finish) debugging the code before the deadline if they don't work overtime.
10. I _____ (monitor) the network traffic continuously during the upgrade process.
11. The IT department _____ (install) the patches by the end of the day.
12. When you call later, she _____ (configure) the backup system.
13. The new protocol _____ (improve) network security significantly in the coming months.
14. We hope that by next quarter, users _____ (experience) fewer connectivity issues.
15. The developers _____ (collaborate) on the project remotely for the foreseeable future.

10. Fill in the correct form of Gerund or Infinitive (with or without to).

1. I enjoy _____ (work) with new programming languages.
2. She decided _____ (upgrade) the system this weekend.
3. They avoided _____ (restart) the server during office hours.
4. He promised _____ (fix) the bug by tomorrow.
5. We plan _____ (migrate) the data to the cloud next month.
6. The manager encouraged the team _____ (learn) advanced security protocols.
7. The system failed _____ (connect) after the update.
8. They suggested _____ (test) the new feature extensively.

9. I admitted _____ (make) a mistake in the code.
10. The technician postponed _____ (install) the update due to the outage.
11. It's important _____ (document) every change properly.
12. We started _____ (develop) the application last year.
13. The IT department needs _____ (train) new staff on the software.
14. She enjoys _____ (solve) complex debugging problems.
15. They expect _____ (receive) the new hardware next week.

11. Rewrite the sentence in active voice.

1. The website will be updated by the IT team tomorrow.
→ The IT team _____
2. The links are going to be checked by the webmaster.
→ The webmaster _____
3. The new design will be launched next month.
→ The company _____
4. The bugs are going to be fixed by the developers.
→ The developers _____
5. The SEO report will be prepared by the analyst.
→ The analyst _____
6. The domain will be registered by the marketing team.
→ The marketing team _____
7. The website is going to be monitored by the admin.
→ The admin _____
8. The blog post will be written by the content creator.
→ The content creator _____
9. The user data will be secured by the IT department.
→ The IT department _____
10. The new features will be tested by the QA team.
→ The QA team _____

12. Convert the following sentences from passive voice to active voice.

1. The presentation is going to be designed by the graphic designer.
2. → The graphic designer _____
3. The emails will be answered by the receptionist.
4. → The receptionist _____
5. The database is going to be updated by the IT specialist.
6. → The IT specialist _____
7. The feedback will be reviewed by the project manager.
8. → The project manager _____

9. The social media campaign is going to be managed by the marketing team.
10. → The marketing team _____
11. The customer complaints will be handled by the support staff.
12. → The support staff _____
13. The security protocols are going to be implemented by the IT team.
14. → The IT team _____
15. The new app features will be brainstormed by the development team.
16. → The development team _____
17. The training materials will be prepared by the HR department.
18. → The HR department _____
19. The event schedule is going to be finalized by the event planner.
20. → The event planner _____

13. Change the following active sentences into passive voice.

1. The chef is preparing a special menu for the event.
2. → A special menu for the event _____
3. The mechanic is repairing the car's engine.
4. → The car's engine _____
5. The librarian will organize the book collection tomorrow.
6. → The book collection _____
7. The photographer captured stunning images of the sunset.
8. → Stunning images of the sunset _____
9. The tour guide explained the history of the castle to the visitors.
10. → The history of the castle _____
11. The team will develop a new strategy for the campaign.
12. → A new strategy for the campaign _____
13. The students are discussing their project ideas with the teacher.
14. → Their project ideas _____
15. The artist is creating a mural for the community center.
16. → A mural for the community center _____
17. The journalist will write an article about the local festival.
18. → An article about the local festival _____
19. The volunteers cleaned the park after the event ended.
20. → The park _____

14. Rewrite sentences using passive voice where appropriate.

1. The gardener watered the flowers in the morning.
2. → The flowers _____
3. The CEO announced the new policy during the meeting.
4. → The new policy _____
5. The developers created a user-friendly interface for the app.
6. → A user-friendly interface for the app _____

7. The teacher gave the students a detailed explanation of the topic.
8. → A detailed explanation of the topic _____
9. The musician composed a beautiful melody for the song.
10. → A beautiful melody for the song _____
11. The technician installed the new software on the computer.
12. → The new software _____
13. The lawyer presented compelling arguments in the courtroom.
14. → Compelling arguments _____
15. The researcher discovered groundbreaking findings in the study.
16. → Groundbreaking findings _____
17. The nurse monitored the patient's condition throughout the night.
18. → The patient's condition _____
19. The architect designed an innovative building for the project.
20. → An innovative building for the project _____

15. Identify whether the sentences are active or passive voice and convert them to the other form.

The paintings were admired by the visitors in the art gallery.

→ _____

The team is brainstorming ideas for the new marketing campaign.

→ _____

The homework will be submitted by the students on time.

→ _____

The author signed copies of the book after the reading session.

→ _____

The report was reviewed by the supervisor.

→ _____

The children are playing games in the backyard.

→ _____

The new product has been tested by the QA team extensively.

→ _____

The presentation is being prepared for the conference by the speaker.

→ _____

The cleaner sanitized all the surfaces in the office.

→ _____

The photographer is editing the pictures from the wedding.

→ _____

16. Combine active and passive sentences to make coherent paragraphs:

The chef cooked a delicious meal for the guests.

→ _____

The meal was served by the waiters in an elegant dining room.

→ _____

The guests praised the chef for the exquisite flavors.

→ _____

The feedback was carefully noted by the restaurant manager.

→ _____

The marketing team planned a promotion to highlight the restaurant's quality.

→ _____

The promotion was launched on social media platforms last week.

→ _____

Potential customers inquired about reservations after seeing the campaign.

→ _____

The inquiries were handled promptly by the receptionist.

→ _____

The restaurant experienced a significant increase in bookings.

→ _____

The success was celebrated by the entire staff at the end of the day.

→ _____

16. Identifying Mistakes in Multimedia Concepts Below are sentences related to multimedia and its applications. Some of them contain errors or inaccuracies.

1. Multimedia refers only to the use of text and images to convey information.
2. Video games are an example of static media rather than multimedia.
3. Podcasts combine video and text to enhance user engagement.
4. Online learning platforms typically exclude multimedia features for simplicity.
5. Streaming platforms like Netflix primarily use graphics and animations to entertain users.
6. Virtual reality experiences are less interactive than traditional teaching methods.
7. Multimedia advertisements consist solely of text-based graphics.
8. Individual learning preferences are rarely accommodated by multimedia content.
9. The integration of audio and video in multimedia reduces its accessibility for diverse audiences.
10. Multimedia is limited to entertainment and has no role in business or education.
11. Video games rarely incorporate dynamic soundtracks or interactive visuals.
12. Educational simulations provide less understanding of complex concepts compared to lectures.
13. Multimedia websites are less effective in showcasing products compared to text-only websites.
14. YouTube is an example of a multimedia platform that excludes user-generated content.
15. Combining various media forms in multimedia diminishes the quality of communication.

17. Write a step-by-step guide on how to create a simple website for a small business using a website builder. Word count: 160–200 words.

UNIT 7. Multimedia

TASKS:

1. Read the text and briefly write its meaning.



Old Media



New Media

Multimedia: Enhancing Communication Through Integration

Multimedia refers to the integration of various forms of media, including text, audio, video, graphics, and animations, to convey information or entertain users. This blending of different mediums allows for a richer and more engaging experience than any single medium alone can provide. In today's digital age, multimedia has become ubiquitous, permeating every aspect of our lives, from entertainment and education to business and communication.

One of the key advantages of multimedia is its ability to cater to different learning styles and preferences. For example, some individuals may prefer to learn through visual aids like videos or diagrams, while others may prefer auditory learning through podcasts or audio lectures. By incorporating a diverse range of media, multimedia content can accommodate various learning needs, making it more accessible and effective for a broader audience.

In the realm of entertainment, multimedia has revolutionized how we consume and interact with content. Streaming platforms like Netflix and YouTube offer a vast library of multimedia content, including movies, TV shows, music videos, and user-generated content. Video games have also evolved into immersive multimedia experiences, combining stunning visuals, dynamic soundtracks, and interactive gameplay to captivate players for hours on end.

In the field of education, multimedia has transformed traditional teaching methods, making learning more interactive and engaging. Educational videos, interactive simulations, and virtual reality experiences allow students to explore complex concepts in a hands-on manner, facilitating deeper understanding and retention of information. Online

learning platforms offer multimedia courses on a wide range of subjects, providing learners with the flexibility to study at their own pace and convenience.

In the business world, multimedia plays a crucial role in marketing and communication. Companies use multimedia presentations, websites, and social media platforms to showcase their products and services in a visually compelling manner. Multimedia advertisements, with their combination of audio, video, and graphics, have a greater impact on viewers and are more likely to be remembered than traditional text-based ads.

Furthermore, multimedia enables more effective communication and collaboration in the workplace. Video conferencing, webinars, and virtual meetings allow teams to connect and collaborate regardless of their physical location, fostering greater productivity and efficiency. Multimedia presentations and reports help convey complex ideas and data in a clear and concise manner, facilitating decision-making and problem-solving.

In conclusion, multimedia has become an integral part of our lives, shaping how we communicate, learn, entertain ourselves, and do business. Its ability to combine various forms of media into cohesive and interactive experiences makes it a powerful tool for engaging audiences and conveying information effectively. As technology continues to advance, the possibilities for multimedia innovation are endless, promising even more immersive and engaging experiences in the future.

2. Answer these questions.

1) How has multimedia transformed traditional teaching methods in education?

2) What role does multimedia play in marketing and communication for businesses?

3) Can you provide examples of how multimedia is used in entertainment today?

4) How does multimedia accommodate different learning styles and preferences?

5) In what ways has technology advanced to enhance multimedia experiences in recent years?

3. The sentence is True or False.

- 1) Multimedia combines various forms of media, including text, audio, video, graphics, and animations, to convey information or entertain users.
- 2) Multimedia content caters to a narrow range of learning styles and preferences.
- 3) Video games have remained static in their evolution as multimedia experiences.
- 4) Multimedia has had a limited impact on traditional teaching methods in education.
- 5) Multimedia advertisements, with their combination of audio, video, and graphics, are less likely to be remembered than traditional text-based ads.

4. Translate the following English units into Ukrainian:

- 1) *Dive into the Multimedia World*-_____
- 2) *Multimedia Melting Pot*-_____
- 3) *Multimedia Experience*-_____
- 4) *Multimedia Odyssey*-_____
- 5) *Multimedia Masterpiece*-_____

5. Give synonyms to the words in **bold** type.

- 1) On the left are two **progressive** scan images.

- 2) The mosaic figures traced the **interlacing** of cultures

- 3) The MPEG-21 standard, from the **Moving Picture Experts Group**, aims at defining an open framework for multimedia applications.

- 4) These are the top eight **office suites** for doing so.

- 5) DAM systems are especially suited to managing multimedia content and tend to offer hooks into specialized desktop media **authoring systems**.

6. Translate Ukrainian to English:

- *Композитне відео*-_____
- *Фокусне світло*-_____
- *Відео*-_____
- *Відеозапис*-_____

- *Текстовий процесор*-_____
- *Растрові зображення*-_____
- *Цифровий багатофункціональний диск*-_____

7. Explain this word in English without using the given word itself.

- *charged-coupled device*-_____

- *TIFF*-_____

- *FAQ(frequency asked questions)*-_____

8. Fill in the blanks with the necessary words in the box.

<i>digital versatile disc</i>	<i>bitmap images</i>
<i>office suites</i>	<i>focal light</i>

1) _____, while often large in file size, provides detailed and high-quality visuals for graphic design and photography projects.

2) _____ like Microsoft Office or Google Workspace offer a comprehensive set of tools for productivity, including word processing, spreadsheet management, and presentation creation.

3) The _____ revolutionized home entertainment by offering high-definition movies and multimedia content.

4) The _____ in the photograph highlighted the subject's features, drawing attention to the central point of interest in the image.

9. Add the correct tag question.

1. She is editing the video, _____?
2. They didn't upload the audio file, _____?
3. You will finish the project on time, _____?
4. He was recording when I arrived, _____?
5. We haven't installed the software yet, _____?
6. The camera supports HD, _____?
7. You didn't use the new microphone, _____?
8. She has exported the file, _____?
9. They will stream the event, _____?
10. He doesn't work with animation, _____?

10. Fill in the blanks with the correct multimedia word: (edit / stream / record / export / upload / download / animate / capture / subscribe / broadcast)

1. What software do you use to _____ videos?
2. Are you going to _____ the concert live tonight?
3. How long does it take to _____ a podcast episode?
4. Where can I _____ the latest software update?
5. Did you _____ the new footage yesterday?
6. She plans to _____ the animated intro next week.
7. I want to _____ the screen during the webinar.
8. Have you _____ the video to the cloud yet?
9. How many people _____ your channel?
10. The company will _____ the event worldwide.

11. Make questions for each sentence (Yes/No or Wh-)

1. She edits videos daily.
2. They streamed the festival last summer.
3. He is recording a new podcast now.
4. The editor added subtitles yesterday.
5. They will broadcast the show live.
6. The animator created new graphics last week.
7. You have subscribed to the channel.
8. She exported the project this morning.
9. The camera captures 4K video.
10. They downloaded the latest software update.

12. Correct the mistakes in these questions.

1. What software you use for editing?
2. Did they streamed the video yesterday?
3. Are you recording the podcast right now?
4. When the event will be broadcast?
5. Has she uploaded the files yet?
6. Why you didn't add subtitles?
7. Who is working on the animation?

8. Do you know where download the audio?
9. Is they going to stream the event?
10. How long export the video takes?

13. Make questions for the answers using different question types

1. Answer: "I am recording a new video now."
→ _____?
2. Answer: "They edited the documentary last week."
→ _____?
3. Answer: "Yes, I subscribed to the channel yesterday."
→ _____?
4. Answer: "The microphone is not working."
→ _____?
5. Answer: "The software will update automatically."
→ _____?
6. Answer: "No, the event was not streamed live."
→ _____?
7. Answer: "The camera captures videos in 4K."
→ _____?
8. Answer: "She added subtitles yesterday."
→ _____?
9. Answer: "They will upload the files tomorrow."
→ _____?
10. Answer: "I prefer Adobe Premiere to Final Cut Pro."
→ _____?

14. Complete the sentences with the correct form of the verb.

1. They _____ (install) the software last week.
2. She _____ (set up) the new server.
3. The IT team _____ (finish) configuring the firewall.
4. I _____ (not update) the antivirus program yet.
5. He _____ (design) the user interface yesterday.
6. We _____ (already test) the backup system.
7. _____ you _____ (check) the network settings?
8. They _____ (not fix) the bug in the application last night.
9. I _____ (recently learn) how to encrypt sensitive data.
10. She _____ (enable) two-factor authentication this morning.
11. _____ the manager _____ (approve) the new protocol?
12. The developers _____ (not complete) the coding yet.
13. They _____ (release) the patch last Friday.
14. We _____ (just discover) a security loophole.

15. He _____ (not respond) to the IT inquiry yet.

15. Find and correct the grammatical mistakes in the following sentences.

1. The email have been send by mistake.
2. They doesn't update the software regularly.
3. She have installed the new antivirus program.
4. I was forgetting to save my work yesterday.
5. The server has crashing due to high traffic.
6. We hasn't received any notifications about the issue.
7. He update the system every two weeks.
8. The file were encrypted incorrectly.
9. They didn't fixed the bug in the last update.
10. She haven't checked the security settings yet.
11. The IT team have resolve the connectivity problem.
12. I didn't finishing the data migration on time.
13. He hasn't enabling multi-factor authentication.
14. They were complete the installation successfully.
15. The codes weren't been debugged properly.

16. Write questions for the given answers using the grammar from this unit.

1. Answer: "Yes, I verified the system logs yesterday." →
_____?
2. Answer: "The patch has already been installed." →
_____?
3. Answer: "No, the account was not hacked." →
_____?
4. Answer: "They downloaded the software last night." →
_____?
5. Answer: "Yes, the backup is stored on a secure server." →
_____?
6. Answer: "The firewall has been activated." →
_____?
7. Answer: "She didn't configure the VPN settings." →
_____?
8. Answer: "They are testing the encryption algorithm now." →
_____?
9. Answer: "The IT manager reviewed the report yesterday." →
_____?
10. Answer: "No, I haven't updated the password yet." →
_____?
11. Answer: "Yes, the system upgrade will start tomorrow." →
_____?

12. Answer: "The device was disconnected from the network." →

?

13. Answer: "I prefer using secured cloud storage." →

?

14. Answer: "The software installation completed successfully." →

?

15. Answer: "Yes, the security policy has been revised." →

?

17. Write a short proposal for a multimedia presentation advertising a new IT product. Mention what media you would use and why. Word count: 150–180 words.

UNIT 8. Cybersecurity

TASKS:

1. Read the text and briefly write its meaning.



Microsoft Revamps Controversial AI-Powered Recall Feature Amid Privacy Concerns

Microsoft recently announced that its controversial AI feature, Recall, will no longer be enabled by default and will instead be opt-in. Recall, which is scheduled to debut on Copilot+ PCs starting June 18, 2024, captures screenshots from users' screens every five seconds to create a searchable timeline of on-screen activity. The idea behind it is to act as a digital memory aid powered by artificial intelligence.

However, the feature quickly drew sharp criticism from privacy and cybersecurity experts. Concerns were raised that Recall could store sensitive content like private messages or confidential documents – even those meant to disappear – without proper protections in place. Critics argued the feature could easily be exploited by malicious actors, calling Microsoft’s initial rollout careless and poorly secured.

Media outlets like WIRED referred to Recall as essentially built-in spyware, and reports emerged that Microsoft kept the feature under wraps during development, avoiding public testing. In response to the backlash, Microsoft stressed that users would have full control over the feature and launched it in preview mode to collect user feedback.

The company has since introduced several major changes. Now, enabling Recall will require user consent during setup, and biometric authentication via Windows Hello must be activated to use or view the Recall timeline. Additionally, the data is encrypted and can only be decrypted with user authentication, thanks to what Microsoft calls "just-in-time" decryption protected by enhanced sign-in security.

Microsoft also emphasized that Recall data stays on the user's device and isn't shared externally. Users will have the option to pause, filter, or delete captured data at any time. In work environments, IT administrators can block Recall from being used, but cannot activate it themselves – it remains the user's decision.

Security researcher Kevin Beaumont, one of the earliest and most vocal critics, acknowledged Microsoft's revisions as a step in the right direction but warned that issues might still arise depending on the implementation. He and others highlighted the importance of giving users the choice to opt in, rather than having the feature automatically enabled.

This shift by Microsoft aligns with its broader push to prioritize security, especially in light of recent attacks linked to foreign state actors. CEO Satya Nadella recently reminded employees that when faced with competing priorities, security must always come first – even if that means delaying new features or phasing out older systems.

2. Answer these questions.

1) What controversial feature is Microsoft revamping amid privacy concerns, and what changes are being made to it?

2) When is the Recall feature set to be available, and on what type of PCs?

3) What purpose does Recall serve, and how does it function?

4) Why did Recall receive criticism from the security and privacy community?

5) What security measures has Microsoft implemented to address concerns regarding Recall?

6) How do IT administrators within enterprise environments have control over Recall, and what choice is emphasized for users?

7) What prompted Microsoft's prioritization of security, as mentioned by CEO Satya Nadella in a recent memo to employees?

3. The sentence is True or False.

1) Microsoft is revamping the Recall feature amid privacy concerns, making it an opt-in feature instead of enabled by default.

2) The Recall feature will be available exclusively on Copilot+ PCs starting June 18, 2024.

3) Recall captures screenshots of users' screens every five seconds to create an "explorable visual timeline."

4) Microsoft faced criticism for being overly transparent about the development of the Recall feature and its security measures.

5) Users have complete control over the Recall feature, including the ability to opt out entirely from periodically saving screenshots.

6) IT administrators in enterprise environments have the control to enable or disable the Recall feature themselves.

4. Translate the following English units into Ukrainian.

1) *Fortress of Firewalls*-_____

2) *Lock and Key Encryption*-_____

3) *Vigilant Guardians of the Virtual Realm*-_____

4) *Digital Minefield*-_____

5) *Shield of Security*-_____

5. Give synonyms to the words in bold type.

1) Brian A. White has a decade of hands-on experience with Software **Configuration Management** tools and methods.

2) **Telnet** does not support applications that require a graphical user interface.

3) It has **distributed** agricultural **tools** and seeds to help rebuild the country.

4) This provides a near real-time **audit trail** of information being exchanged.

5) Unlike a simple static password, a completely different **Digital Signature** is required for every transaction.

6. Translate Ukrainian to English.

- *Миттєве повідомлення*-_____
- *Шлюз*-_____
- *Ключові слова*-_____
- *Аналіз ризиків*-_____
- *Шпигунське програмне забезпечення*-_____
- *Мобільний код*-_____
- *Цілісність даних*-_____

7. Explain this word in English without using the given word itself.

- *ICMP*-_____
- *Packet Sniffer*-_____
- *SMTP Session Hijacking*-_____

8. Fill in the blanks with the necessary words in the box.

<i>Mobile Code (2)</i>	<i>Spyware</i>	<i>Keywords</i>
<i>Backing up</i>	<i>Firewall</i>	<i>System Integrity</i>

1) When browsing the internet, it's important to be cautious of suspicious ____ that may indicate attempts to download spyware or malicious mobile code onto your device.

2) ____ poses a significant threat to ____, as it can execute malicious actions on a device without the user's knowledge, making it essential to implement stringent security measures to prevent its execution

3) Implementing a robust firewall is crucial for protecting against unauthorized access and preventing the infiltration of _____ and malicious mobile code.

4) To maintain system integrity, it's essential to regularly update antivirus software to guard against threats like spyware and _____.

5) Spyware can exploit vulnerabilities in a system, bypassing _____ defenses and compromising system integrity by secretly collecting sensitive information.

6) Regularly _____ your data is an essential part of maintaining system integrity and protecting against data loss due to cyberattacks or system failures

9. Combine sentences with coordinating conjunctions (and, but, or, so, yet)

Combine the two sentences into one compound sentence.

1. The company updated the firewall. The hacker tried to break in.
→ _____
2. The IT team detected a virus. They didn't find the source immediately.
→ _____
3. The user changed the password. He forgot to save it.
→ _____
4. The system was hacked. The backup saved all data.
→ _____
5. The antivirus ran a scan. It didn't detect any threats.
→ _____
6. The cybersecurity specialist improved the protocol. The network remained vulnerable.
→ _____
7. The user clicked on a suspicious link. The computer got infected.
→ _____
8. The company invested in security software. The hackers kept trying to access the system.
→ _____
9. The administrator changed the firewall settings. The server crashed.
→ _____
10. The user installed an update. The software worked better.
→ _____

10. Combine sentences with subordinating conjunctions (because, although, since, unless, when, after, before, if, while).

Combine the sentences into one complex sentence.

1. The system was slow. The antivirus was running a full scan.
→ _____
2. The user changed the password. The account was still hacked.
→ _____

3. The firewall blocked the attack. The network was still vulnerable.
→ _____
4. The technician updated the software. The virus infected the computer.
→ _____
5. The user didn't click the link. The computer got a virus.
→ _____
6. The administrator installed patches. The system remained unprotected.
→ _____
7. The company delayed the update. The data was stolen.
→ _____
8. The hackers tried to break in. The security system detected them.
→ _____
9. The IT team monitored the network. The breach happened anyway.
→ _____
10. The user backed up data. The hard drive crashed.
→ _____

11. Identify if the sentence is complex or compound

Write C for complex sentence or Co for compound sentence.

1. The antivirus scanned the system, but it missed the malware.
2. Although the firewall was updated, the system was hacked.
3. The user reset the password, and the account was secured.
4. The hacker tried to access the network, yet the data remained safe.
5. Since the security protocols were weak, the breach occurred.
6. The IT department upgraded the software, but the virus returned.
7. The user clicked on a phishing email, so the system was infected.
8. If the company installs updates regularly, the risk is lower.
9. The technician fixed the bug, and the system worked properly.
10. While the backup was running, the server crashed.

12. Rewrite using active voice (from passive)

1. The system was protected by the cybersecurity team.
→ _____
2. The password was changed by the user.
→ _____
3. The malware was detected by the antivirus software.
→ _____

4. The firewall rules were updated by the administrator.
→ _____
5. The data was encrypted by the security expert.
→ _____
6. The backup was completed by the technician.
→ _____
7. The breach was prevented by the security system.
→ _____
8. The phishing email was reported by the employee.
→ _____
9. The virus was removed by the antivirus program.
→ _____
10. The suspicious activity was logged by the monitoring tool.
→ _____

13. Combine with coordinating and subordinating conjunctions

Combine the sentences using both coordinating and subordinating conjunctions.

1. The security software was updated. The attack continued. The firewall blocked the suspicious IP.
→ _____
2. The user ignored the warning. The system was infected. The technician fixed the problem.
→ _____
3. The hackers tried to breach the system. The administrator monitored the network. The data remained safe.
→ _____
4. The backup failed. The hard drive crashed. The IT team restored the files.
→ _____
5. The software was outdated. The network was vulnerable. The company invested in new security.
→ _____

14. Identify errors in complex or compound sentences. Find and correct the errors in the sentences.

1. Although the firewall was strong, the hacker still managed to broke in.
2. The antivirus scans the system, but it miss some malware.
3. The user changed the password but forgot to save it, so the account was compromised.
4. Since the update was installed the system is now secure.
5. The hacker tried to access the network, yet they was detected.
6. The technician fixed the bug but the system didn't restarted.
7. Because the security protocols were weak, the breach happened.
8. The company invested in software and yet the attacks continued.

9. If the user don't update the software, the system becomes vulnerable.
10. The backup was running while the server crashed.

15. Rewrite the sentences by correcting the grammatical errors.

- a. The programmer debug the code but didn't fix all the issues.
- b. The software engineer design the app, yet it wasn't functional.
- c. Although the application launched successfully, the user interface was confusing.
- d. The project manager coordinate the team, but the deadline was missed.
- e. Since the framework was outdated, the performance slowed down.
- f. The developer wrote the algorithm, yet it failed to process the data correctly.
- g. The testers identify the bugs but didn't report them.
- h. Because the client's requirements were unclear, the product didn't meet expectations.
- i. The team deployed the software while the system crashed.
- j. If the instructions isn't followed carefully, the installation fails.

16. Write sentences using appropriate grammar to describe software development scenarios.

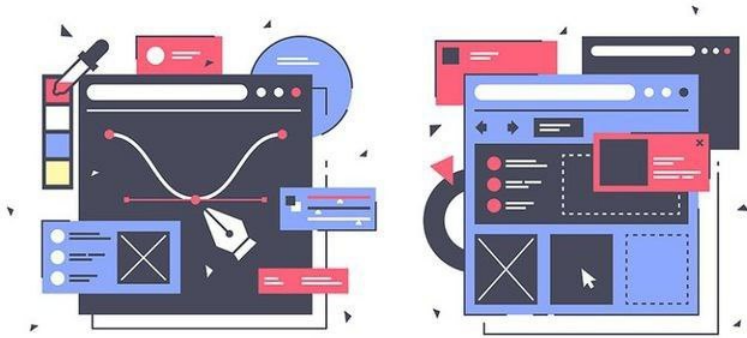
- a. The programmer optimized the code, so the application runs faster.
- b. While the server was being updated, the website went down temporarily.
- c. Agile teams prioritize collaboration and flexibility to improve efficiency.
- d. The designer added new features to the interface before it was tested.
- e. Because the algorithm was poorly written, the calculations were incorrect.
- f. The developers worked overtime, yet the application wasn't ready for launch.
- g. Debugging tools help identify errors but don't always solve them.
- h. Since the sprint ended, the team started planning the next cycle.
- i. The client gave feedback, which helped improve the final product.
- j. If a programming language isn't compatible, the software may not function properly.
- k. Testing ensures that applications meet quality standards before deployment.
- l. The framework was updated while the users were still online.
- m. The system crashed because the hardware wasn't compatible with the software.
- n. While the application was loading, the device overheated.
- o. The product launch was delayed, yet the marketing campaign continued.

17. Write a newsletter article for your company about 3 essential cybersecurity tips every employee should follow. Word count: 150–200 words.

UNIT 9. Programming and software development

TASKS:

1. Read the text and briefly write its meaning.



Programming and software development have become integral components of modern technology, shaping the digital landscape and driving innovation across various industries. At its core, programming involves writing instructions in a specific programming language to create software applications that perform various tasks and solve problems.

Software development encompasses the entire process of designing, coding, testing, and maintaining software applications. It involves a collaborative effort between programmers, software engineers, designers, and other stakeholders to bring ideas to life and deliver functional and user-friendly products.

The field of programming is vast and diverse, with a wide range of programming languages, frameworks, and tools available to developers. Each programming language has its strengths and weaknesses, and the choice of language often depends on factors such as project requirements, performance considerations, and personal preferences.

One of the fundamental skills in programming is algorithmic thinking, which involves breaking down complex problems into smaller, more manageable tasks and devising efficient algorithms to solve them. Algorithms form the backbone of software applications, determining how data is processed, manipulated, and transformed to achieve desired outcomes.

In addition to writing code, software developers also need to be proficient in debugging and troubleshooting to identify and fix errors and issues in their code. Testing is another critical aspect of software development, ensuring that applications function as intended and meet quality standards before being deployed to end-users.

Agile methodologies have gained popularity in recent years as a flexible and iterative approach to software development, emphasizing collaboration, adaptability, and customer feedback. Agile teams work in short development cycles called sprints, continuously

delivering working software and incorporating changes based on feedback from stakeholders.

The rise of DevOps practices has further transformed software development, blurring the lines between development and operations teams and promoting automation, collaboration, and continuous integration and deployment. DevOps aims to streamline the software delivery process, reduce time to market, and improve overall software quality and reliability.

Software development extends beyond traditional desktop applications to encompass web development, mobile app development, cloud computing, artificial intelligence, and more. As technology continues to evolve, software developers play a crucial role in driving innovation and shaping the future of digital transformation.

In conclusion, programming and software development are dynamic and ever-evolving fields that empower individuals and organizations to create innovative solutions to complex problems. With a combination of technical skills, creativity, and problem-solving abilities, software developers are at the forefront of technological innovation, driving progress and shaping the digital world we live in.

2. Answer these questions.

1) How do programming and software development contribute to technological innovation and digital transformation across industries?

2) What are some fundamental skills required in programming, and how do they support the development of software applications?

3) How has the rise of DevOps practices transformed the software delivery process, and what benefits do they offer to development teams and organizations?

4) What role do agile methodologies play in modern software development, and how do they differ from traditional approaches?

5) In what ways has software development evolved beyond traditional desktop applications, and what emerging technologies are shaping the future of the field?

3. The sentence is True or False.

- 1) Programming and software development are essential components of modern technology, driving innovation across various industries.
- 2) Software development involves a collaborative effort between programmers, software engineers, designers, and stakeholders to create functional and user-friendly products.
- 3) Each programming language has its strengths and weaknesses, and the choice of language depends on factors such as project requirements and personal preferences.
- 4) Agile methodologies emphasize long development cycles and discourage continuous feedback and adaptation.
- 5) DevOps practices aim to streamline the software delivery process and improve overall software quality and reliability.
- 6) Software development is limited to traditional desktop applications and does not extend to web development, mobile app development, cloud computing, and artificial intelligence.

4. Translate the following English units into Ukrainian.

- 1) *Coding Cornerstone*-_____
- 2) *Debugging Detective*-_____
- 3) *Agile Arena*-_____
- 4) *DevOps Dance*-_____
- 5) *Innovation Highway*-_____
- 6) *Code Crafting*-_____

5. Give synonyms to the words in **bold type**.

- 1) Shutdown, restart, and **log out** of your computer.

- 2) **Authorization** refers to the process of granting privileges to processes and, ultimately, users.

- 3) Thus, the ME **Token** becomes a real currency unit in its virtual form.

- 4) My research **grant** depends on it.

- 5) An example of this is the Search **Function**.

6. Translate Ukrainian to English.

- Логін - _____
- Ключ авторизації- _____
- Користувач- _____
- Проміжне ПЗ- _____
- Контролер- _____
- Переглянути- _____
- Невідстежуваний- _____

7. Explain this word in English without using the given word itself.

- Hash- _____

- Revoke- _____

- Staged- _____

9. Fill in the blanks with the necessary words in the box.

<i>grant</i> <i>authorization</i>	<i>login</i> <i>user</i>
--------------------------------------	-----------------------------

1) Once the grant of _____ is approved, the user can proceed to the login page and enter their credentials.

2) It's essential for administrators to monitor _____ activity and revoke grants of authorization if necessary to maintain security.

3) To access the system, the user must first request a _____ of authorization from the administrator.

4) After successful _____, the user will be granted access to their account and can begin using the system.

9. Combine each pair of sentences into a complex sentence, using the subordinating conjunction provided.

I was hungry. I ate a sandwich. (because)

The sun was shining. We went for a swim. (since)

She didn't study. She failed the test. (because)

The movie was boring. We left early. (because)

You work hard. You will succeed. (if)

I was tired. I went to bed early. (because)

I was sleepy. I went to bed. (because)

The weather was bad. We stayed home. (since)
She didn't feel well. She didn't go to school. (because)
The food was delicious. We ate a lot. (because)

10. Combine sentences with subordinating conjunctions (because, although, since, unless, when, after, before, if, while)

Make complex sentences by combining the two sentences.

1. The program crashed. The developer didn't test it properly.
→ _____
2. The update was delayed. The team fixed all bugs.
→ _____
3. The code was optimized. The system still ran slowly.
→ _____
4. The tester found an error. The developer hadn't reviewed the code.
→ _____
5. The user reported a bug. The software was updated immediately.
→ _____
6. The developer committed the code. The build failed.
→ _____
7. The manager approved the project. The deadline was tight.
→ _____
8. The software crashed. The team was debugging the system.
→ _____
9. The app worked well. The server was down.
→ _____
10. The developer wrote tests. The code was more reliable.
→ _____

11. Write 10 sentences about software development projects.

Use a variety of:

- Compound and complex sentences
- Future tenses
- Gerunds and infinitives
- Active voice

12. Combine the following sentence pairs using appropriate conjunctions or relative pronouns.

- ❖ The team was testing the app. They discovered a critical bug.
- ❖ The project was delayed. The client requested additional features.
- ❖ The documentation was incomplete. The developers struggled to understand the API.

- ❖ The company invested in new servers. They wanted to improve performance.
- ❖ The code was refactored. It became easier to maintain.

13. Write 10 sentences about the benefits and challenges of cloud computing using gerunds and infinitives.

- ❖ To lower costs, many businesses are moving to the cloud.
- ❖ Managing data securely in the cloud requires careful planning.
- ❖ Using a cloud platform helps in scaling operations efficiently.
- ❖ Developers often try to avoid delaying project timelines.
- ❖ To integrate cloud-based solutions, training staff becomes essential.

14. Write compound and complex sentences about software development.

- ❖ The team worked late, yet they couldn't meet the deadline.
- ❖ Although the app was deployed, some features required further testing.
- ❖ The developer fixed the bug, but the issue reappeared during user testing.
- ❖ The software was well-designed because the developers followed best practices.
- ❖ If the servers had been upgraded, the application would have run faster.

15. Write 15 sentences that compare traditional IT infrastructure with cloud computing.

- ❖ Cloud computing is more flexible than traditional infrastructure.
- ❖ Setting up a traditional server takes longer than configuring a cloud-based one.
- ❖ While traditional systems require upfront investment, cloud services operate on a pay-as-you-go model.
- ❖ Cloud storage is more scalable than on-premises solutions.
- ❖ Maintaining traditional IT systems is more resource-intensive than using cloud platforms.
- ❖ Cloud providers offer better disaster recovery options than local servers.

16. Identify mistakes or inconsistencies in the following text and suggest corrections.

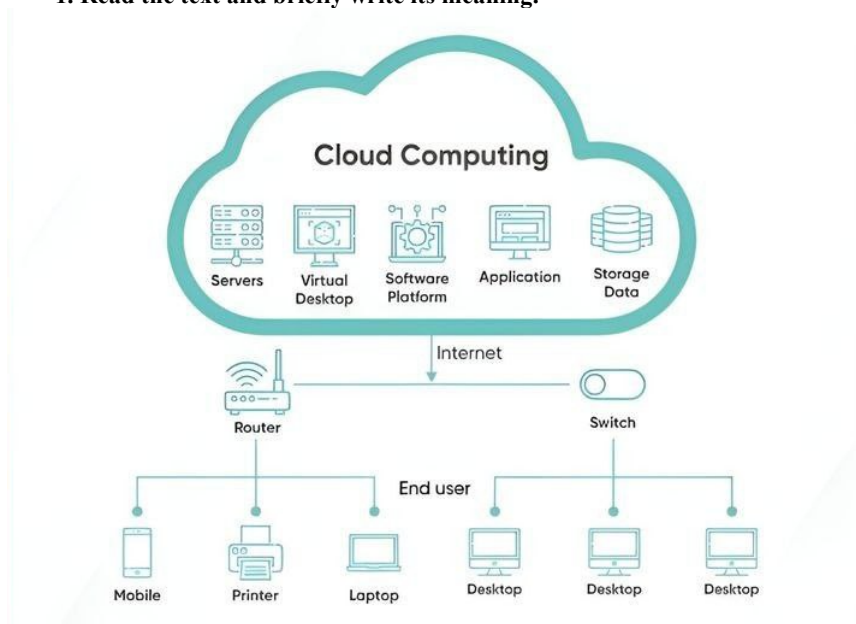
- ❖ The software was launched last year, but some users report occasional crashes when handling large datasets.
- ❖ Our company's guidelines state that all code should be peer-reviewed, but some recent commits have bypassed this process.
- ❖ During deployment, a configuration file was accidentally omitted, which caused downtime for several hours.

17. Write an onboarding note for a junior developer that explains the main stages of software development in a team. Word count: 180–220 words.

UNIT 10. Cloud technologies and computing

TASKS:

1. Read the text and briefly write its meaning.



Cloud technologies are rapidly expanding, drawing interest from both major corporations and smaller enterprises. This model of computing allows users to access applications, data, and other resources online, using any internet-connected device.

The outlook for the cloud market is highly positive. Gartner Inc. predicted that global spending on public cloud services would rise by 20.7% in 2023, reaching \$591.8 billion – up from \$490.3 billion in 2022. This growth surpasses the previous year's projection of 18.8%. The main drivers behind this surge include the growing number of businesses turning to the cloud to streamline operations, store data more efficiently, and lower IT infrastructure expenses. Innovations such as quantum computing and machine learning are also expected to contribute to further market expansion.

A key benefit of cloud computing is its adaptability. Organizations can quickly adjust their resource use based on current demands without investing in new hardware or additional staff. It also enhances productivity by automating routine processes and significantly cuts IT-related costs.

A notable example is Airbnb, which relies on Amazon Web Services to manage and scale its infrastructure effectively. This has enabled the company to handle large volumes of data and maintain service quality as it grows.

Numerous global companies have successfully integrated cloud solutions into their operations:

Coca-Cola uses cloud services to accelerate product launches and improve business efficiency.

BMW employs the cloud to innovate and test new features while boosting vehicle performance and safety.

Adobe relies on cloud storage and computing power to handle vast data sets for software development.

GE Healthcare has developed digital data platforms that assist healthcare professionals in enhancing treatment outcomes.

UPS leverages cloud tools to streamline logistics and improve cargo tracking systems.

One of the most striking recent success stories is ChatGPT, which became the fastest-growing IT product ever. By January 2023, just two months after its release, it had already surpassed 100 million monthly users. Its rapid rise was made possible in large part through the use of cloud technologies.

2. Answer these questions.

1) What is cloud computing, and how does it provide computing resources to users?

2) According to Gartner Inc., what is the projected growth of global spending on public cloud services in 2023, and what factors contribute to this growth?

3) What are some advantages of cloud technologies mentioned in the text, and how do they benefit companies?

4) Can you provide an example of a successful company that utilizes cloud technologies, and how has it benefited from them?

5) How do major global brands such as Coca-Cola, BMW, Adobe, GE Healthcare, and UPS use cloud technologies in their business operations, according to the text?

3. The sentence is True or False.

- 1) The cloud technology market is growing rapidly and attracting the attention of both large corporations and small businesses.
- 2) Cloud computing is a model for providing computing resources that are only available through physical servers.
- 3) Estimates suggest that global spending on public cloud services will decrease in 2023 compared to 2022.
- 4) One reason for the growth of the cloud technology market is the decreasing number of consumers who use cloud technologies for work and data storage.
- 5) Cloud technologies provide flexibility to companies by allowing them to easily scale their computing resources without purchasing new hardware.
- 6) All major global brands mentioned in the text use cloud technologies primarily for marketing purposes.

4. Translate the following English units into Ukrainian.

- 1) *Cloud Nine Efficiency*-_____
- 2) *Silver Lining Solutions*-_____
- 3) *Navigating the Cloudscape*-_____
- 4) *Data Drizzle*-_____
- 5) *Sky-High Scalability*-_____
- 6) *Cloud Cover Collaboration*-_____

5. Give synonyms to the words in **bold** type.

- 1) **On-demand self-service**, when a consumer without interaction with a service provider can determine and change parameters such as access speed, processing time, amount of stored data, etc.

- 2) Bond banks and **resource pooling** can be useful instruments for reducing risk.

- 3) A cloud computing model can be composed of various characteristics such as on-demand self-service, broad network access, resource pooling, **rapid elasticity**, measured service, and so forth.

- 4) VMware View **VDI (Virtual Desktop Infrastructure)** software allows users to access their data and applications across a wide range of clients.

5) As with other cloud models, **private clouds** will provide computing power as a service within a virtualized environment using an underlying pool of physical computing resource.

6. Translate Ukrainian to English:

- Широкий доступ до мережі-_____
- Розмірне обслуговування-_____
- Резервне копіювання в хмарному сховищі-_____
- Хмарна модель: спільнота-_____
- Хмарний мережевий контролер-_____

7. Explain this word in English without using the given word itself.

- *Infrastructure as a Service (IaaS)*-_____

-
- *Platform as a service (PaaS)*-_____

-
- *Software as a Service (SaaS)*-_____
-

8. Fill in the blanks with the necessary words below:

<i>IaaS</i>	<i>PaaS</i>	<i>SaaS</i>
-------------	-------------	-------------

1) Online video game streaming services, currently pioneered by Onlive and PlayStation Now, work like _____: the actual game being played runs on a remote server.

2) What is _____ and who primarily uses it?

3) The second is _____ which lets a company deliver everything from simple cloud-based applications to sophisticated-enabled enterprise applications.

9. Fill in the blanks with the correct modal verb (can, can't, may, might, must)

1. You _____ access the cloud storage from any device.
2. Users _____ share confidential files without permission.
3. The system _____ experience delays during high traffic.
4. Employees _____ use personal accounts to store company data.
5. You _____ backup your files regularly to avoid data loss.
6. The IT department _____ disable accounts that violate policies.

7. Developers _____ test applications in the cloud environment.
8. Clients _____ access the service 24/7.
9. You _____ connect to public Wi-Fi when transferring sensitive data.
10. Admins _____ monitor all cloud activity for security purposes.

10. Rewrite sentences using modal verbs of prohibition or permission

1. It is forbidden to download unapproved software on cloud servers.
→ You _____ download unapproved software on cloud servers.
2. Users are allowed to store documents in the shared folder.
→ Users _____ store documents in the shared folder.
3. The company does not allow employees to access client data without authorization.
→ Employees _____ access client data without authorization.
4. It is necessary to encrypt all sensitive data before uploading.
→ You _____ encrypt all sensitive data before uploading.
5. Using unsecured devices is not permitted on the network.
→ You _____ use unsecured devices on the network.
6. The administrator allows backups during off-peak hours.
→ Backups _____ be done during off-peak hours.
7. Users must not share their passwords with anyone.
→ You _____ share your passwords with anyone.
8. Access to the cloud platform is granted after completing security training.
→ You _____ access the cloud platform after completing security training.
9. The system may experience downtime during maintenance.
→ The system _____ experience downtime during maintenance.
10. Unauthorized users are not allowed to modify system settings.
→ Unauthorized users _____ modify system settings.

11. Fill in the blanks with the correct modal verb expressing allowance or restriction

1. Employees _____ access the cloud only during work hours.
2. You _____ share your login credentials with others.
3. The system _____ notify users of security breaches.
4. Users _____ install software without admin approval.
5. The cloud platform _____ handle thousands of simultaneous connections.
6. Visitors _____ enter the secure server room.
7. You _____ backup files regularly to avoid data loss.
8. Unauthorized users _____ access confidential information.
9. Admins _____ reset passwords for locked accounts.
10. Users _____ disable antivirus software on company devices.

12. Rewrite sentences, replacing the underlined part with a modal verb phrase

1. It is necessary for users to get permission before downloading files.
→ Users _____ download files.
2. It is forbidden to share your password with others.
→ You _____ share your password.
3. It is allowed for admins to view activity logs.
→ Admins _____ view activity logs.
4. It is not permitted to use personal devices on the network.
→ You _____ use personal devices on the network.
5. It is possible that the system will be unavailable during maintenance.
→ The system _____ be unavailable during maintenance.
6. It is mandatory to encrypt sensitive files.
→ You _____ encrypt sensitive files.
7. Users are prohibited from installing unauthorized software.
→ Users _____ install unauthorized software.
8. The company permits employees to work remotely.
→ Employees _____ work remotely.
9. It might be necessary to update passwords regularly.
→ You _____ update passwords regularly.
10. It is not possible to access the server without credentials.
→ You _____ access the server without credentials.

13. Complete the sentences using modal verbs + verbs in brackets

1. You _____ (be) responsible for your account security.
2. Users _____ (not share) their passwords with others.
3. The IT team _____ (monitor) all cloud activity.
4. Employees _____ (use) strong passwords.
5. You _____ (not access) restricted areas without permission.
6. Developers _____ (test) all code before deployment.
7. Clients _____ (contact) support if they have issues.
8. You _____ (backup) data regularly to avoid loss.
9. Unauthorized users _____ (enter) the server room.
10. The system _____ (send) alerts about suspicious logins.

14. Fill in the blanks with the correct form of the verbs in parentheses.

1. He _____ (finish) the report before the deadline.
2. They _____ (not attend) the meeting yesterday.
3. The manager _____ (approve) the proposal if it meets the requirements.
4. We _____ (wait) for your reply since last Monday.
5. The application _____ (not work) properly after the update.
6. You _____ (follow) the guidelines to avoid errors.
7. The team _____ (complete) the project by the end of next month.

8. The system _____ (not accept) passwords that are too short.
9. Customers _____ (provide) accurate information during registration.
10. The developer _____ (present) the new features at the meeting tomorrow.

15. Identify and correct the mistakes in the following sentences.

1. The files was uploaded successfully.
2. She don't have access to the database.
3. Passwords must to be changed regularly.
4. The IT team is monitoring all activities for ensure security.
5. Employees have to follows the security policies.
6. The server was restarted because it was running slow.
7. Developers tests the code before deployment.
8. Users not should share their login details.
9. Backup data is essential for preventing data losses.
10. The system sends an alert if it detects a suspiciously login attempt.

16. Rewrite the following sentences in the passive voice.

1. The IT team monitors all cloud activity.
2. Users should back up their data regularly.
3. Developers will test the code before deployment.
4. The manager approved the security policy.
5. They have completed the project successfully.
6. The system sends alerts about login issues.
7. The team is reviewing the new guidelines.
8. The staff resolved the technical problem quickly.
9. Users changed their passwords last week.
10. Customers provide feedback about their experiences.

17. Write a report explaining why cloud computing is useful for small businesses and what risks they should be aware of. Word count: 170–210 words.

UNIT 11. Databases and database management systems



TASKS:

1. Read the text and briefly write its meaning.

A database management system (DBMS) is software that helps users create, maintain, and work with databases. It acts as a bridge between users or applications and the database itself, making sure data stays well-organized and easy to access. With a DBMS, users can add, change, read, or delete data securely and efficiently.

The DBMS consists of three main parts:

The database engine, which handles access and updates,

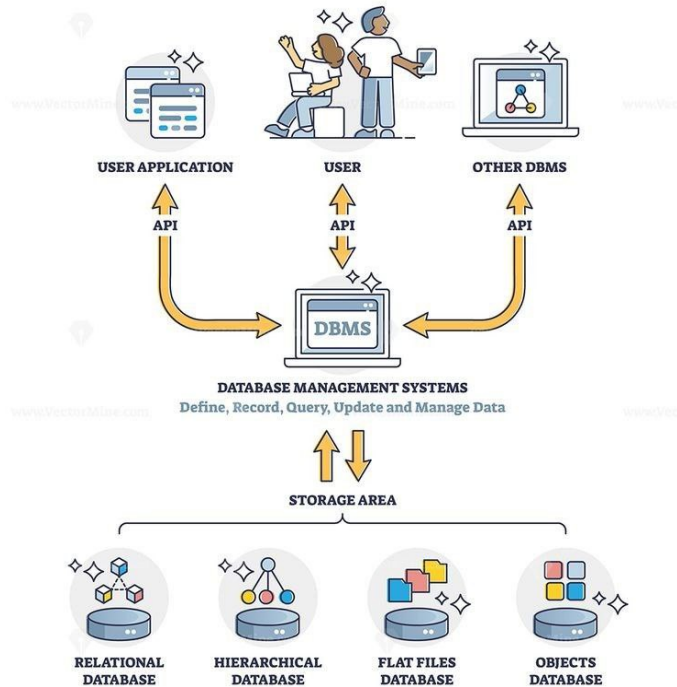
The schema, which defines the structure of the data, and

The management tools, which ensure tasks like security, backups, and performance monitoring are carried out smoothly.

A key feature of a DBMS is that it gives many users access to the same data from different places while still maintaining control over who sees what and how. It also hides the physical details of where data is stored, allowing developers and users to work with data without worrying about how it's organized behind the scenes.

DBMSs offer data independence, meaning applications don't need to change even if the way data is stored changes. This is thanks to the use of standard programming interfaces (APIs).

In the case of relational database systems (RDBMS) – the most common type – the standard language used is SQL. This allows users to define, secure, and retrieve data in a consistent and structured way.



What are the components of a DBMS?

A DBMS is a sophisticated piece of system software consisting of multiple integrated components that deliver a consistent, managed environment for creating, accessing, and modifying data in databases. These components include the following:

- **Storage engine.** This basic element of a DBMS is used to store data. The DBMS must interface with a file system at the operating system (OS) level to store data. It can use additional components to store data or interface with the actual data at the file system level.
- **Metadata catalog.** Sometimes called a system catalog or database dictionary, a metadata catalog functions as a repository for all the database objects that have been created. When databases and other objects are created, the DBMS automatically registers information about them in the metadata catalog. The DBMS uses this catalog to verify user requests for data, and users can query the catalog for information about the database structures that exist in the DBMS. The metadata catalog can include information about database objects, schemas, programs, security, performance, communication, and other environmental details about the databases it manages.
- **Database access language.** The DBMS also must provide an API to access the data, typically in the form of a database access language to access and modify

data but may also be used to create database objects and secure and authorize access to the data. SQL is an example of a database access language and encompasses several sets of commands, including Data Control Language for authorizing data access, Data Definition Language for defining database structures, and Data Manipulation Language for reading and modifying data.

- Optimization engine. A DBMS may also provide an optimization engine, which is used to parse database access language requests and turn them into actionable commands for accessing and modifying data.
- Query processor. After a query is optimized, the DBMS must provide a means for running the query and returning the results.
- Lock manager. This crucial component of the DBMS manages concurrent access to the same data. Locks are required to ensure multiple users aren't trying to modify the same data simultaneously.
- Log manager. The DBMS records all changes made to data managed by the DBMS. The record of changes is known as the log, and the log manager component of the DBMS is used to ensure that log records are made efficiently and accurately. The DBMS uses the log manager during shutdown and startup to ensure data integrity, and it interfaces with database utilities to create backups and run recoveries.
- Data utilities. A DBMS also provides a set of utilities for managing and controlling database activities. Examples of database utilities include reorganization, run stats, backup and copy, recover, integrity check, load data, unload data, and repair database.

2. Answer these questions.

1) What is a database management system (DBMS), and what functions does it serve?

2) How does a DBMS provide data management capabilities to end users and application programs?

3) What are the three foundational elements of a DBMS, and how do they contribute to data management?

4) What tasks are typically supported by a DBMS in terms of database administration?

5) How does a DBMS provide data independence to users and applications?

6) What is the role of an application programming interface (API) in a relational database management system (RDBMS)?

7) What are the key components of a DBMS, and what functions do they perform?

8) Can you provide examples of database utilities used in managing and controlling database activities?

3. The sentence is True or False.

1) A database management system (DBMS) is system software for creating and managing databases.

2) The DBMS allows end users to create, protect, read, update, and delete data in a database.

3) The database engine, database schema, and DBMS together provide concurrency, security, data integrity, and uniform data administration procedures.

4) Most database management systems are responsible for automated rollbacks and restarts, as well as logging and auditing of activity in databases.

5) A DBMS provides a decentralized view of data accessed by multiple users from multiple locations.

6) An API for a relational database management system (RDBMS) is typically SQL, a standard programming language for defining, protecting, and accessing data.

4.Translate the following English units into Ukrainian:

1) *Data Dynamo*-_____

2) *Management Maven*-_____

3) *Information Infrastructure*-_____

4) *Data Highway*-_____

5. Give synonyms to the words in **bold** type.

1) The **database management system (DBMS)** processes queries and returns the results.

2) I must first find that **record**.

3) They are hereby separated from the real **Entity**.

4) Nevertheless, the limitations mentioned previously still largely apply: small sample size and imperfect availability of **data or data definition**.

5) This **Attribute** indicates the name of the filter list for this user.

6. Translate Ukrainian to English:

- База даних-_____
- Таблиця-_____
- Колонка-_____
- Рядок-_____
- Метадані-_____
- Безпека даних-_____
- Індекс-_____

7. Explain this word in English without using the given word itself.

- Field-_____
 - Primary key-_____
 - Data dictionary-_____
-

8. Fill in the blanks with the necessary words in the box.

<i>Data security</i>	<i>Direct organization</i>
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1) _____ of data allows for efficient retrieval and manipulation, streamlining processes, and enhancing productivity within databases.

2) _____ is a critical aspect of database design, ensuring data integrity and minimizing redundancy by organizing data into logical and efficient structures.

3) _____ offer lightning-fast data processing speeds by storing information directly in the system's memory, eliminating the need for disk access.

4) _____ is paramount in today's digital landscape, with organizations implementing robust measures to safeguard sensitive information from unauthorized access or breaches.

9. Complete zero conditional sentences (If + present simple → present simple).

1. If the database server _____ (go) down, the system stops working.
2. If you _____ (enter) invalid data, the system rejects it.
3. If the query _____ (be) complex, it takes longer to run.
4. If the backup _____ (fail), data might be lost.
5. If users _____ (access) the database simultaneously, it may slow down.
6. If the password _____ (be) correct, the user gains access.
7. If the table _____ (contain) many rows, search is slower.
8. If the connection _____ (drop), the transaction is canceled.
9. If you _____ (update) the schema, the application must adapt.
10. If the database _____ (reach) its storage limit, no more data can be saved.

10. Complete first conditional sentences (If + present simple → will + base verb).

1. If the database _____ (be) slow, the admin will optimize it.
2. If the user _____ (forget) the password, they will reset it.
3. If the query _____ (fail), the system will return an error.
4. If the backup _____ (run) successfully, data will be safe.
5. If you _____ (input) wrong data, the system will warn you.
6. If the server _____ (overload), it will shut down automatically.
7. If the software _____ (have) a bug, the developer will fix it.
8. If the user _____ (click) "delete," the record will be removed.
9. If the admin _____ (approve) the changes, they will go live.
10. If the database _____ (be) encrypted, the data will be protected.

11. Complete second conditional sentences (If + past simple → would + base verb).

1. If the database _____ (be) faster, users would be happier.
2. If I _____ (have) more storage, I would back up the data daily.
3. If the system _____ (support) more users, it would be more efficient.

4. If the developer _____ (know) SQL better, they would write faster queries.
5. If the backup _____ (work) correctly, we wouldn't lose data.
6. If the software _____ (be) open source, more people would contribute.
7. If the company _____ (invest) in better hardware, performance would improve.
8. If the database _____ (have) fewer bugs, users would trust it more.
9. If I _____ (be) an admin, I would restrict access to sensitive tables.
10. If the query _____ (run) faster, reports would generate quicker.

12. Complete third conditional sentences (If + past perfect → would have + past participle).

1. If the admin _____ (install) updates earlier, the breach would have been prevented.
2. If the backup _____ (complete) last night, the data would have been safe.
3. If the user _____ (enter) the correct password, they would have logged in.
4. If the developer _____ (fix) the bug, the system wouldn't have crashed.
5. If the query _____ (be) optimized, it would have returned results faster.
6. If the server _____ (not fail), the transaction would have succeeded.
7. If the database _____ (be) encrypted, the data wouldn't have been exposed.
8. If the technician _____ (check) the logs, they would have detected the problem.
9. If the software _____ (pass) all tests, it would have been released.
10. If the users _____ (back up) their data, they wouldn't have lost it.

13. Rewrite sentences using conditionals

1. The database is slow. Users get frustrated.

→ _____

2. The backup was not done. Data was lost.

→ _____

3. The user forgets the password. They can't log in.

→ _____

4. The system crashes during high load. Data corruption happens.

→ _____

5. The admin restricts access. The data is safer.

→ _____

6. The developer fixes bugs. The software runs better.

→ _____

7. The query takes too long. The report is delayed.

→ _____

8. The server fails. The transaction is incomplete.

→ _____

9. The company invests in security. Breaches reduce.

→ _____

10. The users backup data regularly. They avoid losses.

→ _____

14. Correct mistakes in conditional sentences

1. If the database would be faster, the system runs better.
2. If the admin had restricted access, the breach wouldn't happened.
3. The software crashes if the user enter wrong data.
4. If backups fails, data is lost.
5. If the server go down, transactions will fail.
6. If the developer fixed bugs, the app runs more smoothly.
7. If the users forget their passwords, they resets them.
8. The database would be more secure if it encrypted the data.
9. If the backup hadn't completed, data wouldn't have lost.
10. If the system crashes, the admin restart it.

15. Create conditional sentences using AI or ML-related scenarios.

- a. If AI systems were faster, they would analyze data more efficiently.
- b. If the machine learning model had more data, the predictions would improve.
- c. AI tools crash if they encounter corrupted files.
- d. If developers trained algorithms better, biases wouldn't occur.
- e. If the chatbot fails to understand the user, the conversation ends.
- f. If an AI-powered car detects an obstacle, it changes direction.
- g. AI would be more reliable if developers resolved ethical concerns.
- h. If AI systems hadn't evolved, certain industries wouldn't have transformed.
- i. If the machine learning algorithm detects fraud, it flags the transaction.
- j. AI assistants respond faster if their training data is extensive.
- k. If the code had been optimized, the AI model would perform better.
- l. If AI doesn't receive clear instructions, the output becomes unpredictable.
- m. If facial recognition fails to identify a person, access is denied.
- n. The application crashes if the AI encounters an undefined variable.
- o. If AI systems were regulated, privacy concerns would decrease.

16. Rewrite the sentences below to include conditional clauses about AI and ML.

- a. Developers need to fix bugs to improve AI systems.
- b. Data protection is necessary to make AI algorithms secure.
- c. AI tools evolve when developers address biases in datasets.
- d. The financial sector benefits from machine learning models predicting trends.
- e. AI-based healthcare tools assist doctors in patient diagnosis and treatment.
- f. If developers don't consider ethical concerns, AI systems cause harm.
- g. Machine learning algorithms improve when provided with diverse training data.
- h. Companies adopt AI technologies to optimize manufacturing processes.

- i. AI chatbots enhance customer service by responding 6ly to queries.
- j. Advances in NLP help AI-powered translation tools understand nuances in language.
- k. Computer vision improves facial recognition when trained on high-quality images.
- l. AI systems influence job markets when they automate repetitive tasks.
- m. Machine learning helps detect fraud in financial transactions.
- n. Developers refine algorithms to minimize errors in AI predictions.
- o. Governments regulate AI technologies to ensure transparency and accountability.

17. Write an email explaining to your manager why a relational or non-relational database would be more suitable for your current project. Word count: 150–180 words.

UNIT 12. Artificial intelligence and machine learning

TASKS:

1. Read the text and briefly write its meaning.



Artificial Intelligence (AI) and Machine Learning (ML) have become essential parts of today's technological landscape, transforming various industries and redefining how humans interact with digital systems. AI involves machines mimicking human intelligence, while ML – a branch of AI – focuses on systems learning from data without needing explicit instructions. These technologies empower machines to take on tasks typically done by people, such as solving problems, making decisions, and translating languages.

A major strength of AI and ML is their capacity to process massive amounts of data to find trends and forecast outcomes. This skill has fueled progress in sectors like

healthcare, finance, manufacturing, and transportation. For instance, AI-based tools in medicine can examine scans and patient records to help doctors make more accurate diagnoses and treatment choices. In the financial world, ML is used to predict market changes, understand consumer habits, and detect fraud.

AI and ML are also advancing fields like natural language processing (NLP) and computer vision. NLP allows machines to interpret and generate human language, enabling innovations such as voice assistants, translation software, and chatbots. Meanwhile, computer vision gives machines the ability to "see" and understand images and videos, which supports technologies like facial recognition, self-driving cars, and object tracking.

However, these technologies aren't without issues. Bias in algorithms can lead to unfair outcomes, especially in areas like hiring, financial lending, or law enforcement. The use of personal data raises privacy concerns and calls for more transparency and accountability. There are also broader ethical questions, such as how AI might impact jobs, increase inequality, or affect basic human rights.

In summary, while AI and ML offer great potential to solve real-world problems and boost efficiency, it's crucial to manage them thoughtfully. To fully benefit from these technologies, we must also confront their risks and social impacts. When developed and used responsibly, AI and ML can be powerful tools for innovation and positive change.

2. Answer these questions.

1) How do Artificial Intelligence (AI) and Machine Learning (ML) differ, and what are their respective roles in modern technology?

2) What are some examples of tasks traditionally requiring human intelligence that AI and ML now enable computers to perform?

3) How do AI and ML leverage large datasets to make predictions and identify patterns?

4) What are some key applications of AI and ML in healthcare and finance?

5) What are Natural Language Processing (NLP) and Computer Vision, and how do they contribute to AI and ML applications?

6) What challenges do AI and ML face, particularly in terms of bias, data privacy, and ethical considerations?

7) How can responsible deployment of AI and ML technologies address technical challenges and mitigate ethical and societal implications?

3. The sentence is True or False?

1) Artificial Intelligence (AI) and Machine Learning (ML) are the same and can be used interchangeably.

2) AI-powered diagnostic tools in healthcare can assist doctors in making accurate diagnoses and treatment recommendations.

3) Natural Language Processing (NLP) algorithms enable machines to interpret and analyze visual information.

4) Bias in AI algorithms can lead to unfair or discriminatory outcomes in sensitive areas such as hiring and lending.

5) Data privacy concerns arise because AI systems collect and analyze vast amounts of personal data.

6) Addressing technical challenges is the only requirement for realizing the full potential of AI and ML.

4. Translate the following English units into Ukrainian.

1) *Cutting-edge technology*-_____

2) *Machine learning algorithms*-_____

3) *Data-driven decisions*-_____

4) *Predictive analytics*-_____

5) *Neural networks*-_____

6) *Algorithmic bias*-_____

5. Give synonyms to the words in **bold type**.

1) New boot loader GPTZFSBoot supports **GPT and ZFS**.

2) **Patterns** of consumption and production must be sustainable.

3) **Deep Learning** is based on the working of the human brain.

4) This is a classic example of the male standard preferred by the automated system due to **training data bias**.

5) Could **Unsupervised Learning** Unlock the Secrets of the Brain?

6. Translate Ukrainian to English.

- Штучна нейрона мережа- _____
- Комп'ютерна програма- _____
- Двійковий код- _____
- Характеристики- _____
- Алгоритм- _____

7. Explain this word in English without using the given word itself.

- Large Language Models- _____

- Model- _____

- Machine Learning- _____

8. Fill in the blanks with the necessary words in the box.

<i>Machine Learning</i>	<i>Model</i>
<i>Large Language Models</i>	<i>Algorithm</i>

1) _____ like GPT-4 can generate human-like text and are capable of understanding and producing language with remarkable accuracy.

2) _____ has revolutionized various industries by enabling systems to learn from data and improve their performance without explicit programming.

3) Developing an accurate _____ is crucial in machine learning, as it determines how well the system can predict or classify new data.

9. Complete the sentences with a modal verb from the box below. Sometimes more than one answer is possible.

can, could, may, might, must, shall, should, will, would, have to, ought to, need to, mustn't, can't, be able to

1. You _____ install the latest patch before accessing the secure network.
2. Users _____ forget their passwords, so the system includes a recovery option.
3. This code is too clean to contain a bug—it _____ be wrong.
4. Developers _____ test their code thoroughly before deployment.
5. If we optimize the algorithm, we _____ reduce loading times by half.
6. He _____ access the server after the permissions were updated.
7. You _____ share login credentials with anyone—it's a serious security risk.
8. The IT team _____ been able to resolve the issue faster with better documentation.
9. We _____ release the update this Friday, but it depends on final testing.
10. She _____ not finish the task today if she keeps getting interrupted.
11. All employees _____ attend the cybersecurity workshop next week.
12. You _____ contact technical support if the problem persists.
13. The system is down. I _____ try rebooting it and see if it helps.
14. Developers _____ always consider scalability when designing software.
15. By next year, we _____ implement AI-assisted troubleshooting.

10. Complete the sentences using the correct modal verb (e.g., can, could, may, might, must, shall, should, will, would).

- You _____ complete the report before the deadline if you want to receive full credit.
- The team _____ consider alternative solutions to improve performance.
- He _____ have arrived earlier if he had taken the earlier train.
- Developers _____ always prioritize user experience when designing interfaces.
- Everyone _____ submit their signed forms by the end of the day.
- I _____ call the vendor tomorrow to clarify the pricing details.
- We _____ not implement the changes until they are thoroughly tested.

- She _____ try restarting her computer to resolve the connectivity issue.
- The client _____ appreciate clearer communication regarding project timelines.
- By next month, they _____ present the finalized version of the app.

11. Choose the correct modal verb to complete the dialogue.

- A: I think we _____ (must/might) upgrade our software soon.
 B: Yes, we _____ (should/can) do it, but let's wait until after the next release.
 A: Do you think we _____ (would/could) face compatibility issues?
 B: It's possible, though we _____ (must/might) address them during testing.
 A: I _____ (can/will) look into this further and prepare a report.

12. Rewrite the sentences to include modal verbs to indicate possibility, obligation, or necessity.

- The project deadline is tomorrow. (obligation)
- We are able to finish the task if we work overtime. (possibility)
- All employees are required to attend the training. (necessity)
- The client will accept the proposal if it meets their requirements. (possibility)

13. Find the mistakes in these sentences and correct them.

- She cans resolve the issue by restarting her computer.
- We should to consider scalability in our design.
- He musts be on time for the meeting.
- The system might works better if we update the software.
- You could not share sensitive information outside the company.

14. Fill in the blanks with appropriate modal verbs based on the context provided.

- The IT team _____ resolve the issue if they had more resources.
- You _____ report any security concerns immediately.
- The software _____ not function properly without the latest updates.
- We _____ delay the launch until the testing phase is completed.
- He _____ have informed the team about the changes, but he forgot.

15. Match each situation with the correct modal verbs.

1. Situation: A new employee is learning company policies. Modal verb: _____
2. Situation: The server is down. Modal verb: _____
3. Situation: A team is brainstorming ideas. Modal verb: _____
4. Situation: A deadline is approaching. Modal verb: _____
5. Situation: A client is considering an offer. Modal verb: _____

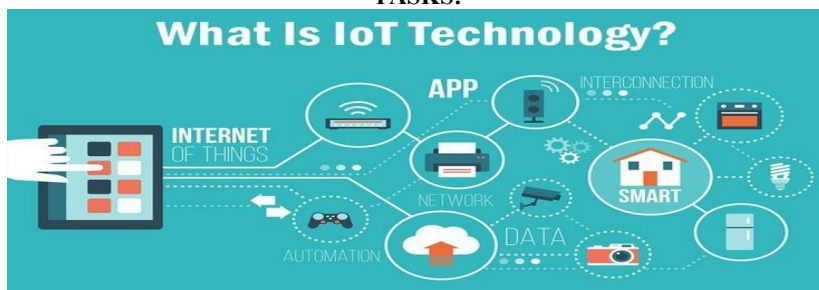
16. Write three sentences for each modal verb (must, should, can, may, might, will, would) demonstrating their different uses in a professional scenario.

- ****Must****:
 - Employees must log their work hours accurately each day.
 - The team must meet the deadline to ensure project success.
 - Developers must test the software thoroughly before deployment.
- ****Should****:
 - Managers should provide regular feedback to their teams.
 - You should update the document to match the latest format.
 - The company should explore new market opportunities.
- ****Can****:
 - You can access the files from the shared drive.
 - The IT team can assist with troubleshooting issues.
 - Developers can implement new features using the latest framework.
- ****May****:
 - The update may improve system performance.
 - You may contact technical support for additional help.
 - This policy may apply to remote workers as well.
- ****Might****:
 - The server might experience downtime due to maintenance.
 - Users might face delays during peak hours.
 - The company might launch a new product line next quarter.
- ****Will****:
 - The system will notify users of any updates.
 - We will release the new version once testing is complete.
 - Customers will receive a discount on bulk orders.
- ****Would****:
 - I would appreciate your feedback on the proposal.
 - The developer would fix the bug if resources were allocated.
 - The client would accept the terms if conditions are favorable.

17. Write a simplified article explaining the difference between artificial intelligence and machine learning for tech beginners. Word count: 160–200 words.

UNIT 13. Internet of Things, IoT

TASKS:



1. Read the text and briefly write its meaning

The Internet of Things (IoT) refers to a system of smart, interconnected devices that communicate with each other and with cloud-based services. These devices are usually equipped with sensors, processors, and networking capabilities, allowing them to collect data from their surroundings and share it over the internet. Examples include smart refrigerators, wearable fitness trackers, connected vehicles, and industrial machines.

One of the key benefits of IoT is that it allows devices to function with minimal human input. They can gather information, send it to a central system for processing, or even analyze it on the spot using local computing power (also known as edge computing). This helps reduce the amount of data that needs to be transmitted, saving time and network resources.

IoT devices often communicate through a central hub known as an IoT gateway. This gateway connects multiple devices, allowing them to work together smoothly. For instance, a smart home system could have a central controller that connects lighting, heating, and security devices, which adjust automatically based on the user's preferences or behaviors.

The technology plays a vital role in many industries. In manufacturing, IoT helps monitor machine performance and predict maintenance needs, reducing downtime. In logistics and supply chains, it allows for real-time tracking of goods and inventory. In agriculture, IoT sensors can monitor soil conditions, weather, and crop health to optimize irrigation and increase yields.

IoT also enhances daily life for individuals. Smart home devices can automate tasks like adjusting the temperature, turning on lights, or even making coffee when a person wakes up. Wearable devices can track health data and alert users to potential health concerns.

To make IoT even more effective, many systems incorporate artificial intelligence (AI) and machine learning (ML). These technologies help devices not just collect and send data, but also learn from patterns, make predictions, and take appropriate actions without being manually programmed for every scenario.

However, as IoT grows, so do concerns around data privacy and security. Since these devices often collect sensitive personal or business information, it's crucial to ensure that data is protected from unauthorized access and misuse.

In summary, IoT is a powerful and evolving technology that connects devices in smarter, more efficient ways. It has already transformed many sectors and continues to open new possibilities for automation, data analysis, and real-time decision-making – both in homes and across industries.

2. Answer these questions.

1) What are IoT devices typically embedded with, and what types of machines and objects can they include?

2) How do organizations benefit from using IoT in terms of efficiency, customer service, and decision-making?

3) What role does an IoT gateway play in the IoT ecosystem, and how does analyzing data locally benefit the system?

4) How do IoT devices communicate and interact with each other, and what is the extent of human intervention required?

5) Why is IoT considered essential to both consumers and businesses, and what advantages does it provide in terms of automation and operational transparency?

3. The sentence is True or False.

1) IoT devices typically require human-to-human or human-to-computer interactions to transfer data over a network.

2) An IoT ecosystem consists of web-enabled smart devices that use embedded systems to collect, send, and act on data from their environments.

3) Analyzing data locally on an edge device increases the volume of data sent to the cloud and maximizes bandwidth consumption.

4) IoT devices can only function with constant human intervention and cannot communicate with each other autonomously.

5) IoT can use artificial intelligence and machine learning to aid in making data collection processes easier and more dynamic.

6) IoT is only useful for consumers and has no significant impact on business operations or efficiency.

4. Translate the following English units into Ukrainian.

- 1) *Smart grid*-_____
- 2) *Connected ecosystem*-_____
- 3) *Edge computing*-_____
- 4) *Seamless integration*-_____
- 5) *Remote monitoring*-_____
- 6) *Predictive maintenance*-_____

5. Give synonyms to the words in **bold** type.

- 1) Six different applications of the **Internet of Things**.

- 2) REST has proved to be a popular choice for implementing **Web Services**.

3) The GDPR stands apart from the American approach to **information privacy** in its comprehensive nature.

- 4) **Security concerns** prevented e-voting in this year's Majlis elections.

- 5) What are the goals of **Denial of Service**?

6. Translate Ukrainian to English.

- *Бездротова сенсорна мережа*-_____
- *Розумні пристрої*-_____
- *Інтелектуальне середовище*-_____
- *Ресурс*-_____
- *Сенсор*-_____
- *Обман*-_____
- *Атака за наймом*-_____

7. Explain this word in English without using the given word itself.

● *Machine to Machine-* _____

● *M2M process-* _____

● *Asymmetric threats-* _____

8. Fill in the blanks with the necessary words in the box.

<i>Internet of Things</i> <i>Intelligent Environments</i>	<i>M2M</i> <i>Automation</i>
--	---------------------------------

1) David Webber, managing director at _____, said the increase in use of digital devices by youth has changed the way people handle money

2) The _____ is expanding worldwide.

3) Using the service _____ - sensor tracking, information from ATMs or terminals by GSM network

9. Fill in the gaps with a verb in the correct conditional (type 0, type 1, type 2).

1. If users _____ (forget) their passwords, they can reset them via email.
2. If you _____ (click) this button, the program will crash.
3. If I _____ (have) more time, I would rewrite the code from scratch.
4. If the system overheats, it automatically _____ (shut) down.
5. If they _____ (test) the feature more thoroughly, it wouldn't have so many bugs.
6. If you _____ (not install) the update, the app won't function properly.
7. If the server goes down, it _____ (trigger) an alert in the monitoring system.
8. If I _____ (be) the project manager, I would assign more developers to the task.
9. If the user _____ (enter) incorrect login details, the system blocks access.
10. If we _____ (optimize) the database, queries would run faster.
11. If you _____ (need) help, the IT department is always available.
12. If I _____ (know) more about cybersecurity, I'd help with the audit.
13. If the internet disconnects, the app _____ (not save) your progress.
14. If you _____ (press) Ctrl + S, the document saves automatically.

15.If we had more time, we _____ (develop) a mobile version too.

10. Fill in the gaps with the appropriate future tense (Future Simple, Future Continuous, Future Perfect, Future Perfect Continuous, to be going to, Present Continuous).

1. By next year, the company _____ (develop) a fully automated cybersecurity platform.
2. At 10 a.m. tomorrow, the team _____ (run) penetration tests on the new system.
3. I _____ (not finish) the deployment by noon unless I get assistance.
4. They _____ (launch) the updated version as soon as testing is complete.
5. We _____ (have) a meeting with the software vendor this afternoon.
6. She _____ (work) on the cloud migration project for six months by the time it's done.
7. I think the AI assistant _____ (replace) basic support queries in the near future.
8. Look at the CPU usage — it's clear the server _____ (crash) if we don't intervene.
9. They _____ (not install) the patches until they've verified all the dependencies.
- 10.This time next week, we _____ (present) the final results to the stakeholders.
- 11.We _____ (start) the security audit at 9 a.m. sharp tomorrow.
- 12.By 2026, most IT infrastructure _____ (move) to decentralized cloud environments.
- 13.He _____ (not attend) the briefing because he'll be working on the update.
- 14.Our team _____ (complete) the user documentation by Friday morning.
- 15.In two hours, she _____ (debug) the new API module for over five hours straight.

11. Complete the sentences with the correct future tense form of the verbs in parentheses.

- By next year, we _____ (launch) the new feature globally.
- At 6 p.m. tomorrow, they _____ (test) the backup systems for potential failures.

- She _____ (not finalize) the report until all data is verified.
- This time next month, our company _____ (host) its largest online symposium yet.
- Don't worry about the repairs; the contractor _____ (finish) them by Friday afternoon.
- By 8 a.m., the delivery drones _____ (operate) for over three months in this area.
- He _____ (not participate) in the webinar because he'll be visiting clients overseas.
- In two weeks, the team _____ (evaluate) the software upgrades thoroughly.
- When the training session starts, the interns _____ (learn) the basics of IoT for five hours already.
- We _____ (begin) the implementation phase right after the kickoff meeting tomorrow.

12. Rearrange the sentences to use correct future tense forms.

- By the end of the year, most small businesses _____ (adopt) AI-assisted marketing tools.
- Tomorrow afternoon, the analysts _____ (discuss) the quarterly earnings report with the board of directors.
- She _____ (not approve) the contract changes until all stakeholders agree.
- The advanced robotics division _____ (present) their findings in the upcoming expo.
- We _____ (monitor) server activity closely during the migration process tomorrow.
- In the next decade, experts predict that renewable energy sources _____ (replace) traditional power grids entirely.
- They _____ (not proceed) with the release until all beta testers provide their feedback.
- By 3 p.m., the technicians _____ (install) the latest firmware updates on all devices.
- The security team _____ (conduct) a thorough vulnerability assessment by the end of the day.
- When the conference begins, the delegates _____ (prepare) their reports for over a week.

13. Correct the mistakes in these sentences.

- ❖ She will finish the design of the website until next Friday.
- ❖ Our team presenting the results of the study tomorrow morning.
- ❖ By November, we will starts the development of new IoT solutions.
- ❖ Don't worry, the upgrades won't install until the system is rebooted.
- ❖ They will be completed the testing phases by the end of next week.

- ❖ During the training, the interns are learned the fundamentals of AI-based automation.
- ❖ By 2028, renewable technologies were replaced traditional energy sources worldwide.
- ❖ This time tomorrow, we hosting a webinar on the latest trends in e-commerce.
- ❖ The delivery drone will not operate until weather conditions are suitable.
- ❖ In five hours, she debugged the new API module tirelessly.

14. Choose the correct future tense form to complete the sentences.

- ❖ At 3 p.m. tomorrow, the IT team _____ (upgrade/have upgraded) the outdated systems.
- ❖ By next week, she _____ (complete/will complete) the research on blockchain applications.
- ❖ They _____ (not analyze/will not analyze) the data until it is fully available.
- ❖ This time next year, our business _____ (expand/will be expanding) into new international markets.
- ❖ He _____ (present/will present) the draft proposal once the client feedback is received.
- ❖ In two hours, the engineers _____ (work/will work) on the cloud migration project for seven days straight.
- ❖ By next month, the company _____ (launch/will have launched) its IoT-enabled smart devices.
- ❖ Tomorrow morning, the logistics team _____ (deliver/will be delivering) the first batch of products to customers.
- ❖ The results _____ (not be analyzed/will not have been analyzed) by the time the conference takes place.
- ❖ In ten years, autonomous vehicles _____ (replace/will replace) most traditional cars on the road.

15. Fill in the blanks using the appropriate future tense.

- ❖ By the end of the fiscal year, we _____ (increase) our market penetration to 75%.
- ❖ In two weeks, the IT department _____ (test) the new security protocols.
- ❖ When the project concludes, the researchers _____ (examine) the collected data for months.
- ❖ She _____ (not attend) the team meeting tomorrow due to a prior engagement.
- ❖ At this time next year, the startup _____ (employ) over 200 professionals in its various departments.
- ❖ By Friday evening, the development team _____ (finalize) the prototype of the new app.
- ❖ The marketing campaign _____ (launch) at exactly 9 a.m. tomorrow morning.
- ❖ They _____ (not confirm) the partnership until the legal agreement is reviewed.
- ❖ By next Wednesday, every department _____ (receive) training on the updated policy guidelines.

- ❖ In three hours, the event organizers _____ (prepare) the venue for over a week.

16. Create sentences using the provided verbs in future forms.

- ❖ debug
- ❖ integrate
- ❖ propose
- ❖ assess
- ❖ enable
- ❖ migrate
- ❖ launch
- ❖ optimize
- ❖ verify
- ❖ update

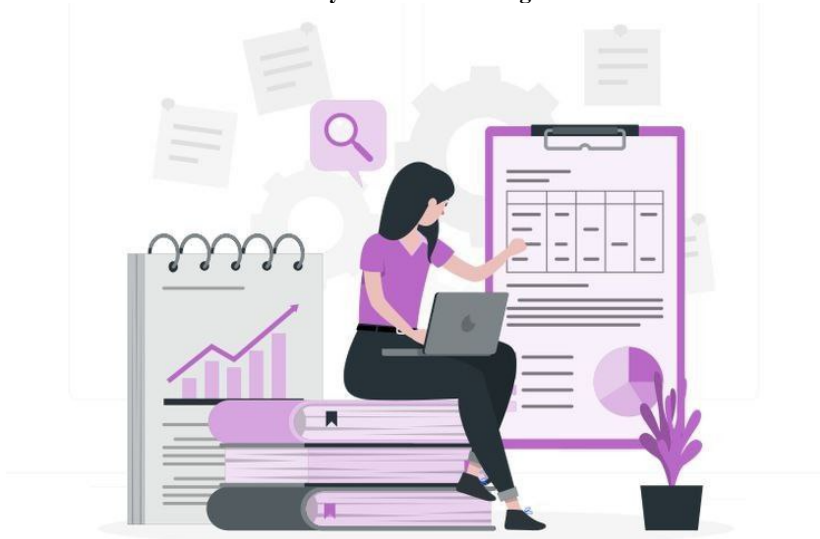
17. Write a product description for a smart home device that uses IoT. Highlight how it improves everyday life. Word count: 140–170 words.

PART II

UNIT 14. Business on the Internet

TASKS:

1. Read the text and briefly write its meaning.



Business on the Internet

The advent of the internet has revolutionized the way businesses operate, creating a dynamic and ever-evolving digital marketplace. The term "e-business" encompasses all types of business activities conducted online, from selling products and services to managing customer relationships and supply chains.

One of the most significant advantages of conducting business on the internet is the ability to reach a global audience. Traditional brick-and-mortar stores are limited by their physical location, but online businesses can market their products and services to customers around the world. This expanded reach not only increases potential sales but also enables businesses to tap into niche markets that may not be viable in a local setting.

E-commerce Platforms

E-commerce platforms like Amazon, eBay, and Shopify have made it easier for businesses to set up online stores. These platforms provide a comprehensive suite of tools that help with inventory management, payment processing, and shipping logistics. They also offer analytics and reporting features, allowing businesses to track performance and make data-driven decisions.

Digital Marketing

Digital marketing is a cornerstone of internet business. Techniques such as search engine optimization (SEO), pay-per-click (PPC) advertising, social media marketing, and email marketing are crucial for driving traffic to online stores. Effective digital marketing strategies help businesses increase their visibility, attract more customers, and ultimately drive sales.

Customer Relationship Management (CRM)

The internet has also transformed how businesses manage customer relationships. CRM systems are now more sophisticated, integrating various communication channels like email, social media, and live chat. These systems enable businesses to provide personalized customer experiences, track customer interactions, and build long-term loyalty.

Cloud Computing

Cloud computing is another technological advancement that supports online businesses. Cloud services offer scalable and cost-effective solutions for data storage, processing, and software applications. This flexibility allows businesses to scale their operations quickly in response to changing demand, without the need for significant upfront investment in IT infrastructure.

Challenges

Despite the numerous advantages, doing business on the internet comes with its own set of challenges. Cybersecurity is a major concern, as online businesses are prime targets for cyberattacks and data breaches. Ensuring robust security measures to protect customer data and business operations is crucial. Additionally, the fast-paced nature of the internet means that businesses must continually innovate and adapt to stay competitive. Changes in technology, consumer behavior, and market trends require constant vigilance and flexibility.

In conclusion, the internet offers vast opportunities for businesses to expand their reach, improve their operations, and enhance customer relationships. By leveraging e-commerce platforms, digital marketing, CRM systems, and cloud computing, businesses can achieve significant growth and success in the digital marketplace. However, they must also be prepared to address the challenges associated with cybersecurity and rapid technological change. Embracing the dynamic nature of the internet and remaining adaptable will be key to thriving in this ever-evolving business landscape.

2. Answer these questions.

1) What are some of the primary advantages of conducting business on the internet compared to traditional brick-and-mortar stores?

2) How do e-commerce platforms like Amazon, eBay, and Shopify support online businesses?

3) Why is digital marketing important for online businesses, and what are some techniques used in digital marketing?

4) How have Customer Relationship Management (CRM) systems evolved with the advent of the internet, and what benefits do they offer businesses?

5) What are some of the challenges businesses face when operating on the internet, and how can they address these challenges?

3. The sentence is True or False.

1) Traditional brick-and-mortar stores can reach a global audience just as easily as online businesses.

2) E-commerce platforms provide tools for inventory management, payment processing, and shipping logistics.

3) Digital marketing is not necessary for driving traffic to online stores.

4) CRM systems now integrate various communication channels like email, social media, and live chat.

5) Cloud computing offers scalable and cost-effective solutions for data storage and processing.

6) Cybersecurity is not a significant concern for online businesses.

4. Translate the following English units into Ukrainian.

1) *Level the playing field*-_____

2) *Digital footprint*-_____

3) *Click-and-mortar*-_____

4) *E-commerce boom*-_____

5) *Omni-channel strategy*-_____

5. Give synonyms to the words in **bold type**.

1) You can buy just about anything online, and because the online stores do not have the overheads that come with **high street premises**, they can generally sell the same products cheaper than the physical stores.

2) People want a **competitive edge** these days.

3) To effectively personalize these conversations, Wong says you need a robust **customer data management** platform that allows your team to access all customer data in one centralized location.

4) **Price comparison** sites typically do not charge users anything to use the site.

5) Our extensive experience and engineering capabilities make us the leading **customer-oriented** oil and gas company in China.

6. Translate Ukrainian to English.

- Інтернет маркетинг-_____
- Оптимізація витрат-_____
- Скорочення персоналу-_____
- Доставка до дому-_____
- Початкові інфекції-_____
- Конкуреноспроможність-_____
- Затримка доставки-_____

7. Explain this word in English without using the given word itself.

- *Potential market expansion*-_____
-

- *Flexibility in operations*-_____
-

- *Core marketing tool*-_____
-

8. Fill in the blanks with the necessary words in the box.

<i>Potential market expansion</i>	<i>Innovation</i>	<i>Staff reduction</i>
<i>Competitive edge</i>	<i>Global reach</i>	<i>Product variety</i>

1) Progress in efficiency is likely to speed up and ultimately to exceed all _____ for commodities.

- 2) Various brands producing fashionable footwear must constantly maintain a _____.
- 3) Such _____ will provide the government with raised levels of awareness of the industry.
- 4) The large _____ allows users to choose from a range of oils meeting different requirements according to the specific application.
- 5) Today, people are very concerned about _____ because of equipment upgrades.

9. Complete the sentences using the past perfect in the if-clause and "would/could/ might have + past participle" in the main clause.

1. If she _____ (study) harder, she _____ (pass) the exam.
2. They _____ (arrive) on time if they _____ (leave) earlier.
3. If I _____ (know) you were sick, I _____ (visit) you.
4. We _____ (not miss) the flight if we _____ (book) a taxi.
5. If he _____ (listen) to my advice, he _____ (avoid) the mistake.
6. She _____ (be) happier if she _____ (marry) someone else.
7. If you _____ (tell) me the truth, I _____ (forgive) you.
8. He _____ (get) the job if he _____ (prepare) more for the interview.
9. If we _____ (not spend) all the money, we _____ (have) enough for rent.
10. You _____ (enjoy) the trip if you _____ (come) with us.
11. If they _____ (check) the weather, they _____ (not go) hiking.
12. I _____ (not burn) the cake if I _____ (set) the timer.
13. If she _____ (practice) more, she _____ (win) the competition.
14. We _____ (understand) the problem if we _____ (ask) more questions.
15. If he _____ (not forget) her birthday, she _____ (not get) so angry.

10. Complete the sentences with the correct verb forms. Use the third conditional in the if-clause and the second or first conditional in the main clause, depending on the meaning.

1. If I _____ (not break) my leg last week, I _____ (play) in today's match.
2. If she _____ (save) more money, she _____ (travel) now.
3. He _____ (be) at university now if he _____ (not fail) the entrance exam.
4. If they _____ (learn) to code earlier, they _____ (have) better jobs today.

5. If you _____ (not lie) to me, I _____ (trust) you now.
6. I _____ (feel) more confident today if I _____ (practice) yesterday.
7. If we _____ (not miss) the train, we _____ (be) in Paris by now.
8. If she _____ (take) the other job, she _____ (earn) more now.
9. He _____ (not be) so tired if he _____ (go) to bed earlier.
10. If you _____ (listen) to me back then, you _____ (not be) in trouble now.
11. They _____ (join) us for dinner if they _____ (finish) work earlier.
12. If he _____ (not crash) the car, we _____ (use) it tomorrow.
13. I _____ (help) you now if I _____ (learn) how to do it earlier.
14. If she _____ (not argue) with her boss, she _____ (still/work) there.
15. If you _____ (take) that course last year, you _____ (pass) the exam this year.

11. Complete the sentences with the correct verb forms

- If they _____ (study) harder, they _____ (pass) the test next week.
- We _____ (not arrive) on time if we _____ (take) the earlier bus.
- If you _____ (not finish) your report today, you _____ (miss) the deadline tomorrow.
- She _____ (be) happier now if she _____ (choose) a different career path.
- If he _____ (accept) the offer earlier, he _____ (be) the manager now.
- They _____ (not face) financial difficulties if they _____ (save) more last year.
- I _____ (call) you if I _____ (not lose) your number yesterday.
- If we _____ (not cancel) the event, everyone _____ (attend) it tonight.
- If she _____ (leave) earlier, she _____ (catch) the flight yesterday.
- You _____ (understand) the concept if you _____ (read) the book last week.

12. Identify and correct the mistakes in the sentences

- If I had went there, I would have met them. (Correct: _____)
- She wouldn't be tired now if she didn't stay up late yesterday. (Correct: _____)
- They will arrive on time if they would take a taxi. (Correct: _____)
- If he had studied, he will pass the exam. (Correct: _____)
- I wouldn't have missed the train if I leave earlier. (Correct: _____)
- If you were more careful, you will not forget your wallet. (Correct: _____)
- We could be there now if we would not get lost. (Correct: _____)
- If they had helped me, I could finish everything earlier. (Correct: _____)
- You wouldn't be in trouble if you were listened to me. (Correct: _____)
- If she hadn't argue with them, she wouldn't have lost her job. (Correct: _____)

13. Transform the sentences into conditional forms

- He didn't prepare for the meeting; he isn't confident now.
(Transform: _____)
- We missed the train; we aren't in Paris now. (Transform: _____)
- She didn't accept the job offer; she isn't earning more now.
(Transform: _____)
- He didn't sleep early; he's tired now. (Transform: _____)
- You didn't listen to my advice; you're in trouble now.
(Transform: _____)
- They didn't finish work on time; they didn't join us for dinner.
(Transform: _____)
- He crashed the car; we aren't able to use it tomorrow.
(Transform: _____)
- I didn't learn how to do it; I can't help you now. (Transform: _____)
- She argued with her boss; she isn't still working there.
(Transform: _____)
- You didn't take the course last year; you didn't pass the exam this year. (Transform: _____)

14. Choose the correct verb forms

- If I _____ (had/have) practiced more, I _____ (would/would have) been better now.
- We _____ (would/would have) arrived earlier if we _____ (take/had taken) the train on time.
- If she _____ (had/have) chosen the other job, she _____ (would/would have) been earning more now.
- He _____ (would/would have) been less tired if he _____ (go/had gone) to bed earlier.
- If you _____ (had/have) listened to me, you _____ (would/would have) been in a better position now.
- They _____ (would/would have) joined us for dinner if they _____ (finish/had finished) work earlier.
- If he _____ (had/have) taken care of the car, we _____ (would/would have) used it tomorrow.
- I _____ (would/would have) helped you if I _____ (learn/had learned) how to do it.
- If she _____ (argue/had argued) less, she _____ (would/would have) still been working there.
- If you _____ (had/have) taken that course, you _____ (would/would have) passed the exam easily.

15. Write conditional sentences based on the scenarios

- You forgot to bring an umbrella, so you're wet now. (Write: _____)
- We didn't book tickets early, so we couldn't attend the concert.
(Write: _____)
- She didn't study for the test, so she didn't pass it. (Write: _____)
- He didn't save money last year, so he can't afford the trip now.
(Write: _____)
- I didn't call you, so I didn't get your advice. (Write: _____)
- They didn't prepare well, so they didn't win the competition.
(Write: _____)
- He didn't apply for the job, so he isn't employed now. (Write: _____)
- If you _____ (not eat) breakfast, you _____ (feel) hungry now.
- If the weather _____ (be) better, we _____ (go) hiking yesterday.
- If she _____ (try) harder, she _____ (succeed) in her project last month.

16. Match the two halves of the conditional sentences

First half	Second half
If he had studied harder,	he wouldn't be struggling with his grades now.
If we hadn't missed the flight,	we would be at our destination by now.
If she had accepted the offer,	she would be working at a better position now.
If they had prepared for the presentation,	they would have impressed the audience.
If you had listened to the instructions,	you wouldn't have made a mistake.
If he hadn't stayed up all night,	he would be more energetic now.
If she had apologized to her colleague,	she would still be friends with them.
If we had arrived earlier,	we wouldn't have missed the opening ceremony.
If the weather had been better,	we would have gone for a picnic.
If she had invested wisely,	she would be wealthier now.

17. Write a short business plan for launching a small online business. Describe the product, the platform, and your digital strategy. Word count: 180–220 words.

UNIT 15. Internet shopping

TASKS:

1. Read the text and briefly write its meaning.



Online Shopping: A Modern Convenience

Thanks to advancements in science and technology, many everyday tasks can now be done from the comfort of our homes – and shopping is no exception. Buying products over the internet has become extremely common and is increasingly preferred by people from all walks of life. Online shopping means purchasing goods through websites without going to a physical store. In today's fast-paced world, where many people are pressed for time due to work and other responsibilities, this method of shopping offers a practical and time-saving alternative. Shoppers can order everything from clothing and electronics to household items and accessories without leaving their homes.

Here are some of the main advantages of shopping online:

Ease of Use – It's ideal for those with demanding work lives who don't have time to visit shops in person.

Avoiding Busy Places – People who dislike the hustle and bustle of shopping centres can make purchases from their homes or offices.

Greater Selection – The internet provides access to a vast assortment of products that might not be available in local stores. Consumers can browse multiple platforms to find exactly what suits them best.

Flexible Payment Methods – Buyers can pay using credit or debit cards, and many platforms even offer the option to pay upon delivery, eliminating the need to carry cash.

However, online shopping also comes with some downsides. Sometimes, the product that arrives doesn't quite match the one pictured or described online. Differences in size, colour, or quality can lead to disappointment. Moreover, there are fraudulent sites that appear trustworthy but are actually scams, tricking buyers with false deals or fake items. For this reason, it's important to be careful and do some research before making a purchase online to avoid future problems.

2. Answer these questions.

1) What are some of the main reasons why online shopping has become popular among people?

2) How does online shopping benefit individuals with busy schedules?

3) What are some of the potential drawbacks or risks associated with online shopping?

4) Why is it important to exercise caution and make informed choices when shopping online?

3. The sentence is True or False.

- 1) Online shopping allows people to buy items without visiting physical stores.
- 2) People who enjoy crowded places prefer online shopping over visiting malls.
- 3) Online shopping typically offers a smaller variety of products compared to physical stores.
- 4) Payment options for online shopping are limited to physical cash.
- 5) There is no risk of receiving items that do not match your expectations when shopping online.

4. Translate the following English units into Ukrainian.

- 1) *Add to cart*-_____
- 2) *Shop till you drop*-_____
- 3) *Virtual storefront*-_____
- 4) *Buyer's remorse*-_____

5. Give synonyms to the words in bold type.

- 1) That's what **extraordinary** measures were made for.

- 2) Others take the prepayment and **disappear**.

- 3) Her facial **expression** changed from confusion to understanding as she grasped the concept.

- 4) It is **admittedly** a difficult time to be in business.

- 5) **E-commerce** has changed the way business is done today.

6. Translate Ukrainian to English:

- *Кількість*-_____
- *Інтернет-ринок*-_____
- *Продуктовий магазин*-_____
- *Збільшення ціни*-_____
- *Цифровий платіж* - _____
- *Відгуки покупців*-_____
- *Список бажань*-_____

7. Explain this word in English without using the given word itself.

- *Return process*-_____
- *Access limitation*-_____
- *Market presence*-_____

8. Fill in the blanks with the necessary words in the below:

<i>add to cart</i> <i>virtual storefront</i>	<i>online discounts</i> <i>access limitation</i>
---	---

- 1) After browsing through the online catalog, she decided to _____ the latest smartphone model _____ for purchase
- 2) The horizontal commitments section of the schedule lists _____ relevant to trade in all services.
- 3) For some product categories, _____ systems can be used as a virtual storefront, with the possibility for the buyer to interactively create the product he needs.
- 4) Also, be sure to check for _____ and deals that could save you money.

9. Rewrite each sentence using a participle clause.

1. Because she was impressed by his speech, she offered him the job.
2. → _____, she offered him the job.
3. When I opened the window, I saw the beautiful view.
4. → _____, I saw the beautiful view.
5. As he had forgotten his keys, he couldn't enter the house.
6. → _____, he couldn't enter the house.
7. Since he was injured, he didn't play in the match.
8. → _____, he didn't play in the match.
9. After I had finished my homework, I went out with friends.
10. → _____, I went out with friends.
11. When it is used correctly, AI can improve productivity.
12. → _____, AI can improve productivity.
13. While he was talking on the phone, he was driving.
14. → _____, he was driving.
15. Although she was warned about the risks, she went ahead.
16. → _____, she went ahead.
17. As they were built over a century ago, the houses need renovation.
18. → _____, the houses need renovation.
19. When they are translated poorly, idioms can be confusing.
20. → _____, idioms can be confusing.
21. Because she had studied in London, her English was fluent.
22. → _____, her English was fluent.
23. After he had been rejected three times, he finally got the job.
24. → _____, he finally got the job.
25. While walking in the forest, we saw a deer.
26. → _____, we saw a deer.
27. As the letter had been written in haste, it was full of mistakes.
28. → _____, it was full of mistakes.
29. Since they were trained professionals, they handled the crisis well.

30. → _____, they handled the crisis well.

10. Fill in the gaps using the correct participle form of the verb in brackets.

1. _____ (finish) the presentation, she felt relieved.
2. _____ (walk) through the streets of Rome, we admired the architecture.
3. The letter, _____ (send) last week, still hasn't arrived.
4. _____ (know) what to do, he acted immediately.
5. The children, _____ (excite) by the news, started jumping around.
6. _____ (not eat) all day, he was starving.
7. The documents, _____ (sign) by both parties, are now legally binding.
8. _____ (live) abroad for years, she spoke several languages fluently.
9. The cake, _____ (decorate) with fresh fruit, looked amazing.
10. _____ (look) for his phone, he checked every pocket.
11. The actor, _____ (recognize) by the fans, smiled and waved.
12. _____ (injure) in the accident, he was taken to hospital.
13. The team, _____ (motivate) by the coach, trained hard for the match.
14. _____ (be) a teacher for 10 years, he knew how to handle the class.
15. The book, _____ (write) in the 19th century, is still popular today.

11. Complete the sentences using the correct form of the verb in parentheses.

- _____ (prepare) for the exam, she had all her notes organized.
- _____ (complete) the marathon, he felt a huge sense of accomplishment.
- _____ (wear) her traditional outfit, she looked stunning at the festival.
- The car, _____ (repair) yesterday, runs perfectly now.
- _____ (work) on the project for hours, he finally took a break.
- The documents, _____ (translate) from French, are ready to be sent.
- _____ (know) the routine well, she performed flawlessly on stage.
- The painting, _____ (restore) by experts, is ready for display.
- _____ (search) for a solution, they brainstormed ideas tirelessly.
- _____ (study) the map, they finally found the right route.

12. Choose the correct form of the verb to complete the sentences.

- _____ (know/knowing) the area well, he guided us through the city.
- The sculpture, _____ (create/created) by a famous artist, is admired by all.
- _____ (train/trained) in martial arts, she was able to defend herself.
- The cake, _____ (decorate/decorated) with flowers, looked beautiful.
- _____ (leave/left) early, he missed the announcement.
- The team, _____ (motivate/motivated) by their captain, played exceptionally well.
- _____ (spend/spent) a summer in Italy, she learned to speak fluent Italian.

- The manuscript, _____ (write/written) in Latin, needed translation.
- _____ (design/designed) by an architect, the building is unique.
- _____ (walk/walked) for hours, they finally reached the summit.

13. Rewrite the sentences, correcting any grammar mistakes.

- The player, train by a coach, was ready for the match.
- The report, wrote by the assistant, was presented at the meeting.
- Having finish the homework, he went outside to play.
- The garden decorate with lights is beautiful.
- Living in Paris for years, he knows the city well.
- The car, fix yesterday, is now running perfectly.
- Looking for their keys, they searched under every cushion.
- Injured in the match, the goalkeeper was replace by another player.
- The book write by a famous author is a bestseller.
- Having spend all his savings, he decided to find a job quickly.

14. Match the sentences with their correct meaning.

- A chef _____ (train) for years knows how to prepare perfect dishes.
- The bridge, _____ (build) in 1889, is a historic landmark.
- _____ (live) near the ocean, the family enjoys swimming every weekend.
- The speech, _____ (write) by a professional, inspired everyone in the room.
- _____ (work) as a teacher for decades, he earned the respect of his students.
- The vase, _____ (decorate) with intricate patterns, is a masterpiece.
- _____ (read) the instructions carefully, she was able to assemble the furniture.
- The team, _____ (motivate) by their coach, won the championship.
- _____ (study) for weeks, she aced the test effortlessly.
- The movie, _____ (direct) by a renowned filmmaker, received several awards.

15. Fill in the blanks using the correct verb forms.

- The house, _____ (paint) last summer, still looks fresh.
- _____ (travel) across Europe, they had numerous adventures.
- The dog, _____ (rescue) from the shelter, became a loving companion.
- _____ (play) in the rain, the children had a great time.
- The castle, _____ (restore) by experts, is open to visitors now.
- _____ (grow) roses for years, she knows how to care for them.
- The manuscript, _____ (edit) thoroughly, was submitted to the publisher.
- _____ (know) all the answers, he finished the quiz quickly.
- The dress, _____ (sew) by hand, was truly unique.
- _____ (stand) at the edge of the cliff, he admired the view.

16. Rearrange the given words to form grammatically correct sentences.

- Having / prepared / carefully / speech / her / delivered / she / confidently.
- The / decorated / with / cake / fresh / fruit / was / amazing.
- The / restored / experts / by / painting / is / ready / display / for.
- Living / abroad / years / for / she / fluently / several / spoke / languages.
- Looking / keys / they / for / searched / every / pocket.
- Injured / accident / in / taken / he / hospital / the / was / to.
- The / motivated / coach / team / trained / by / hard / match / for.
- Being / for / teacher / 10 / he / years / handle / knew / how / the / class.
- The / written / in / book / century / 19th / still / popular / is / today.
- The / signed / documents / both / by / are / parties / legally / binding / now.

17. Write a comparison of two online shopping platforms. Focus on user experience, delivery speed, and payment options. Word count: 150–180 words.

UNIT 16. ART

TASKS:

1. Read the text and briefly write its meaning.



IS PHOTOGRAPHY ART?

Today, this question might seem outdated. Surrounded by countless images, we tend to accept that photography goes beyond simply delivering information or advertising

products – it also enhances spaces visually, inspires us emotionally, and helps us reflect on the world around us. However, in the early years after photography was invented, people actively debated how this new, mechanical medium could be incorporated into the long-established world of fine art.

A famous quote from the artist Paul Delaroche, who claimed that the invention of the daguerreotype meant the end of painting, is particularly puzzling. In another statement from the same year, 1839, he also acknowledged the potential of photography as a helpful tool for visual artists. His mixed messages were representative of the broader artistic community's divided reaction, ranging from full rejection to partial acceptance. The debate was especially intense in France, where many artists were affected by government policy, but it also sparked serious discussion in England. In both countries, art was considered closely tied to national prestige and cultural success.

Amid the back-and-forth arguments, three major perspectives on photography's artistic potential developed:

The most skeptical group – including some artists and members of the public – argued that photography couldn't be classified as art because it was created using machines and chemicals rather than human creativity and craftsmanship. To them, a photo was closer to a mass-produced fabric than to a painting born of inspiration.

Another, more moderate viewpoint, shared by some painters and critics, acknowledged that photography could serve the arts as a reference or study aid – but didn't view it as artistically equal to drawing or painting.

The third, more supportive stance suggested that photography could be treated like other printmaking methods, such as etching or lithography. Supporters of this idea believed that photographs could be just as meaningful as handmade artworks and that they might even positively influence art and society.

Artists responded to photography in different ways. Many portrait painters – especially miniaturists – realized their careers were threatened and began using daguerreotypes or early forms of photography to adapt. Some blended photography with painting, while others gave up traditional painting entirely. Notably, the French painter Ingres used photography to document his work and to help plan compositions, although he insisted that it didn't affect his artistic vision or qualify as art in its own right.

Critics like Lacan and Francis Wey provided thoughtful reflections on the usefulness of photography. Wey, who worked in both literary and artistic circles, eventually recognized photography's expressive possibilities. He believed it could help artists better depict anatomy, facial expressions, clothing, and scenery, and free them from routine tasks so they could focus more on deeper artistic concerns.

However, not all critics were supportive. Charles Baudelaire, an influential French poet and art critic, was strongly opposed. In 1859, responding to a photography exhibition, he argued that untalented or lazy painters would turn to photography. To him, true art was about imagination and refined ideas, while photography was stuck in the realm of physical reality. He called it a "humble servant" of both art and science and saw it as part of an industrial trend that, in his view, was degrading the spiritual quality of culture.

On the other hand, the painter Eugène Delacroix welcomed photography, though he acknowledged its limits. He regretted that the invention had come too late in his life, yet

he still learned how to use it and collected photographs. He believed that, when used properly, photography could help artists reach new heights.

The debate was not limited to France. In England, people also discussed whether photography was a form of documentation or a true art. An anonymous article stated that photography had a purpose but should not be forced to compete directly with painting. Some critics, like Philip Gilbert Hamerton, were more critical. He dismissed photography as overly simplistic, pointing out that it could present one truth while obscuring many others.

Underlying this skepticism was a fear among cultural elites in both countries. They worried that photography, made widely available through commercial studios and sold in city shops, would make art too accessible. In their eyes, this popularity, especially among the middle class, would shift public taste from imaginative, idealistic works to ordinary realism. Still, even some critics admitted that individual photographers sometimes produced work that could be appreciated for its artistic quality and emotional depth.

These writers reflected the opposition of a section of the cultural elite in England and France to the **‘cheapening of art’**, which the growing acceptance and purchase of camera pictures by the middle class represented. Technology made photographic images a common sight in the shop windows of Regent Street and Piccadilly in London and the commercial boulevards of Paris. In London, for example, there were at the time some 130 commercial establishments where portraits, landscapes, and photographic reproductions of works of art could be bought. This appeal to the middle class convinced the elite that photographs would foster a desire for realism instead of idealism, even though some critics recognized that the work of individual photographers might display an uplifting style and substance that was consistent with the defining characteristics of art.

2. Answer these questions.

1) What is the writer’s main point in the first paragraph?

2) What public view about artists was shared by the French and the English?

3) What does the writer mean by “the handwriting on the wall”?

4) What was the result of the widespread availability of photographs to the middle classes?

3. The sentence is True or False.

1) The pronouncement by painter Paul Delaroche signified the acceptance of photography as an art form.

2) The view that photographs were comparable to fabric produced by machinery in a mill was held by many painters and a section of the public.

3) Artists like Jean-Auguste-Dominique Ingres embraced photography as a tool for their work but denied its influence on their artistic vision.

4) Francis Wey suggested that photography would lead to greater artificiality in the graphic depiction of various subjects.

5) According to Baudelaire, photography was regarded as a humble servant of art and science and was believed to have detrimental effects on the spiritual aspects of life and art.

4. Translate the following English units into Ukrainian.

1) *handwriting on the wall*- _____

2) *external reality*- _____

3) *a very humble servant of art and science*- _____

4) *such a wonderful invention*- _____

5) *raise himself to heights that we do not yet know*- _____

6) *narrow in range, emphatic in assertion, telling one truth for ten falsehoods*- _____

7) *cheapening of art*- _____

5. Give synonyms to the words in **bold type**.

1) British artist pledges 28 days in isolation wearing a **VR headset**.

2) The **competition** becomes stronger every year.

3) **Hatching** in this style is almost not used.

4) **Shadows** on the face or behind it aren't allowed.

5) It doesn't exist except as an **assemblage** of elements.

6. Translate Ukrainian to English.

- Рисунок-_____
- Обмежений-_____
- Якість лінії або вага лінії-_____
- Геометрична фігура-_____
- Джерело світла-_____
- Основні моменти-_____
- Відтінок-_____

7. Explain this word in English without using the given word itself.

- *Daguerreotype*-_____
- *Beneficial*-_____
- *Inferior*-_____

8. Fill in the blanks with the necessary words in the box.

<i>inventive</i>	<i>mixed</i>	<i>next</i>
<i>beneficial</i>	<i>inferior</i>	<i>justified</i>
<i>inventive</i>	<i>similar</i>	<i>innovative</i>

In the early days of photography, opinions on its future were _____, but three clear views emerged. A large number of artists and ordinary people saw photographs as _____ to paintings because of the way they were produced. Another popular view was that photographs could have a role to play in the art world, despite the photographer being less _____. Finally, a smaller number of people suspected that the impact of photography on art and society could be _____.

9. Complete the sentences with one of the prepositions from the box.

in, on, at, to, from, of, for, with, about, by, into, through, over, under, between

1. The data was transferred _____ the local server to the cloud environment.
2. She's an expert _____ network security and encryption protocols.
3. We encountered an error _____ the installation process.
4. The update will be available _____ all users by the end of the week.

5. Always back up your files _____ advance to avoid data loss.
6. The file is too large to send _____ email.
7. They're working _____ a solution to improve loading speed.
8. The system crashed _____ a lack of available memory.
9. He logged _____ the server using his admin credentials.
10. There's a conflict _____ the new plugin and the current CMS version.
11. She specializes _____ developing custom database queries.
12. This application is not compatible _____ older operating systems.
13. We accessed the intranet _____ a secure VPN connection.
14. They're responsible _____ maintaining the company's digital infrastructure.
15. He gained unauthorized access _____ the internal documentation folder.

10. Complete the sentences with one of the prepositions from the box.

about - across - along - behind - below - by - for - from - near - of - off - on - over - through - throughout - to - under - up - with

1. The technician is responsible _____ updating the security settings.
2. The new regulations apply _____ all departments, not just IT.
3. We walked _____ the server racks to check the cable connections.
4. The error log is stored just _____ the system files directory.
5. This folder contains confidential information not meant _____ public access.
6. There's a security camera installed _____ the entrance to the data center.
7. The team worked late into the night to catch _____ on the deadline.
8. The firewall blocked the connection _____ an untrusted IP address.
9. We received an urgent email _____ the network administrator.
10. There was a major spike in traffic _____ the site was mentioned in the news.
11. Can you find out more _____ this software update before we install it?
12. She collaborated closely _____ the backend developers on the API integration.
13. The access point is hidden _____ the main server cabinet.
14. Data was compromised because the file was left open _____ encryption.
15. They launched the campaign simultaneously _____ all social media platforms.

11. Fill in the blanks with the correct preposition.

1. The server crashed _____ midnight due to an overload.

2. She saved her progress _____ the cloud storage system.
3. The new software update was rolled out _____ the weekend.
4. The data transfer was interrupted _____ a technical issue.
5. He was successful _____ implementing the new security protocols.
6. The document was shared securely _____ an encrypted platform.
7. The team logged in _____ the shared workspace platform to collaborate.
8. The request was denied _____ lack of proper authorization.
9. The confidential files were stored _____ an external hard drive.
10. She worked tirelessly _____ the user interface design.

12. Match the sentences in Column A with the appropriate preposition from Column B.

Column A:

1. The software was launched _____ a global audience.
2. The meeting was scheduled _____ 3 PM sharp.
3. The updates were received _____ email.
4. Collaboration took place _____ multiple departments.
5. The announcement was made _____ social media channels.
6. The analysis was conducted _____ a secure environment.
7. The backup files were encrypted _____ safety.
8. The access was granted _____ administrative permissions.
9. The data breach occurred _____ negligence.
10. The final decision was made _____ the CEO.

Column B:

- a. via
- b. at
- c. through
- d. among
- e. under
- f. because of
- g. through
- h. with
- i. by
- j. on

13. Find and correct the errors in the following sentences.

1. The backup was stored on an secure server.
2. She worked hardly to complete the project on time.
3. The files were send through email yesterday.
4. The meeting has been scheduled at 2:30 PM.
5. The updates was received by all team members.
6. The project manager divided the tasks among the three team.

7. The server is currently under maintenance since this morning.
8. She collaborate with the design team on the new interface.
9. The data breach happen due to a weak password.
10. The training sessions were conducted through online platforms.

14. Write sentences using the correct preposition.

1. The firewall blocked the access _____ an unauthorized IP address.
2. He saved the presentation slides _____ the shared drive.
3. The system went down _____ a power surge.
4. They collaborated _____ the IT department on the project.
5. Access to the building is restricted _____ employees only.
6. The announcement was made _____ the internal communication platform.
7. The data was retrieved _____ the backup system.
8. The remote team logged in _____ video conferencing software.
9. The troubleshooting guide was available _____ the support website.
10. The file was accidentally deleted _____ the shared folder.

15. Choose the correct option to complete the sentences.

1. The policy was updated (on/at) the beginning of the year.
2. The file was saved (in/on) the desktop.
3. The project team worked (among/with) external consultants.
4. The system rebooted (by/because of) a scheduled maintenance.
5. The operation was successful (under/with) the guidance of the technical lead.
6. The emails were sent out (through/into) a bulk mailing system.
7. The incident was reported (via/among) the official communication channel.
8. The software was developed (on/through) a collaborative framework.
9. The meeting was held (at/on) headquarters.
10. The team prepared for the presentation (with/for) great enthusiasm.

16. Rewrite the following sentences using the correct prepositions.

1. The report was submitted on the manager's desk.
2. The audio files were shared into the cloud drive.
3. The request was approved at the team leader.
4. The documents were printed under the office printer.
5. The training session was scheduled on 10 AM.
6. The project was delayed because of a unexpected issue.
7. The team logged on the shared workspace platform.
8. The issue was resolved via a technical fix.
9. The announcement was made among the entire organization.
10. The updates were sent with the internal communication tool.

17. Write down your opinion about how the Internet has changed art and creative expression. Use real examples. Word count: 160–200 words.

UNIT 17. Studying

TASKS:

1. Read the text and briefly write its meaning.



Online Studying

Online studying, also known as e-learning, has revolutionized the way education is delivered and accessed. With the rapid advancement of technology, the Internet has become a vast repository of knowledge accessible to anyone with an Internet connection. Online studying encompasses a wide range of educational activities conducted over the Internet, from traditional courses offered by universities to self-paced tutorials and interactive learning platforms.

One of the key advantages of online studying is its flexibility. Students can access course materials and lectures at their own convenience, allowing them to balance their studies with work, family commitments, or other responsibilities. This flexibility also extends to the pace of learning, as students can progress through courses at their own speed, revisiting material as needed or accelerating their progress if they grasp concepts quickly.

Another benefit of online studying is its accessibility. With online courses, geographical barriers are virtually eliminated, allowing students from around the world to access high-quality education from top institutions. This opens up new opportunities for

individuals who may not have access to traditional educational resources due to factors such as location, disability, or financial constraints.

Online studying also promotes collaboration and interaction among students and instructors. Through discussion forums, video conferencing, and other online tools, students can engage with peers and instructors, share ideas, and collaborate on projects regardless of physical distance. This collaborative learning environment fosters critical thinking, problem-solving skills, and a sense of community among participants.

Furthermore, online studying often incorporates multimedia elements such as videos, animations, simulations, and interactive exercises, making learning more engaging and effective. These multimedia resources can cater to different learning styles and preferences, allowing students to explore concepts through multiple modalities and enhance their understanding.

However, online studying also presents challenges and considerations. Students must be self-disciplined and motivated to succeed in an online learning environment, as they are responsible for managing their time effectively and staying on track with coursework. Additionally, reliable internet access and access to appropriate technology are essential for participating in online courses, which may pose barriers for some individuals.

Despite these challenges, online studying continues to grow in popularity and prominence, offering a flexible, accessible, and engaging approach to education that complements traditional learning methods. As technology continues to evolve, the potential for online studying to transform education and expand access to learning opportunities around the globe remains vast.

2. Answer these questions.

1) What are some key advantages of online studying mentioned in the text?

2) How does online studying promote collaboration among students and instructors?

3) What challenges and considerations are associated with online studying?

4) How do multimedia elements enhance the learning experience in online courses?

5) What role does technology play in facilitating online studying?

3. The sentence is True or False.

1) Online studying offers flexibility in terms of accessing course materials and lectures at one's convenience.

2) Online studying promotes collaboration and interaction among students and instructors through various online tools.

3) The text mentions that reliable internet access and access to appropriate technology are essential for participating in online courses.

4) Online studying incorporates multimedia elements such as videos, animations, and interactive exercises to enhance the learning experience.

5) Online studying has revolutionized the way education is delivered and accessed, thanks to rapid technological advancement.

6) The text does not explicitly mention the specific challenges associated with online studying.

4. Translate the following English units into Ukrainian.

1) *Hit the books*-_____

2) *Burning the midnight oil*-_____

3) *Put one's nose to the grindstone*-_____

4) *Cram session*-_____

5) *Learn the ropes*-_____

5. Give synonyms to the words in bold type.

1) Attach your file or **drag** it here.

2) You must first **upload** them to your computer.

3) This is the **record** of our stay there.

4) But the silence was the only **reply**.

5) Users can also **mute** notifications from the apps for up to eight hours.

6. Translate Ukrainian to English:

- Прокрутити вгору/вниз/поперек-_____
- Навушники-_____
- Відкрити-_____
- Надіслати-_____
- Документ-_____
- Мікрофон-_____
- Колонки-_____

7. Explain this word in English without using the given word itself.

- Earphones-_____

- Folder-_____

- Link-_____

8. Fill in the blanks with the necessary words in the box.

<i>join</i>	<i>sign up to</i>	<i>headset</i>
<i>invite</i>	<i>to log on to</i>	<i>post a comment</i>

- 1) I received an _____ to the virtual conference and immediately accepted it.
- 2) Don't forget to _____ the online workshop before all the slots are taken.
- 3) Remember _____ the webinar platform using your username and password.
- 4) Make sure your _____ is connected properly for the online meeting to hear the audio clearly.

9. Write C for countable or U for uncountable next to each noun.

- Advice – ____
- Software – ____
- File – ____
- Hardware – ____
- Information – ____
- Device – ____
- Data – ____ (*Can be both, but typically U in academic/IT contexts*)
- Application – ____
- Research – ____

- Virus – ____
- Code – ____
- Bug – ____
- Equipment – ____
- Backup – ____
- Program – ____
- Electricity – ____
- Update – ____
- Technology – ____
- Email – ____ (*C when referring to individual messages; U when referring to the system*)

10. Choose the correct answer for each sentence.

1. I don't have much _____ to give.
 - a) advices
 - b) advice
 - c) advises
2. She bought two _____ of milk.
 - a) cartons
 - b) milk
 - c) waters
3. Can you feel the _____ in the room?
 - a) chair
 - b) tension
 - c) paper
4. He has many good _____.
 - a) suggestion
 - b) suggestions
 - c) suggest
5. I don't have enough _____ to buy a new car.
 - a) moneys
 - b) coins
 - c) money
6. Please be quiet and respect our _____.
 - a) peace
 - b) pizzas
 - c) times
7. There's too much _____ in this soup.
 - a) salt
 - b) salts
 - c) salty
8. She showed great _____ during the test.
 - a) strength

- b) stone
 - c) street
9. We need to buy some new _____ for the living room.
- a) furniture
 - b) furnitures
 - c) furniturings
10. That's the best _____ I've ever received!
- a) informations
 - b) information
 - c) inform
11. He handed me three _____.
- a) homework
 - b) homeworks
 - c) assignments
12. We talked about our future and our _____.
- a) hopes
 - b) books
 - c) clouds
13. I'd like a cup of _____ with no sugar.
- a) coffees
 - b) coffee
 - c) coffeeness
14. She had a lot of _____ but no experience.
- a) enthusiasm
 - b) laptops
 - c) headphones
15. We had a long _____ about politics.
- a) chat
 - b) chats
 - c) chattings

11. Choose the correct word to complete each sentence.

- ❖ He is very _____ about starting his new job. (enthusiastic / enthusiasm / enthusiast)
- ❖ The _____ of the event made everyone excited. (announcement / announce / announcing)
- ❖ We _____ talked about our plans for the weekend. (briefly / brief / brevity)
- ❖ She has a lot of _____ for organizing events. (potential / potentials / potentially)
- ❖ The company _____ its customers with excellent service. (provide / provides / providing)
- ❖ They decided to _____ the meeting until next week. (postpone / postpones / postponing)

- ❖ The _____ solution was easier than expected. (suggest / suggestion / suggested)
- ❖ Technology makes communication _____ accessible than ever. (more / most / much)
- ❖ He _____ understanding the new software. (struggle / struggles / struggling)
- ❖ The _____ was clear and precise. (response / respond / responding)

12. Find and correct the mistakes in the sentences below.

- ❖ She enjoy to play tennis every weekend.
- ❖ They was discussing about the new project yesterday.
- ❖ I doesn't like to eat spicy food.
- ❖ The informations he gave was very useful.
- ❖ Everyone were excited to attend the conference.
- ❖ We speaks English fluently in our workplace.
- ❖ The team has been work on the project for two months.
- ❖ The technology have changed the way we communicate.
- ❖ He didn't knew how to solve the problem.
- ❖ The book was interesting, but the ending was disappointed.
- ❖ The movie were highly recommended by critics.
- ❖ A discussion were held between the managers and employees.
- ❖ They enjoys spending time with their friends during weekends.
- ❖ The emails was sent to all the members yesterday.
- ❖ She have been working in this company for five years.

13. Fill in the blanks with the correct form of the word in brackets.

- ❖ He _____ (choose) to be part of the team because of his expertise.
- ❖ The new manager has _____ (implement) several strategies to improve productivity.
- ❖ She _____ (focus) on completing the report before the deadline.
- ❖ The meeting was _____ (schedule) for 3 p.m. tomorrow.
- ❖ They _____ (develop) a creative solution to the problem.
- ❖ The participants _____ (share) their ideas during the discussion.
- ❖ We _____ (explore) different options to make the event successful.
- ❖ The team members were _____ (assign) their roles and responsibilities.
- ❖ Communication skills are _____ (essential) in building strong relationships.
- ❖ They _____ (analyze) the data to make informed decisions.
- ❖ The project was _____ (complete) ahead of the deadline.
- ❖ She _____ (prepare) the report with great attention to detail.
- ❖ We _____ (practice) speaking English daily to improve our fluency.
- ❖ The company _____ (introduce) a new product last month.
- ❖ The proposal was _____ (approve) by the board members.

14. Complete the sentences with the correct form of the verb in parentheses.

- ❖ She _____ (organize) the event with precision and care.
- ❖ The company _____ (expand) its operations worldwide.
- ❖ They _____ (discuss) the proposal during the meeting.
- ❖ The participants _____ (attend) the workshop on communication skills.
- ❖ We _____ (develop) innovative solutions to solve complex problems.
- ❖ He _____ (submit) his thesis before the deadline.
- ❖ The new policy was _____ (implement) effectively last year.
- ❖ The team members _____ (collaborate) on a challenging project.
- ❖ Effective leadership _____ (inspire) others to reach their potential.
- ❖ They _____ (evaluate) the outcomes of the strategy.

15. Rewrite each sentence in the passive voice.

- ❖ She prepared the presentation with great thoroughness.
- ❖ The board members approved the annual report.
- ❖ The company launched a new service in February.
- ❖ The teachers encourage students to participate actively in discussions.
- ❖ Researchers analyzed the data to draw meaningful conclusions.
- ❖ They explored innovative ways to address the concerns.
- ❖ The city council implemented the new regulations last month.
- ❖ The students practiced their speaking skills to become fluent.
- ❖ The organizers assigned tasks to everyone in the group.
- ❖ Experts identified the risks associated with the new technology.

16. Find and correct the mistakes in the following sentences.

- ❖ They was analyzing the data to make decisions.
- ❖ We practices speaking English every day for better fluency.
- ❖ The project were completed successfully by the team.
- ❖ Communication are essential for maintaining strong bonds.
- ❖ She prepare the report with detailed attention.
- ❖ The proposal was approve by all members of the board.
- ❖ The company introduced a new product last week.
- ❖ They explores options to enhance productivity.
- ❖ We assign roles based on individual expertise.
- ❖ The participants shares their thoughts during the session.

17. Write a speech for a student conference about how the Internet helps people study and learn new skills. Word count: 160–200 words.

UNIT 18. Communications

TASKS:

1. Read the text and briefly write its meaning.



Emerging Technologies and Communication Security

In today's rapidly evolving digital landscape, emerging technologies play a crucial role in enhancing communication security. As cyber threats become increasingly sophisticated, leveraging advanced technologies is essential to safeguard sensitive information and ensure secure communication channels.

One of the most promising emerging technologies for communication security is blockchain. Originally developed for cryptocurrencies, blockchain's decentralized and immutable nature makes it an excellent tool for secure communication. By utilizing cryptographic hashing and distributed ledger technology, blockchain ensures that data cannot be tampered with or altered without detection. This makes it highly effective for securing communications and transactions, providing an extra layer of trust and transparency.

Artificial Intelligence (AI) and Machine Learning (ML) are also transforming communication security by enabling more proactive and adaptive defenses. These technologies can analyze vast amounts of data to identify patterns and anomalies that may indicate cyber threats. AI-powered systems can automatically detect and respond to suspicious activities, such as phishing attempts or unauthorized access, significantly reducing response times and mitigating potential damage.

Quantum cryptography is an emerging field that promises to revolutionize communication security through the principles of quantum mechanics. Quantum Key Distribution (QKD) is a technique that uses quantum bits (qubits) to create unbreakable encryption keys. Any attempt to intercept or measure the qubits alters their state, making eavesdropping detectable and ensuring that the communication remains secure.

Secure Multiparty Computation (SMC) is another emerging technology that enhances communication security by allowing multiple parties to jointly compute a function over their inputs while keeping those inputs private. This technology is particularly useful in scenarios where sensitive data needs to be shared and processed without revealing the data to other parties involved.

Zero Trust Architecture is a security model that assumes no communication, whether internal or external, is automatically trusted. It requires continuous verification of users and devices, ensuring that only authenticated and authorized entities can access sensitive information. This approach minimizes the risk of breaches by strictly enforcing security policies and monitoring all communication activities.

As these emerging technologies continue to develop and mature, they will play an increasingly vital role in protecting communication channels and ensuring the security of sensitive information. By staying informed and leveraging these advanced tools, organizations can build more robust defenses against the ever-evolving landscape of cyber threats.

2. Answer these questions.

1) What are the key advantages of using blockchain technology for communication security?

2) How do Artificial Intelligence (AI) and Machine Learning (ML) contribute to detecting and responding to cyber threats?

3) What is Quantum Key Distribution (QKD) and how does it enhance communication security?

4) In what scenarios is Secure Multiparty Computation (SMC) particularly useful, and why?

5) What is the principle behind Zero Trust Architecture and how does it help prevent unauthorized access?

3. The sentence is True or False.

- 1) Blockchain technology ensures data security by allowing data to be tampered with without detection.
- 2) Artificial Intelligence (AI) and Machine Learning (ML) can automatically detect and respond to suspicious activities in communication security.
- 3) Quantum Key Distribution (QKD) uses traditional encryption methods to secure communication.
- 4) Secure Multiparty Computation (SMC) allows multiple parties to compute a function over their inputs while keeping the inputs private.
- 5) Zero Trust Architecture assumes that all internal communications are automatically trusted.
- 6) Emerging technologies are not considered effective in enhancing communication security against cyber threats.

4. Translate the following English units into Ukrainian.

- 1) *Rapidly evolving digital landscape*-_____
- 2) *Leveraging advanced technologies*-_____
- 3) *Decentralized and immutable nature*-_____
- 4) *Proactive and adaptive defenses*-_____
- 5) *Revolutionize communication security*-_____
- 6) *Minimize the risk of breaches*-_____

5. Give synonyms to the words in **bold** type.

- 1) **Blockchain** technology ensures data cannot be tampered with.

- 2) Artificial Intelligence (AI) and Machine Learning (ML) can analyze **vast** amounts of data.

- 3) Quantum cryptography promises to **revolutionize** communication security.

- 4) Secure Multiparty Computation (SMC) allows multiple parties to jointly compute a function while keeping inputs **private**.

- 5) Zero Trust Architecture requires continuous **verification** of users and devices.

6. Translate Ukrainian to English.

- Блокчейн- _____
- Безпека- _____
- Штучний- _____
- Дані- _____
- Квантовий- _____
- Шифрування- _____
- Перевірка- _____

7. Explain this word in English without using the given word itself.

- *Immutable*- _____

- *Cryptography*- _____

- *Anomalies*- _____

8. Fill in the blanks with the necessary words in the box.

<i>analyze</i>	<i>create</i>	<i>compute</i>	<i>detect</i>
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- 1) Artificial Intelligence can quickly _____ vast amounts of data to identify potential threats.
- 2) Quantum cryptography aims to _____ unbreakable encryption keys.
- 3) Secure Multiparty Computation allows parties to _____ a function over their inputs while keeping the inputs private.

9. Fill in: THE, A, AN or _ (no article).

1. He installed _____ antivirus program to protect his files.
2. They experienced _____ unexpected error during the system update.
3. She works as _____ IT consultant for a major tech company.
4. We need to reboot _____ server before applying the patch.
5. He's writing _____ code to automate routine tasks.
6. Cloud computing is _____ important part of modern IT infrastructure.
7. Did you read _____ documentation before installing the software?

8. I have _____ meeting with the cybersecurity team at 2 p.m.
9. They upgraded _____ operating system last week.
10. Encryption is essential for securing _____ data.
11. The intern is testing _____ application prototype today.
12. You'll find _____ USB port on the left side of the laptop.
13. She has experience working with both Linux and _____ Windows environments.
14. We use _____ cloud service that complies with GDPR.
15. He's looking for _____ solution to reduce system latency.

10. Fill in: THE, A, AN or _ (no article).

1. She installed _____ antivirus program to protect her system.
2. He's developing _____ app that uses machine learning.
3. I downloaded _____ update for my operating system.
4. We need to access _____ server to retrieve the backup.
5. _____ HTML is a markup language used for creating web pages.
6. We launched _____ new version of the website yesterday.
7. He's working as _____ IT support specialist.
8. You can access your files through _____ cloud platform.
9. The team is building _____ AI model for cybersecurity.
10. They implemented _____ system to track user activity.
11. _____ JavaScript code you wrote contains a syntax error.
12. She used _____ open-source tool to encrypt the data.
13. He's responsible for maintaining _____ database infrastructure.
14. We had to restart _____ network router after the power outage.
15. Cybersecurity is becoming _____ crucial aspect of modern business.

11. Fill in the blanks with the most appropriate word. Each blank requires a specific determiner.

1. I don't have _____ time to complete the project before the deadline.

2. He bought _____ interesting book about cybersecurity yesterday.
3. _____ information you sent me was extremely helpful.
4. My colleague didn't give me _____ explanation for his absence.
5. We should arrange _____ meeting to discuss the new project.
6. There isn't _____ milk left in the fridge, so I'll need to buy some.
7. She has _____ plans to travel abroad next year.
8. Can you lend me _____ money until I get paid?
9. _____ people believe that AI will transform the tech industry completely.
10. I don't need _____ help with this; I can manage it on my own.

12. Rewrite the sentences using the correct form of the words in brackets.

1. The database needs (update) _____ regularly.
2. This tool is (effective) _____ than the previous one we used.
3. (Connect) _____ to the network is essential for file sharing.
4. The company is (develop) _____ a new AI-powered platform.
5. Many (specialize) _____ tools are available for cybersecurity experts.
6. The code will need some (modify) _____ before it works correctly.
7. She is (responsible) _____ for maintaining the server.
8. (Train) _____ staff is an important part of the onboarding process.
9. This file takes (long) _____ to download than the others.
10. The programmer made several (adjust) _____ to improve system speed.

13. Find the mistakes in the following sentences and correct them.

1. I don't have no idea how to fix this error.
2. There is much tools available for resolving the issue.
3. Each of the team members have completed their tasks.
4. He didn't gave us any detailed instructions.
5. They are working in a project on cloud security.
6. Why don't we schedule the meeting for last Friday?
7. There's any way to recover the lost data?
8. She didn't knew the system update had failed.
9. None of the technicians were available to help us.
10. I am thinking to upgrade my computer this weekend.

14. Match the sentence beginnings with their appropriate endings.

- | | |
|--------------------------------------|--|
| 1. The system will shut down... | a. we discovered a critical error. |
| 2. If the code doesn't compile... | b. to be causing compatibility issues. |
| 3. We should inform the users... | c. without consulting the project manager. |
| 4. While analyzing the bug report... | d. during off-peak hours to minimize downtime. |
| 5. This software update seems... | |

- | | |
|---|---|
| 6. When the installation is complete... | e. if you click on the red button. |
| 7. The network runs smoothly... | f. you'll lose it permanently. |
| 8. In case of a data breach... | g. the IT team will monitor the server's performance. |
| 9. Unless you save your work... | h. they should change their passwords immediately. |
| 10. They decided to implement the change... | i. as long as no updates are being installed. |
| | j. you'll need to debug it further. |

15. Complete the sentences with the correct preposition or article.

1. The team is working _____ a groundbreaking technology project.
2. This software is designed specifically _____ beginners.
3. The IT specialist fixed the issue _____ using remote access.
4. He's proud _____ the work he's done on the app.
5. They are experts _____ cybersecurity and data protection.
6. You'll need to log _____ the system before accessing the files.
7. I'm interested _____ learning more about coding.
8. She succeeded _____ solving the complex algorithm.
9. We're meeting _____ 3 PM to review the tasks.
10. The files are stored _____ the company's internal server.

16. Combine the following sentences using relative pronouns or conjunctions.

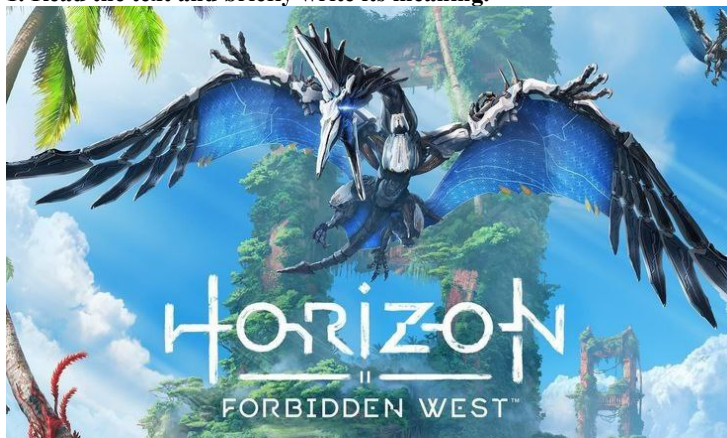
1. The developer created a program. The program can detect malware.
2. She's the manager. She will introduce the new policies.
3. There's an error in the code. The error is causing the system to crash.
4. They postponed the meeting. The meeting was supposed to happen yesterday.
5. This is the tool. It makes encryption easier.
6. The technician fixed the router. The router was not working properly.
7. We need to hire a specialist. The specialist understands cloud computing.
8. This is the software. Many companies use it for data analysis.
9. He's the engineer. He designed the new database.
10. I bought a laptop. The laptop has a touch screen.

17. Write an article on how online communication has changed friendships and teamwork in IT. Word count: 150–180 words.

UNIT 19. Video games

TASKS:

1. Read the text and briefly write its meaning.



Horizon Forbidden West

Diving into "Horizon Forbidden West" is like stepping into a sprawling sandbox where the boundaries of reality blur with the edges of an epic digital playground. This sequel to the critically acclaimed "Horizon Zero Dawn" amps up the action and immersion, inviting players to once again don the role of Aloy, our badass huntress, in her quest to unravel the mysteries of a post-apocalyptic world teeming with robotic wildlife.

From the get-go, "Horizon Forbidden West" throws you into the deep end with jaw-dropping visuals and a storyline that keeps you on the edge of your seat. The game's open world is a gamer's paradise, filled with intricate environments, ranging from dense jungles to arid deserts, and treacherous underwater biomes. The attention to detail is next level, making every corner of the map worth exploring.

The combat system is where the game shines. It's not just about spamming buttons; you've got to strategize, craft ammo, and set traps, making every encounter a test of skill and wit. Whether you're taking down a Thunderjaw with a well-placed tripcaster or stealthily hacking a Ravager to turn it against its kin, the gameplay mechanics are fluid and satisfying.

Loot is king in "Horizon Forbidden West." Scavenging parts from fallen machines and upgrading your gear is crucial for survival. The game's RPG elements are deep enough to keep you grinding for that perfect build, whether you're min-maxing your stats or just looking to deck out Aloy in the sickest armor sets. And let's not forget the skill tree, which offers a plethora of options to tailor Aloy's abilities to your playstyle.

Exploration is also dialed up to eleven. With the addition of the Shieldwing glider and underwater traversal, getting around the massive map is a breeze. The thrill of

discovering hidden ruins, solving ancient puzzles, and uncovering lore-rich collectibles adds layers of depth to the gameplay. Plus, the side quests are no mere fetch missions – they're packed with narrative punch, giving you a chance to dive deeper into the world's rich lore and meet a cast of unforgettable NPCs.

Multiplayer might not be a thing here, but the community around "Horizon Forbidden West" is thriving. From Reddit threads dissecting lore to YouTube channels offering pro tips and epic gameplay montages, there's a sense of camaraderie among players. Sharing strategies, trading screenshots of breathtaking vistas, and discussing theories about the game's plot twists are all part of the experience.

In short, "Horizon Forbidden West" isn't just a game; it's a journey, an odyssey through a meticulously crafted world that begs to be explored. Whether you're a veteran of the first game or a newcomer, there's something here to captivate every type of gamer. So gear up, dive in, and get ready to lose yourself in one of the most immersive gaming experiences out there. Game on!

2. Answer these questions.

1) What role does Aloy play in "Horizon Forbidden West"?

2) How does the combat system in "Horizon Forbidden West" differ from typical button-mashing gameplay?

3) What are some of the environments players can explore in the game?

4) How do the RPG elements, like loot and skill trees, enhance the gameplay experience in "Horizon Forbidden West"?

5) What makes the side quests in "Horizon Forbidden West" more engaging than typical fetch missions?

3. The sentence is True or False.

1) In "Horizon Forbidden West," players primarily explore urban environments filled with skyscrapers and cityscapes.

2) The combat system in "Horizon Forbidden West" requires strategic thinking, including crafting ammo and setting traps.

3) Aloy uses the Shieldwing glider and underwater traversal to navigate the game's expansive map.

4) Multiplayer is a major feature in "Horizon Forbidden West," allowing players to team up and complete missions together.

5) The side quests in "Horizon Forbidden West" are narrative-driven and offer a deeper understanding of the game's lore.

6) The community around "Horizon Forbidden West" is active, with players sharing strategies and discussing plot theories online.

4. Translate the following English units into Ukrainian.

- 1) *Jaw-dropping visuals*-_____
- 2) *On the edge of your seat*-_____
- 3) *Next level*-_____
- 4) *Fluid and satisfying*-_____
- 5) *Dialed up to eleven*-_____
- 6) *Dive deeper into the world's rich lore*-_____

5. Give synonyms to the words in **bold** type.

- 1) **Post-apocalyptic** world features a setting where society has collapsed.

- 2) **Combat** mechanics in the game require strategic thinking.

- 3) The game includes various methods of **traversal**, such as gliding and swimming.

- 4) **Upgrading** your gear is crucial for surviving tougher enemies.

- 5) The **skill tree** allows players to customize Aloy's abilities.

6. Translate Ukrainian to English:

- *Постапокаліптичний*-_____
- *Бій*-_____
- *Пересування*-_____
- *Оновлення*-_____

- *Дерево навичок*-_____
- *Захоплюючий*-_____
- *Сандбокс*-_____

7. Explain this word in English without using the given word itself.

- *Sprawling*-_____

- *Meticulously*-_____

- *Camaraderie*-_____

8. Fill in the blanks with the necessary words in the box.

<i>sandbox</i> <i>crafting</i> <i>immersion</i> <i>lore</i> <i>min-maxing</i> <i>mechanics</i>
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1) "Horizon Forbidden West" offers a vast _____ experience where players can explore and interact with the world freely.

2) A key aspect of the game is _____ ammo and setting traps to strategize in combat.

3) The game's detailed environments and storyline contribute to its high level of _____ for players.

4) Uncovering hidden ruins and solving puzzles helps players dive deeper into the game's rich _____.

5) Players can spend hours _____ their stats to create the perfect build for Aloy.

9. Complete the sentences with a modal verb from the box below. Sometimes more than one answer is possible.

may – might – can – can't – should – shouldn't – must – have to – has to – needn't – mustn't – don't have to – doesn't have to

1. You _____ install the latest drivers to ensure compatibility.
2. She _____ be at the data center now — her car is in the parking lot.
3. Users _____ change their passwords every 90 days for security.
4. You _____ share your admin credentials with anyone. It's strictly prohibited.
5. He _____ know the answer — he designed the system himself.
6. They _____ attend the webinar if they already completed the training.

7. You _____ restart your computer after installing that update. It will apply automatically.
8. This error _____ be due to a corrupted file or missing dependency.
9. We _____ upgrade the server soon; performance is becoming an issue.
10. The developer _____ test the code before committing any changes.
11. That solution _____ work, but we should run more tests to be sure.
12. She _____ log in remotely using her credentials and a secure token.
13. You _____ be careful when modifying system files — it could crash the OS.
14. He _____ access the files because his account was deactivated.
15. The team _____ finish the task today, or the release will be delayed.

10. Fill in the blanks with appropriate modals (must, can, could, may, might, should, etc.).

- ❖ She _____ be the one who left the door unlocked; I saw her leaving last.
- ❖ You _____ take an umbrella with you; the weather report hinted at rain.
- ❖ They _____ know the answer if we explain it clearly.
- ❖ He _____ have missed the meeting because his train was delayed.
- ❖ You _____ submit the assignment by Friday to meet the deadline.
- ❖ This package _____ arrive tomorrow, but there is a slight chance of delay.
- ❖ We _____ call them when we get to the venue.
- ❖ The manager _____ approve this request before we proceed.
- ❖ That comment _____ offend them, so please think twice before posting it.
- ❖ The artist _____ finish the painting by next week.

11. Choose the correct modal to complete each sentence.

- ❖ You (should/can) always wear sunscreen when going outside.
- ❖ She (must/might) be late because of traffic.
- ❖ They (can/may) borrow the book if they return it on time.
- ❖ You (might/must) finish this task today; it's urgent.
- ❖ We (could/may) go to the park if the weather improves.
- ❖ He (should/can't) say that; it's rude.
- ❖ This (must/might) be the right way to solve the problem.
- ❖ You (may/should) try restarting the system to fix the issue.
- ❖ She (can/mustn't) play loud music during working hours.
- ❖ They (might/should) arrive early to secure seats.

12. Rewrite the sentences using modals to express different levels of certainty.

- ❖ It's possible she forgot the meeting. (might)
- ❖ I am sure they finished the project yesterday. (must)
- ❖ There is a chance he will come to the party. (may)
- ❖ It's not possible for them to know the answer. (can't)
- ❖ He is allowed to leave early today. (may)
- ❖ You are required to wear a helmet on the construction site. (must)
- ❖ They are advised to check their emails daily. (should)
- ❖ It's unlikely she will win the competition. (might not)
- ❖ You have permission to use the conference room. (can)
- ❖ It's obligatory for everyone to attend the safety briefing. (must)

13. Find and correct the grammatical errors in the following sentences (modals included).

- ❖ She can't goes to the store without her wallet.
- ❖ He must to submit the report by Friday.
- ❖ They mights be late because of the heavy traffic.
- ❖ You should not to leave the computer unlocked.
- ❖ We can't have arrive early; the event starts at 8 PM.
- ❖ She must has permission to access the files.
- ❖ They should putted away their tools after using them.
- ❖ You can borrow the book if you will return it tomorrow.
- ❖ He may to know the answer to the problem.
- ❖ We mights need to call technical support for assistance.

14. Complete the sentences using modals to express advice, necessity, or possibility.

- ❖ You _____ prepare for the test thoroughly; it's challenging.
- ❖ They _____ call ahead to confirm their reservation.
- ❖ We _____ leave now; traffic is getting worse.
- ❖ She _____ apologize for the mistake before it escalates.
- ❖ He _____ finish his homework before going out to play.
- ❖ You _____ wear formal attire for the interview.
- ❖ They _____ consider the consequences before taking action.
- ❖ We _____ check the system regularly to ensure it's running smoothly.
- ❖ She _____ attend the meeting; her input is crucial.
- ❖ You _____ ask for help if you're struggling with the task.

15. Fill the blanks with correct modals based on the context provided.

- ❖ You _____ bring your passport for international travel.

- ❖ He _____ practice more to improve his performance.
- ❖ They _____ wait here until the next train arrives.
- ❖ We _____ try the new Italian restaurant downtown.
- ❖ She _____ have left the door open; it wasn't locked when I arrived.
- ❖ You _____ ask before borrowing other people's belongings.
- ❖ He _____ fix the error in the report before submission.
- ❖ They _____ be able to solve the puzzle; they've been practicing.
- ❖ We _____ contact them about the delay immediately.
- ❖ She _____ know the answer; she's good at math.

16. Combine sentences using modals.

- ❖ It's raining heavily. We should stay indoors. (combine with 'might')
- ❖ He has extra tickets. He can invite his friends. (combine with 'may')
- ❖ The system crashed. Someone must have modified the files. (combine with 'must')
- ❖ She has spare time. She can help us with the decorations. (combine with 'could')
- ❖ He made an error. He should correct it before submitting. (combine with 'might')
- ❖ They are not at home. They may have gone to visit relatives. (combine with 'may')
- ❖ You haven't eaten yet. You should grab a snack. (combine with 'must')
- ❖ The weather is cold. You must wear a coat. (combine with 'should')
- ❖ He is late. He might miss the bus. (combine with 'might')
- ❖ The printer is broken. You must fix it before printing the document. (combine with 'should')

17. Write an opinion essay about whether video games can be educational. Give at least two examples. Word count: 170–200 words.

UNIT 20. Cryptocurrencies

TASKS:

1. Read the text and briefly write its meaning.



Basics

Alright, let's break down cryptocurrencies in the simplest way possible, without getting too deep into the technical weeds. Imagine you have a stash of digital coins that you can use to buy stuff or trade, just like cash, but it's all online and not controlled by any government or bank. That's the gist of cryptocurrencies!

First up, let's talk about **Bitcoin**, the big daddy of all cryptocurrencies. Think of Bitcoin as digital gold. It was the first cryptocurrency and still the most well-known. People use it for transactions and as an investment. Bitcoin is powered by **blockchain** technology, which is like a digital ledger that records all transactions across a network of computers. This ensures everything is transparent and secure.

Now, **blockchain** might sound complex, but it's really just a chain of blocks. Each block contains a list of transactions. When a block is filled, it's added to the chain. Picture a digital notebook where every page is a block, and the whole notebook is the blockchain. Once something is written in the notebook, it can't be erased or altered.

Another cool term is **mining**. No, we're not talking about digging for gold. In the crypto world, mining is the process of solving complex math problems to verify transactions and add them to the blockchain. Miners use powerful computers to do this and get rewarded with new coins. It's like a digital treasure hunt!

Then there are **wallets**. Just like the wallet in your pocket holds your cash and cards, a crypto wallet holds your digital coins. There are different types of wallets, like hot wallets (connected to the internet) and cold wallets (offline, more secure). Think of hot wallets as your regular wallets and cold wallets as a safe at home.

Let's not forget **altcoins**. These are any cryptocurrencies other than Bitcoin. Some popular altcoins are Ethereum, Litecoin, and Ripple. Each has its own unique features.

For instance, Ethereum isn't just a currency; it's a platform for building decentralized apps (dApps). It's like a Swiss Army knife of the crypto world.

Another buzzword is **HODL**, which means "Hold On for Dear Life." This term came from a misspelled forum post and now it's a mantra for crypto enthusiasts who believe in keeping their coins through market ups and downs instead of selling when prices drop.

FOMO (Fear Of Missing Out) is also big in the crypto community. It's the anxiety that comes when you see the value of a cryptocurrency skyrocketing and you feel the urge to buy in so you don't miss out on potential gains.

Lastly, there's **DYOR** (Do Your Own Research). This is crucial advice in the crypto space. It means you should always investigate and understand what you're investing in rather than just following the hype. The crypto market can be a wild ride, so it's important to know what you're getting into.

So there you have it – a crash course in cryptocurrencies with all the basic terms and a bit of slang. Remember, the crypto world is full of ups and downs, so buckle up and enjoy the ride!

2. Answer these questions.

1) What is Bitcoin often compared to in the text, and why?

2) How does blockchain technology ensure transparency and security?

3) What is the process of mining in the context of cryptocurrencies?

4) What are the differences between hot wallets and cold wallets?

5) What does the term HODL stand for, and what does it signify in the crypto community?

6) Why is DYOR (Do Your Own Research) considered crucial advice in the crypto space?

3. The sentence is True or False.

- 1) Bitcoin is often referred to as digital gold because it was the first cryptocurrency and remains the most well-known.
- 2) Blockchain technology involves a centralized ledger that is controlled by a single entity to ensure transparency and security.
- 3) In the context of cryptocurrencies, mining refers to digging for gold.
- 4) Hot wallets are connected to the internet, while cold wallets are offline and considered more secure.
- 5) Altcoins refer to any cryptocurrencies other than Bitcoin, including Ethereum and Litecoin.
- 6) FOMO (Fear Of Missing Out) describes the anxiety of missing potential gains when the value of a cryptocurrency is rising.

4. Translate the following English units into Ukrainian.

- 1) *Digital gold*-_____
- 2) *Complex math problems*-_____
- 3) *Digital treasure hunt*-_____
- 4) *HODL*-_____
- 5) *FOMO*-_____
- 6) *DYOR*-_____

5. Give synonyms to the words in **bold** type.

- 1) Bitcoin is often referred to as **digital** gold.

- 2) Blockchain technology involves a digital **ledger** that records transactions.

- 3) Miners use powerful computers to **verify** transactions.

- 4) Hot wallets are connected to the **internet**, making them easily accessible.

- 5) The crypto market can be a **wild** ride, with frequent ups and downs.

6. Translate Ukrainian to English:

- *Бімкоїн*-_____

- Блокчейн-_____
- Гаманець-_____
- Майнер-_____
- Альткоїн-_____
- Занурення-_____
- Стратегія-_____

7. Explain this word in English without using the given word itself.

- *Decentralized*-_____
- *Immutable*-_____
- *Cryptographic*-_____

8. Fill in the blanks with the necessary words in the box.

<i>blockchain</i>	<i>cryptocurrency</i>	<i>wallet</i>	<i>mining</i>	<i>transaction</i>
<i>altcoins</i>	<i>HODL</i>	<i>FOMO</i>	<i>DYOR</i>	<i>ledger</i>

- 1) Bitcoin is a popular type of _____ used for digital transactions.
- 2) _____ technology ensures that all transactions are recorded in a secure and transparent manner.
- 3) A crypto _____ is used to store and manage your digital coins.
- 4) _____ is the process of verifying transactions and adding them to the blockchain.
- 5) Ethereum and Litecoin are examples of _____ that have unique features compared to Bitcoin.
- 6) Investors who _____ their assets believe in holding onto them despite market fluctuations.
- 7) _____ describes the anxiety of missing out on potential gains when the value of a cryptocurrency rises.
- 8) In the crypto world, _____ is crucial advice, meaning you should always investigate and understand what you're investing in.

9. Complete the sentences with an appropriate conjunction or linking word.

Use: *although, because, so, however, and, or, but, while, since, even though, unless.*

I studied all night, ____ I still didn't pass the exam.
 You can use a laptop ____ a tablet for the test.
 ____ I was tired, I continued working on the project.

We decided to leave early ____ the weather was getting worse.
She loves working with data, ____ she doesn't like coding.
____ he has a fast computer, he never uses it for gaming.
I can't attend the meeting ____ I finish this report on time.
I enjoy web design, ____ I'm also interested in cybersecurity.
He was talking on the phone ____ checking his emails.
____ it was raining, we went outside to check the Wi-Fi signal.

10. Rewrite the sentences using impersonal structures (*It is said that... / It seems that... / It appears that... / It was reported that... / It is known that... / It is believed that...*).

Example: *People say that artificial intelligence is dangerous.* → *It is said that artificial intelligence is dangerous.*

Experts believe that cloud storage is safer than local storage.
People think that this app collects too much data.
They report that the system was hacked last week.
Everyone knows that he is a talented programmer.
They say that this software is very user-friendly.
The news reported that the virus had spread through email.
People assume that only young people play video games.
Some researchers believe that AI will change education.
Users complain that the platform is not reliable.
Everyone says that the course is helpful for beginners.

11. Rewrite the sentences by transforming them into passive voice while preserving their meaning.

1. People believe that the Internet has changed communication forever.
2. Experts report that social media influences beauty standards.
3. Studies show that online platforms can cause body image issues.
4. Researchers confirm that digital collaboration tools improve efficiency.
5. Celebrities share photos that set unrealistic beauty trends.
6. Users complain that some apps track too much personal data.
7. People think that young individuals are the primary users of social media.
8. Analysts state that online education is becoming increasingly popular.
9. Authorities warn that viruses spread rapidly through email systems.
10. Critics argue that digital content often lacks authenticity.

12. Identify the mistakes in the sentences below and correct them.

1. Internet have revolutionized how people communicate.
2. The emails was sent to the wrong person.
3. Researchers says that online platforms could influence user behavior.
4. Everyone know that technology evolves rapidly.

5. Social medias often promote unrealistic beauty standards.
6. People assumes that only teenagers use video games.
7. The system was hacked last week, but no datas were compromised.
8. Influencers shares content that impacts public perception of beauty.
9. Authorities warns the public about potential cybersecurity threats.
10. Some apps collects excessive amounts of personal information.

13. Complete the sentences using the correct tense of the verbs in parentheses.

1. The Internet (revolutionize) communication in the past two decades.
2. Social media platforms (become) increasingly popular among teenagers.
3. Celebrities (influence) beauty standards through their posts.
4. Researchers (study) the effects of online education since 2010.
5. Users (complain) about unreliable platforms for years.
6. Technological advancements (change) the way people work remotely.
7. Authorities (warn) the public about cybersecurity risks recently.
8. People (assume) that video games are only for young individuals.
9. The news (report) that the virus (spread) through email last week.
10. Experts (believe) that AI will transform education in the future.

14. Rewrite the sentences in reported speech.

1. "The course is helpful for beginners," everyone says.
2. "The platform is not reliable," users complain.
3. "AI will change education," some researchers believe.
4. "Young people mainly play video games," people assume.
5. "The virus spread through email," the news reported.
6. "This software is user-friendly," they say.
7. "The system was hacked last week," they report.
8. "This app collects too much data," people think.
9. "Cloud storage is safer than local storage," experts believe.
10. "The Frisian language has official status," people note.

15. Match the sentence fragments to form meaningful sentences using appropriate grammar structures.

- | | |
|--|---|
| A. The Internet has revolutionized... | 1. ...unrealistic beauty standards, |
| B. Social media platforms often promote... | 2. ...connect with others instantly across long distances. |
| C. Emails can spread... | 3. ...cybersecurity risks associated with online communication. |
| D. Researchers agree that... | 4. ...team efficiency and facilitate remote work. |
| E. Young people tend to... | |
| F. Experts warn against... | |

- | | |
|---|---|
| G. Celebrities frequently share photos... | 5. ...can compromise user privacy. |
| H. Collaboration tools improve... | 6. ...that set trends in beauty and aesthetics. |
| I. Influencers impact... | 7. ...how people perceive beauty standards online. |
| J. Apps that collect excessive personal data... | 8. ...the way society interacts and communicates. |
| | 9. ...harmful viruses that infect computers. |
| | 10. ...gravitate toward video games as a form of entertainment. |

16. Make sentences, add necessary grammar, sometimes more than one answers is possible.

1. The Internet / revolutionize / communication / globally.
2. Social media platforms / influence / beauty standards / young people.
3. Researchers / study / effects / online education.
4. Apps / collect / personal data / users.
5. Authorities / warn / cybersecurity risks / public.
6. Celebrities / share / idealized images / platforms.
7. Emails / spread / viruses / systems.
8. People / assume / video games / popular / teenagers.
9. Experts / believe / AI / transform / education.
10. Users / complain / unreliable platforms / apps.

17. Write an informational post that explains what cryptocurrencies are and how they are used in modern online businesses. Word count: 160–200 words.

UNIT 21. The influence of the Internet on society

TASKS:

1. Read the text and briefly write its meaning.



The Internet has profoundly impacted modern society, changing the way we communicate, consume media, and perceive beauty standards, while also exposing individuals to harmful content. Its pervasive influence touches many aspects of daily life, bringing both benefits and challenges.

1) _____

The Internet has revolutionized communication, enabling people to connect instantly across vast distances. Social media platforms, email, and messaging apps have made it easier to maintain relationships, share information, and collaborate on projects. These tools have transformed personal and professional interactions, making communication more immediate and accessible.

2) _____

The Internet plays a significant role in shaping beauty standards, with social media and online platforms often promoting unrealistic and idealized images. Influencers and celebrities share photos and videos that set trends and influence public perception of beauty. This can lead to body image issues and pressure to conform to certain aesthetics, especially among young people.

3) _____

Media addiction is a growing concern in the age of the Internet. The constant availability of information, entertainment, and social interaction can lead to excessive screen time, affecting mental health and well-being. Individuals may find themselves spending hours browsing social media, streaming videos, or playing online games, often at the expense of other activities and responsibilities.

4) _____

Exposure to harmful content, such as videos or photos depicting real violence, is a major issue on the Internet. Such content can be disturbing and traumatizing, particularly for younger audiences. The prevalence of this material poses a challenge for platforms trying to balance freedom of expression with the need to protect users from harm.

In summary, the Internet has dramatically influenced society, bringing both positive changes and serious challenges. Its impact on communication, media addiction, beauty standards, and the spread of harmful content highlights the complex role it plays in modern life.

2. Match the heading (A-E) to paragraphs (1-5).

- A) Communication
- B) Harmful Content
- C) Beauty Standards
- D) Media Addiction

3. The sentence is True or False.

- 1) The Internet has made it easier for people to communicate instantly across vast distances.
- 2) Media addiction is not a concern in the age of the Internet, as most people use it in moderation.
- 3) Social media platforms often promote unrealistic and idealized images, influencing public perception of beauty standards.
- 4) Exposure to harmful content, such as videos depicting real violence, is a minor issue on the Internet.
- 5) The Internet has transformed personal and professional interactions, making communication more immediate and accessible.
- 6) The prevalence of harmful content online poses no significant challenges for platforms in terms of user protection.

4. Translate the following English units into Ukrainian.

- 1) *excessive screen time*-_____
- 2) *shaping beauty standards*-_____
- 3) *idealized images*-_____
- 4) *profoundly impacted modern society*-_____

5. Give synonyms to the words in bold type.

- 1) The Internet has **revolutionized** communication, enabling people to connect instantly across vast distances.

2) Media **addiction** is a growing concern in the age of the Internet.

3) The Internet plays a significant role in **shaping** beauty standards.

4) Social media often promotes **unrealistic** and idealized images.

5) The prevalence of harmful content online poses a **challenge** for platforms trying to balance freedom of expression with the need to protect users.

6. Translate Ukrainian to English:

- *Поширеність*-_____
- *Миттєво*-_____
- *Залежність*-_____
- *Впливати*-_____
- *Надмірний*-_____
- *Захист*-_____
- *Ідеалізований*-_____

7. Explain this word in English without using the given word itself.

- *Prevalence*-_____
- *Idealized*-_____
- *Addiction*-_____

8. Fill in the blanks with the necessary words in the box.

<i>revolutionized</i> <i>perception</i> <i>unrealistic</i> <i>prevalence</i> <i>addiction</i>
--

1) The Internet has _____ communication, making it possible for people to connect instantly across vast distances.

2) Media _____ is a growing concern in the age of the Internet, as excessive screen time can affect mental health.

3) Social media often promotes _____ and idealized images, influencing public perception of beauty standards.

4) The _____ of harmful content online poses a challenge for platforms trying to protect users.

9. Complete each sentence using one of the following prepositional phrases: *in charge of, on behalf of, in spite of, according to, in case of, by means of, in front of, instead of, due to, out of.*

1. The manager spoke _____ the whole team during the meeting.
2. We stayed indoors _____ the heavy rain.
3. _____ the company policy, we must reset our passwords monthly.
4. She solved the problem _____ a special algorithm.
5. The error was fixed quickly _____ the quick response of the IT team.
6. They installed cameras _____ the building to increase security.
7. _____ his lack of experience, he got the job.
8. I printed the report _____ writing it by hand.
9. I'm _____ the new user interface design.
10. Keep your backup drives safe _____ system failure.

10. Fill in the blanks with the correct prepositional phrase from the list – *at risk, in favour of, in relation to, with regard to, in need of, on time, at first, for the sake of, under control, on the basis of.*

1. We must protect users who are _____ of data breaches.
2. The update was released _____ improving security.
3. The server crashed _____, but it was fixed quickly.
4. The project was approved _____ its long-term potential.
5. Please send me the documents _____ your application.
6. The system seems to be _____ now, but we should monitor it.
7. He always finishes his tasks _____, even if they are difficult.
8. They voted _____ using open-source tools in the company.
9. The charity helps people _____ medical support.
10. _____ your question about the login error, we're still investigating it.

11. Fill in the blanks with the correct preposition or conjunction.

1. Social media has revolutionized the way people communicate, _____ it has also caused significant challenges.

2. Many young people feel pressured _____ unrealistic beauty standards presented online.

3. The Internet can be a tool for education; ____, it can also expose users to harmful content.
4. Many people multitask ____ using the Internet, which can reduce productivity.
5. The Internet is helpful, ____ users need to manage their time wisely to avoid addiction.
6. People spend hours scrolling social media ____ realizing how much time has passed.
7. Sleep patterns are disrupted ____ excessive screen use before bed.
8. A person can feel isolated ____ they are always virtually connected.
9. Communication online feels immediate ____ often lacks depth.
10. The Internet provides instant access to information, ____ it also requires discernment to avoid misinformation.

12. Choose the correct word to complete the sentences: 'affect' or 'effect.'

1. Spending too much time online can ____ a person's emotional well-being.
2. The ____ of social media on self-esteem is often negative.
3. The constant exposure to online content can ____ how people see themselves.
4. Over-reliance on the Internet may ____ relationships with family and friends.
5. Awareness of how the Internet impacts mental health can help reduce its ____ on users.
6. The ____ of notifications and alerts can be disruptive during work or study.
7. Excessive use of the Internet might ____ sleep patterns.
8. The Internet may ____ children's development if not monitored carefully.
9. Many people are unaware of the ____ their online habits have on productivity.
10. Taking breaks from digital devices can positively ____ one's stress levels.

13. Rewrite the sentences using passive voice where possible.

1. The Internet exposes users to both opportunities and risks.
2. Social media platforms have created a sense of false community.
3. Harmful content can affect teenagers profoundly.
4. Notifications interrupt work and reduce focus.
5. Experts have studied the long-term effects of media addiction.
6. Many people experience isolation despite being constantly connected.
7. Teachers use the Internet as a resource to enhance learning.
8. Online communication has replaced traditional letters in many cases.
9. Digital habits shape how young people interact with the world.
10. Companies collect vast amounts of data through Internet usage.

14. Match the sentence halves to form complete ideas.

- | | |
|--|---|
| 1. Spending excessive time online ____ | a. even though it provides instant connections. |
| | b. can cause anxiety and restlessness. |

- | | |
|---|--|
| 2. Social media often makes people feel isolated ____ | c. but it also exposes users to harmful content. |
| 3. Proper Internet usage ____ | d. might lead to better mental health. |
| 4. The Internet is a powerful tool for education ____ | e. can disrupt focus and concentration. |
| 5. Notifications and alerts ____ | f. but it often lacks meaningful interactions. |
| 6. Digital communication seems easy ____ | g. due to unrealistic beauty standards online. |
| 7. Young people struggle with self-esteem ____ | h. when users spend hours on social media. |
| 8. Productivity decreases ____ | |

15. Correct the errors in these sentences.

1. Many people are rely on the Internet for their daily tasks.
2. Excessive usage of the Internet can affects emotional well-being.
3. Notifications is a major cause of distractions.
4. People feels isolated despite being connected online.
5. The Internet has revolutionized how we communicates with each other.
6. Many young person struggle with the pressure of beauty standards.
7. Overusing the Internet effects productivity and sleep.
8. Online communication seem convenient but lacks depth.
9. The Internet provide instant access to knowledge.
10. Social media often lead to feelings of loneliness.

16. Write a short paragraph using the vocabulary and grammar from the unit.

Write about how the Internet influences your daily life. Include at least 10 sentences and use words like “affect,” “effect,” “addiction,” “productivity,” “isolation,” and “beauty standards.” Use varied sentence structures, and make sure to include at least one conditional sentence and one sentence in the passive voice. Example start: “The Internet has a significant effect on my daily routine. It affects how I communicate with others, as...”

17. Write an argumentative essay on whether the Internet has had a positive or negative impact on society. Word count: 180–220 words.

UNIT 22. The influence of the Internet on you

TASKS:

1. Read the text and briefly write its meaning.



The Internet significantly impacts various aspects of a person's life, affecting how they communicate, perceive beauty standards, and deal with media addiction and exposure to harmful content, often leading to profound emotional and psychological consequences.

1) _____

Media addiction, fueled by the Internet, can deeply affect a person's well-being. The constant barrage of notifications and the allure of social media often lead to hours of mindless scrolling. This addiction can result in feelings of anxiety and restlessness when not connected, and a sense of emptiness and time loss after prolonged use. Over time, a person may notice decreased productivity, disrupted sleep patterns, and a decline in real-life social interactions. The psychological toll includes symptoms of depression, increased stress levels, and an overwhelming feeling of being trapped in a digital cycle that's hard to break.

2) _____

The Internet has revolutionized communication, but it also comes with significant consequences. Instant messaging and social media platforms create a facade of closeness, yet often leave a person feeling more isolated than ever. The lack of deep, meaningful

interactions can lead to feelings of loneliness and disconnection. Over-reliance on digital communication can diminish social skills, making face-to-face interactions anxiety-inducing. This superficial connectivity can result in a hollow sense of social engagement, leaving a person yearning for genuine human contact that feels increasingly rare in a digitally dominated world.

3) _____

Encountering harmful content online can have a severe impact on a person's mental health. Graphic images and disturbing videos can trigger anxiety, nightmares, and even symptoms of post-traumatic stress disorder (PTSD). The constant exposure to such content can desensitize a person, leading to emotional numbness and a distorted view of reality. The emotional toll of coming across violent or disturbing material can lead to increased fear, mistrust, and a pervasive sense of vulnerability, affecting overall psychological well-being.

4) _____

The Internet's influence on beauty standards can wreak havoc on a person's self-esteem. Constantly comparing oneself to the seemingly perfect lives and appearances showcased on social media can lead to profound feelings of inadequacy and insecurity. This comparison culture often results in body image issues, eating disorders, and an unhealthy obsession with appearance. The pressure to conform to unrealistic beauty ideals can cause anxiety and depression, as a person strives for perfection that is often unattainable. The impact is a diminished sense of self-worth and a continuous struggle with identity and acceptance.

In summary, the Internet's influence on a person's life is profound, bringing both positive and negative consequences. The convenience of digital connectivity is often overshadowed by the psychological toll of media addiction, the emptiness of superficial communication, the trauma of harmful content, and the insecurity bred by unrealistic beauty standards. These impacts highlight the need for mindful and balanced Internet use, as people navigate the digital world while striving to maintain their emotional and psychological health. The consequences are deeply personal, affecting not just how a person interacts with the world, but how they perceive themselves and their place in it.

2. Match the heading (A-E) to paragraphs (1-5).

- A) Harmful Content**
- B) Beauty Standards**

- C) Communication**
- D) Media Addiction**

3. The sentence is True or False.

- 1) Media addiction caused by the Internet can result in feelings of anxiety and restlessness when not connected.
- 2) The Internet has no significant impact on a person's productivity and sleep patterns.

3) Instant messaging and social media platforms always create a sense of deep, meaningful interactions.

4) Encountering harmful content online can trigger symptoms of post-traumatic stress disorder (PTSD).

5) Constantly comparing oneself to social media images can lead to feelings of inadequacy and insecurity.

6) The pressure to conform to unrealistic beauty ideals promoted online has no effect on a person's self-esteem.

4. Translate the following English units into Ukrainian.

1) *woven itself into the fabric of daily life*- _____

2) *double-edged sword*- _____

3) *barrage of notifications*- _____

4) *facade of closeness*- _____

5) *hollow sense of social engagement*- _____

5. Give synonyms to the words in **bold** type.

1) Media addiction can deeply **affect** a person's well-being.

2) Over time, a person may notice **decreased** productivity due to media addiction.

3) Instant messaging and social media platforms create a **facade** of closeness.

4) Encountering harmful content online can have a **severe** impact on mental health.

5) The pressure to **conform** to unrealistic beauty ideals can cause anxiety and depression.

6. Translate from Ukrainian into English:

• *Вплив*- _____

• *Двосічний меч*- _____

• *Постійний потік*- _____

• *Видимість*- _____

• *Справжній*- _____

- Порожній-_____
- Пустосуватися-_____

7. Explain this word in English without using the given word itself.

- Dependency-_____

- Superficial-_____

- Desensitize-_____

8. Fill in the blanks with the necessary words in box.

<i>compare</i>	<i>overcome</i>	<i>promote</i>	<i>influenced</i>
<i>notifications</i>	<i>harmful</i>	<i>create</i>	<i>decrease</i>

- 1) The Internet has deeply _____ many aspects of modern life.
- 2) People often _____ themselves to others on social media.
- 3) Constant exposure to _____ content can be traumatic.
- 4) Instant messaging can sometimes _____ a false sense of closeness.
- 5) Many individuals struggle to _____ their media addiction.
- 6) Social media can _____ unrealistic beauty standards.
- 7) Overuse of the Internet can _____ productivity and real-life social interactions.

9. Read the following situation and complete the tasks below.

Dear Sir/Madam,

I am writing to complain about the IT workshop entitled "**CyberSecure Today**", organised by your company at the Digital Future Conference Centre on 12 June. I attended the event with several of my classmates, and unfortunately, it turned out to be a major disappointment.

First of all, the confirmation email advised us to arrive 45 minutes early to complete registration.

When we arrived at the specified time, we were surprised to find a long queue and **waited in a poorly ventilated hall for over an hour.**

(1) _____.

Several people began feeling unwell due to the heat. My friend actually fainted.

(2) _____.

The event organisers made matters worse. They did not provide any water or assistance.
(3) _____.

We were finally allowed to enter the seminar room, which was overcrowded and poorly lit.
(4) _____.

The sound system produced constant feedback, and the projector malfunctioned throughout the keynote session.
(5) _____.

I was shocked when the speaker, instead of delivering the promised **cybersecurity training**, started advertising his company's services.
(6) _____!

We had travelled from another city, expecting a professional and (**educate**) experience. Instead, we were left disappointed and frustrated.

(7) I hope that, in the future, you will consider improving your event (**organise**) and providing more reliable (**inform**) beforehand.

Yours faithfully,
Ivan Kovalchuk
3rd-year student, Computer Science Department

10. Complete the text by using the correct form of the word in brackets.

Cloud-native development has become the cornerstone of modern software engineering. Recent (**1 innovate**) _____ in container orchestration have raised expectations for both flexibility and performance, yet the rapid pace of change also tests the (**2 rely**) _____ of legacy toolchains. To remain (**3 efficient**) _____ in such a dynamic environment, teams must adopt a culture of continuous learning and quick (**4 adapt**) _____.

Security, meanwhile, can no longer be an after-thought. With micro-services multiplying by the hour, companies require a (**5 secure**) _____-by-design strategy that (**6 integrate**) _____ compliance checks directly into each deployment pipeline. Sophisticated log-management platforms now (**7 analyse**) _____ billions of events per day, enabling near-real-time anomaly detection and fostering closer (**8 collaborate**) _____ between developers and security analysts.

Equally important is universal access to computing resources. Cloud providers have made high-performance GPUs far more **(9 accessible)** _____, allowing start-ups to **(10 expand)** _____ their AI research without prohibitive upfront costs. Yet as auditors **(11 observe)** _____, unrestrained growth can obscure the true **(12 mature)** _____ of a platform's cost model and leave budgets exposed to **(13 volatile)** _____ consumption peaks. Effective cost **(14 govern)** _____ therefore becomes as **(15 critical)** _____ as the code itself, demanding transparent dashboards and granular spending limits at every stage of the product lifecycle.

11. Exercise 1: Fill-in-the-Blank

Complete the sentences using the correct form of the word in parentheses.

1. The artist felt _____ (frustrate) when they saw their work copied by an AI program.
2. AI has the ability to _____ (generate) stunning visuals, but many argue it lacks authenticity.
3. Some people believe AI will _____ (replace) human creativity, while others think it will enhance it.
4. The artist's _____ (unique) perspective cannot be replicated by a machine.
5. Ethical _____ (concern) about AI in art have been growing in recent years.

12. Sentence Transformation

Rewrite each sentence using the word in parentheses without changing the original meaning.

1. AI can create art much faster than humans. (speed)
2. The artwork was beautiful, but it felt empty to me. (lack)
3. Many artists feel threatened by AI's ability to make art. (threatening)
4. The emotional depth in human-created art is hard to match. (difficult)
5. Using AI to produce art without giving credit is unethical. (wrong)

13. Match the Sentences

Match the beginning of each sentence (Column A) with its correct ending (Column B).

Column A	Column B
1. Some people misuse AI	a. because it can mimic human creativity.

2. The emotional connection between viewers and art	b. diminishes when art lacks authenticity.
3. AI-generated art is often visually stunning	c. to create works without proper credit.
4. Artists invest a lot of time and effort	d. in creating meaningful and unique pieces.
5. Ethical dilemmas arise	e. when technology is used to exploit creativity.

14. True or False

Read the statements below and identify if they are true (T) or false (F).

1. AI-generated art always has the same emotional impact as human-created art. (___)
2. Some people use AI to imitate human creativity without acknowledgment. (___)
3. The ethics of using AI in art is not a concern for most artists. (___)
4. Authentic art often reflects the creator's personal experiences. (___)
5. Mass production by AI can devalue human-crafted art. (___)

15. Create Sentences

Using the words provided, create meaningful sentences about the risks of AI in art.

1. originality / creativity / essential
2. ethical / consequences / harmful
3. human touch / irreplaceable / valuable
4. exploit / technology / consequences
5. art market / oversaturation / problem

16. Write short responses (2–3 sentences each) to the following questions.

1. How do you think AI might change the art world in the next 10 years?
2. In your opinion, what makes art valuable: its appearance or its story? Why?
3. Do you think AI-generated art should be treated the same as human-created art? Explain.
4. How can artists protect their work from misuse by AI?
5. What role does emotional depth play in making art meaningful to viewers?

17. Write a personal reflection on how the Internet has influenced your habits, lifestyle, or values. Word count: 150–180 words.

UNIT 23. The Risks of Artificial Intelligence

TASKS:

1. Read the text and briefly write its meaning.

Plagiarism:
is a one to one theft

AI Generated:
is a one to many theft

Artificial Intelligence (AI) has undoubtedly revolutionized various fields, but its impact on the world of art has raised significant concerns. The advent of AI-generated art has created a storm within the artistic community, bringing to the forefront issues of ethics, originality, and the devaluation of human creativity.

One of the most glaring risks of AI in art is the devaluation of human work. Artists pour their heart and soul into their creations, each piece a reflection of their unique perspective and emotional depth. However, AI can churn out artworks in a fraction of the time, devoid of the human touch and lived experience. This mass production capability diminishes the value of human-crafted art, reducing it to just another commodity. It's akin to comparing a hand-stitched tapestry to a machine-made rug – technically similar, but worlds apart in terms of value and meaning.

The unethical use of AI in art poses a direct threat to the livelihoods of artists. Some individuals use AI to generate art, and then claim it as their own, bypassing the effort and skill that genuine artists invest in their work. This deceit not only robs artists of recognition and revenue but also undermines the integrity of the art market. It's like a wolf in sheep's clothing, where the true artist's toil is hidden behind a facade of technological prowess. The proliferation of AI-generated art can lead to a saturation of the market, making it increasingly difficult for genuine artists to find an audience and sustain their careers.

Perhaps the most insidious consequence of AI in art is the erosion of the emotional connection between the viewer and the artwork. Art is not just about visual appeal; it's about the stories, emotions, and experiences that it conveys. AI-generated art, while often visually impressive, lacks the depth and authenticity that comes from a human creator. This can lead to a loss of the visceral, emotional response that true art evokes, leaving viewers with a hollow, superficial experience. It's like replacing a heartfelt, handwritten letter with a generic, typed note – technically proficient, but emotionally barren.

It is crucial to note that AI itself is not the problem; the ethical dilemmas arise from how it is used. When individuals exploit AI to mimic and replace human creativity, they cross a line that threatens the very essence of art. The problem lies in the unscrupulous

users who claim AI-generated art as their own, sabotaging the lives and careers of real artists. This unethical behavior is a betrayal of the trust and respect that the art community is built upon. It's a betrayal akin to plagiarism, where the original creator's voice is drowned out by a sea of unearned accolades.

While AI has the potential to augment and inspire new forms of art, its misuse poses significant risks to the artistic community. The devaluation of human work, the sabotage of artists' livelihoods, and the erosion of the emotional essence of art are profound issues that need to be addressed. The onus is on society to use AI ethically, ensuring that it complements rather than undermines human creativity. By recognizing and valuing the unique contributions of human artists, we can safeguard the integrity and emotional richness of the art world, ensuring that it remains a realm where the human spirit can truly shine.

2. Answer these questions.

1) How does AI-generated art impact the value of human-crafted art?

2) In what ways does the unethical use of AI in art threaten the livelihoods of artists?

3) What emotional consequences can arise from the prevalence of AI-generated art?

4) Why is AI itself not considered the problem in the context of art?

5) How can society ensure that AI complements rather than undermines human creativity in art?

3. The sentence is True or False.

- 1) AI-generated art can be produced in a fraction of the time it takes for human artists to create their work.
- 2) The use of AI in art has no effect on the value of human-created artwork.
- 3) Some individuals claim AI-generated art as their own, which undermines the integrity of the art market.

- 4) AI-generated art often evokes the same deep emotional response as human-created art.
- 5) The main issue with AI in art lies in the technology itself, not in its misuse by individuals.
- 6) Society has a responsibility to use AI ethically to support human creativity in art.

4. Translate the following English units into Ukrainian.

- 1) *Created a storm within*-_____
- 2) *Pour their heart and soul*-_____
- 3) *A wolf in sheep's clothing*-_____
- 4) *A hollow, superficial experience*-_____
- 5) *A double-edged sword*-_____
- 6) *Safeguard the integrity and emotional richness*-_____

5. Give synonyms to the words in **bold** type.

- 1) The advent of AI-generated art has **created** a storm within the artistic community.

- 2) Artists pour their **heart** and soul into their creations.

- 3) AI can churn out artworks in a **fraction** of the time.

- 4) The **proliferation** of AI-generated art can lead to market saturation.

- 5) This **unethical** behavior is a betrayal of the art community's trust.

6. Translate Ukrainian to English.

- *Суперечка*-_____
- *Спільнота*-_____
- *Цінність*-_____
- *Обман*-_____
- *Занурюватися*-_____
- *Емоційний*-_____
- *Забезпечити*-_____

7. Explain this word in English without using the given word itself.

● *Proliferation*-_____

● *Insidious*-_____

● *Authenticity*-_____

8. Fill in the blanks with the necessary words in the box.

<i>unethical pour integrity ensure creativity diminish proliferation</i>
--

- 1) AI-generated art can _____ the value of human-crafted artworks.
- 2) Artists often _____ their heart and soul into their creations.
- 3) The _____ of AI-generated art can lead to a saturated market.
- 4) This _____ behavior undermines the integrity of the art community.
- 5) Society must _____ the ethical use of AI in art.

9. Choose the correct option to complete the sentences.

- a) AI can _____ (inspire/use) artists to create innovative designs.
- b) Automation often _____ (saves/replaces) repetitive jobs in manufacturing.
- c) Ethical guidelines _____ (ensure/avoid) the responsible use of AI in workplaces.
- d) Self-driving vehicles _____ (revolutionize/discarded) transportation systems.
- e) Online shopping platforms _____ (reduce/apply) the need for physical stores.

10. Match the sentences to their correct descriptions.

- | | |
|--|--|
| 1) Robots can work tirelessly without breaks. | a) Description: Efficiency in repetitive tasks. |
| 2) AI creates art that challenges traditional concepts. | b) Description: Ethical consideration and societal impact. |
| 3) Automation in retail simplifies the checkout process. | c) Description: Innovation in creative industries. |
| 4) Technological evolution opens doors to global collaboration. | d) Description: Convenience and customer experience. |
| 5) Machines replacing human jobs raise significant ethical concerns. | e) Description: Opportunities for worldwide teamwork. |

11. Correct the errors in the sentences below.

- 1) AI are transforming the job landscape.
- 2) This kind of technology have revolutionized education.
- 3) Automated trucks reduces the demand for human drivers.
- 4) Retail jobs was unaffected by automation in the past.
- 5) Advances in AI promotes sustainable practices.

12. Fill in the blanks with suitable words.

predict adapt ensure develop influence

- 1) Experts _____ that automation will reshape the workforce.
- 2) Workers need to _____ to new technologies and processes.
- 3) Employers _____ the ethical use of AI in recruitment systems.
- 4) Companies _____ tools to _____ productivity while addressing risks.

13. Write full sentences using the following sentences.

- a) Automation / solved / efficiency problems / quickly.
- b) AI / continue / influence / creative industries / positively.
- c) Students / adapt / new learning methods / through / technology.
- d) Retail / transformed / e-commerce platforms.
- e) Transportation / being / revolutionized / by / self-driving vehicles.

14. Rewrite the sentences using passive voice.

- 1) Automation creates numerous job opportunities.
- 2) Engineers develop innovative AI systems.
- 3) Retailers simplify checkout processes with technology.
- 4) Manufacturers replace human workers with machines.
- 5) AI influences all aspects of modern industries.

15. Complete the sentences using the correct tense.

- a) By 2030, automation _____ (replace) most repetitive tasks.
- b) Engineers _____ (develop) AI systems since the early 2000s.
- c) Currently, retailers _____ (use) automated checkout systems widely.
- d) Last year, manufacturers _____ (introduce) new robotics into production lines.
- e) In the near future, creative industries _____ (embrace) AI-generated art even more.

16. Complete the sentences using the passive voice where appropriate.

- a) In recent years, self-driving cars _____ (develop) by major tech companies.
- b) Automated checkout systems _____ (introduce) into retail environments to increase efficiency.
- c) Teachers _____ (assist) by AI tools in creating personalized lessons for students.
- d) Last week, new AI-based recruitment software _____ (launch) to streamline hiring processes.
- e) By 2025, numerous administrative tasks _____ (perform) by intelligent systems instead of humans.

17. Write an article about the risks of artificial intelligence in areas like education, law, or job recruitment. Word count: 160–200 words.

UNIT 24. The Risks of Automation

TASKS:

1. Read the text and briefly write its meaning.



Job Displacement

Automation hailed as the harbinger of a more efficient and prosperous future, carries with it a deeply ironic twist. While it promises to make our lives easier, it also threatens to leave many of us out in the cold, facing job displacement on an unprecedented scale. The very technology designed to free us from drudgery is now putting countless jobs at risk, casting a long shadow over the workforce.

The first casualties in this march of progress are often those in repetitive or routine jobs. Manufacturing workers, once the backbone of the industrial revolution, now find themselves replaced by robots that can work tirelessly without breaks or complaints. Assembly line jobs, which provided steady employment for generations, are being handed over to machines that can do the same work faster and with fewer errors.

In the realm of transportation, truck drivers are staring down the barrel of automation. Self-driving vehicles, while still in their nascent stages, are poised to revolutionize the industry. What was once considered a stable job, requiring skill and endurance may soon be a relic of the past, replaced by autonomous trucks that don't need sleep, food, or wages.

Retail workers are also feeling the pinch. Automated checkout systems and online shopping platforms have significantly reduced the need for human cashiers and sales

associates. The rise of e-commerce giants has created a world where a few clicks can replace the friendly face-to-face service once found in brick-and-mortar stores.

Administrative and clerical jobs are not immune either. Tasks such as data entry, scheduling, and even some aspects of customer service are increasingly being handled by sophisticated software and artificial intelligence. These white-collar positions, once seen as safe from the mechanized threat, are now just as vulnerable as their blue-collar counterparts.

The cruel irony of automation lies in its promise versus its reality. Automation was supposed to liberate us from mundane tasks, giving us more time to pursue creative, fulfilling endeavors. Instead, it has created an environment where many fear for their livelihoods. The dream of a future where machines handle the grunt work, allowing humans to enjoy leisure and intellectual pursuits, is marred by the stark reality of job losses and economic insecurity.

It's a bitter pill to swallow, seeing technology that should have been a boon turning into a bane for so many. The streets, once bustling with workers heading to their jobs, are now filled with the echoes of uncertainty. Those who once had steady employment now find themselves in the precarious position of seeking new skills or facing unemployment.

The emotional toll is significant. It's not just about losing a job; it's about losing a sense of purpose, a daily routine, and the dignity that comes with earning a livelihood. The anxiety and stress of job displacement weigh heavily on the minds of those affected, creating a ripple effect that touches families and communities.

The promise of automation should not come at the cost of human livelihoods. While technology advances, there must be a concerted effort to ensure that people are not left behind. Retraining programs, social safety nets, and ethical considerations in deploying automation are crucial. It is essential to find a balance where automation can coexist with human employment, enhancing lives rather than diminishing them.

The irony of automation's impact on jobs serves as a poignant reminder that progress must be managed with care and compassion. As we embrace the future, let us not forget the human element at its core, striving to make the world a better place for everyone, not just the machines.

2. Answer these questions.

1) What is the ironic twist associated with the promises of automation?

2) Which types of jobs are the first to be affected by automation?

3) How has automation impacted manufacturing workers specifically?

4) What potential changes might self-driving vehicles bring to the transportation industry?

5) In what ways are retail workers affected by automation and the rise of e-commerce?

6) How are administrative and clerical jobs being impacted by automation?

7) What emotional and psychological effects does job displacement due to automation have on individuals?

8) What measures are suggested to ensure that the advancement of automation does not come at the cost of human livelihoods?

3. The sentence is True or False.

1) Automation promises to make our lives easier but also threatens to leave many people without jobs.

2) Manufacturing workers are not affected by automation because their jobs cannot be performed by machines.

3) Self-driving vehicles are expected to replace truck drivers in the transportation industry.

4) The rise of e-commerce has reduced the need for human cashiers and sales associates.

5) Administrative and clerical jobs are safe from the impacts of automation.

6) Job displacement due to automation can lead to feelings of anxiety and loss of purpose among affected individuals.

4. Translate the following English units into Ukrainian.

1) *A bitter pill to swallow*-_____

2) *Cast a long shadow*-_____

3) *March of progress*-_____

4) *Out in the cold*-_____

5) Staring down the barrel- _____

6) Staring down the barrel- _____

5. Give synonyms to the words in bold type.

1) Automation was supposed to **liberate** us from mundane tasks.

2) The streets are now filled with the **echoes** of uncertainty.

3) Automation has **revolutionized** the transportation industry with self-driving vehicles.

4) The emotional **toll** of job displacement weighs heavily on those affected.

5) The rise of e-commerce has **reduced** the need for human cashiers.

6. Translate Ukrainian to English.

- Автоматизація- _____
- Робочі місця- _____
- Залізниця- _____
- Безробіття- _____
- Ефективність- _____
- Заміна- _____
- Навички- _____

7. Explain this word in English without using the given word itself.

- Displacement- _____
-

- Precarious- _____
-

- Nascent- _____
-

8. Fill in the blanks with the necessary words in box

<i>learn</i>	<i>adapt</i>	<i>experience</i>	<i>turn</i>	<i>overcome</i>	<i>replace</i>
--------------	--------------	-------------------	-------------	-----------------	----------------

- 1) Automation can _____ many jobs, making it difficult for people to find new employment.
- 2) Workers must _____ new skills to remain competitive in the job market.
- 3) Companies often _____ to automation to increase efficiency and reduce costs.
- 4) Many individuals _____ anxiety and stress due to the threat of job displacement.

9. Rewrite the following sentences using the passive voice where appropriate.

- a) Technology has transformed the workplace significantly.
- b) They are developing new AI tools to combat misinformation.
- c) Social media platforms spread false information quickly.
- d) Governments will implement stricter policies to regulate online content.
- e) People were discussing propaganda techniques during the meeting.

10. Use the correct form of the verbs in parentheses to complete the sentences.

- a) If we _____ (fact-check) more often, we wouldn't believe so many false stories.
- b) Propaganda _____ (use) to manipulate public opinion for centuries.
- c) By the time AI bots _____ (detect), they had already spread disinformation.
- d) Many people _____ (not realize) the impact of false information until it is too late.
- e) If misinformation _____ (not control), it might destabilize societies.

11. Write sentences about how people should react to propaganda using modal verbs (must, should, could, might, etc.).

- a) _____ verify the source of information before sharing it.
- b) People _____ question the legitimacy of news that seems too sensational.
- c) You _____ rely on independent fact-checkers to confirm the truth.
- d) Social media platforms _____ play a greater role in identifying and blocking false information.
- e) Propaganda _____ influence you if you don't think critically.

12. Combine the sentences using relative clauses.

- a) Propaganda often plays on emotions. It targets people's fears and biases.

- b) False information spreads quickly. It is usually shared on social media.
- c) The AI bots were detected. They had been disseminating fake news online.
- d) Russia uses propaganda techniques. These techniques destabilize opposing countries.
- e) Social media platforms are flooded with fake news. This makes it harder for users to trust information.

13. Complete the sentences with the correct prepositions.

- a) Propaganda works _____ playing on people's emotions and biases.
- b) AI tools are more effective _____ creating fake content nowadays.
- c) People should be cautious _____ the information they consume online.
- d) Social media platforms are responsible _____ allowing the spread of disinformation.
- e) Governments are working _____ stricter regulations to combat propaganda.

14. Rewrite the sentences in reported speech.

- a) "We need to be more cautious about misinformation," said the journalist.
- b) "The AI bots have been creating false content for weeks," the report revealed.
- c) "Governments will introduce new policies to tackle propaganda," experts predicted.
- d) "This video was AI-generated," the fact-checkers confirmed.
- e) "You should always double-check the source of your information," she advised.

15. Answer the comprehension questions about a hypothetical scenario.

Imagine a country where social media is the primary news source for its citizens. AI-generated content has flooded the platforms, creating confusion.

- a) What might be the consequences of relying solely on social media for news?
- b) How could people protect themselves from being influenced by propaganda in this situation?
- c) What role do you think education plays in combating misinformation?
- d) Why is it essential to verify the authenticity of content online?
- e) What could international organizations do to address this issue?

16. Fill in the blanks with the correct conjunctions (because, although, while, unless, and).

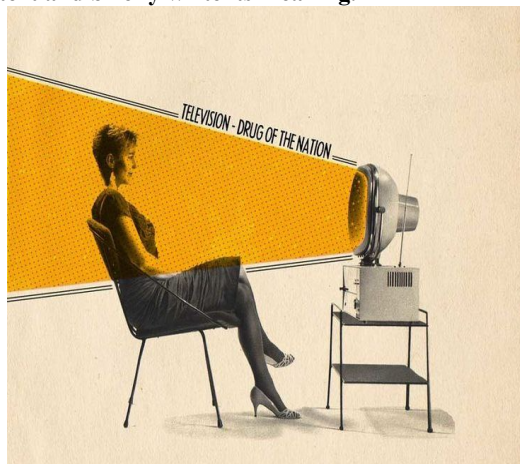
- a) Propaganda can be highly effective, _____ it manipulates emotions.
- b) _____ AI-generated content is difficult to identify, people still fall for it.
- c) Social media platforms must take action _____ they risk losing user trust.
- d) _____ many people distrust mainstream media, others believe everything they read online.
- e) Misinformation spreads quickly _____ people share it without checking facts.

17. Write a letter to the editor suggesting ways to reduce the negative effects of automation on the workforce. Word count: 160–200 words.

UNIT 25. False information

TASKS:

1. Read the text and briefly write its meaning.



Propaganda has always been a powerful tool for shaping public opinion and manipulating the masses, but in the age of the Internet, its reach and influence have grown exponentially. The digital age has made it easier than ever for false information to spread like wildfire, and nowhere is this more evident than in the realm of propaganda. People are more susceptible to being influenced by what they see online, and the rise of artificial intelligence (AI) has only added fuel to the fire.

Propaganda works by playing on people's emotions and biases, often presenting information in a way that seems credible but is actually misleading or entirely false. The Internet provides the perfect breeding ground for this, as people are constantly bombarded with information from countless sources. It's like drinking from a fire hose – overwhelming and difficult to filter. Many people don't have the time or resources to fact-check everything they read, making them easy targets for propaganda. Once a piece of false information takes root, it can spread rapidly through social media, blogs, and even mainstream news sites. The power of propaganda lies in its ability to tap into pre-existing beliefs and fears, reinforcing them and making them seem more legitimate.

The advent of AI has taken propaganda to a whole new level. AI-generated art and bots are now being used to create and disseminate false information more effectively. These technologies can produce realistic images and videos that are nearly impossible to distinguish from reality, adding a new layer of deception to propaganda efforts. For

instance, AI bots can be programmed to flood social media with specific narratives, amplifying certain viewpoints while drowning out opposing voices. These bots can engage with real users, spreading false information and creating the illusion of widespread consensus. It's like a puppet show, where the strings are pulled by unseen hands, manipulating the audience without their knowledge.

Russian propaganda is a prime example of how AI and the Internet can be used to influence public opinion on a massive scale, particularly during times of war. During wars, Russian operatives utilize AI-generated content and bots to craft and disseminate narratives that serve their strategic interests. This includes creating false reports of enemy actions, fabricating evidence of atrocities, and spreading disinformation to undermine the morale of opposing forces and civilians. By flooding social media with these fabricated stories, they create confusion and distrust, making it difficult for people to discern the truth.

In the context of war, Russian propaganda aims to destabilize and demoralize the enemy while bolstering support at home. For example, they might release AI-generated videos depicting enemy forces committing war crimes, even if these events never occurred. These tactics are designed to provoke outrage and rally domestic support for the war effort, all while weakening the resolve of the enemy. The use of AI makes these efforts more convincing and harder to detect, posing significant challenges for those trying to counteract the misinformation.

One of the most alarming aspects of propaganda is how easily people can be influenced. When individuals are exposed to the same false information repeatedly, it becomes ingrained in their minds, making them more likely to believe it. This is especially true in the echo chambers of social media, where people are often surrounded by like-minded individuals who reinforce their beliefs. The psychological impact of propaganda can be profound, leading people to take actions based on false premises. This can result in real-world consequences, from misguided political movements to public health crises. The ease with which propaganda can influence people highlights the importance of media literacy and critical thinking in today's digital age.

In conclusion, propaganda remains a potent force in the digital age, its influence magnified by the Internet and AI technologies. The ease with which false information can spread online makes people more susceptible to manipulation, and the use of AI-generated content and bots only exacerbates the problem. The case of Russian propaganda, especially during times of war, demonstrates the dangers of these developments, showing how they can destabilize societies and undermine democratic processes. As we navigate this new landscape, it's crucial to remain vigilant and critical of the information we encounter, striving to separate fact from fiction in an increasingly complex world.

2. Answer these questions.

1) How has the Internet made it easier for false information to spread?

2) What are some tactics used by AI to enhance the effectiveness of propaganda?

3) How does Russian propaganda use AI and the Internet during times of war?

4) Why are people easily influenced by propaganda in the digital age?

5) What are the consequences of repeated exposure to false information spread by propaganda?

3. The sentence is True or False.

- 1) Propaganda often plays on people's emotions and biases to present misleading information as credible.
- 2) The Internet makes it difficult for false information to spread widely and rapidly.
- 3) AI-generated art and bots can produce realistic images and videos that are nearly impossible to distinguish from reality.
- 4) Russian propaganda during wars aims to destabilize and demoralize the enemy while bolstering support at home.
- 5) People are rarely influenced by the propaganda they encounter online.
- 6) Repeated exposure to false information can lead to significant psychological impact and real-world consequences.

4. Translate the following English units into Ukrainian.

- 1) *Spread like wildfire*-_____
- 2) *Drinking from a fire hose*-_____
- 3) *Add fuel to the fire*-_____
- 4) *Play on people's emotions*-_____
- 5) *Puppet show*-_____
- 6) *Pull the strings*-_____

5. Give synonyms to the words in **bold** type.

- 1) The **advent** of AI has taken propaganda to a whole new level.

2) People are more **susceptible** to being influenced by what they see online.

3) AI bots can be programmed to **flood** social media with specific narratives.

4) Propaganda can create **confusion** and distrust among people.

5) It is important to remain **vigilant** and critical of the information we encounter.

6. Translate Ukrainian to English:

- Війна-_____
- Пропаганда-_____
- Вплив-_____
- Дезінформація-_____
- Мережа-_____
- Реальність-_____
- Зловмисник-_____

7. Explain this word in English without using the given word itself.

- Disseminate-_____

- Amplify-_____

- Destabilize-_____

8. Fill in the blanks with the necessary words in the box.

<i>manipulate amplify susceptible fabricate destabilize disseminate</i>

- 1) Propaganda can _____ widely through social media, affecting many people.
- 2) AI-generated content can _____ the impact of false information by making it more convincing.
- 3) The goal of disinformation is often to _____ societies and create distrust.

4) People are _____ to believe false information if they see it repeatedly.

9. Complete the sentences with the correct form of the verb in brackets.

- 1) If you _____ (receive) a suspicious email, you should report it immediately.
- 2) Many people _____ (fall) victim to phishing scams because they don't verify the sender's identity.
- 3) By the time the victim realizes what happened, the hacker _____ (already steal) their information.
- 4) _____ (be) cautious can help you avoid becoming a victim.

10. Rewrite the following sentences in the passive voice.

- 1) Cybercriminals create fake websites to steal personal data.
- 2) Phishers have designed convincing social media posts to deceive users.
- 3) They are sending emails that mimic legitimate institutions.
- 4) The attackers will gather sensitive information from unsuspecting individuals.

11. Match the words in Column A with their definitions in Column B.

Column A	Column B
Disseminate	a) To distribute information widely.
Fabricate	b) To create something false or fake.
Amplify	c) To make something louder or more intense.
Destabilize	d) To weaken or disrupt a system.

12. Fill in each blank with the appropriate conjunction: although, because, so, unless, or when.

- 1) _____ phishing emails look genuine, you should always double-check their source.
- 2) You can avoid falling for scams _____ you know how to recognize them.
- 3) _____ the website asked for personal details, she became suspicious.
- 4) Always verify the sender's email address _____ it seems familiar.

13. Transform the following sentences using reported speech.

- 1) "Never share your password with anyone," the expert warned.
- 2) "We are implementing new security measures," the company announced.
- 3) "Phishing scams have increased this year," said the cybersecurity analyst.
- 4) "You should change your passwords regularly," advised the IT technician.

14. Fill in the blanks with the appropriate modal verb: must, can't, should, might, or could.

- 1) This email _____ be legitimate—it has too many spelling mistakes.
- 2) You _____ update your antivirus software to stay protected.
- 3) Phishers _____ use social engineering techniques to manipulate victims.
- 4) It _____ be a genuine message, but you should verify it to be sure.

15. Rewrite the following sentences using conditionals (first, second, or third).

- 1) If people know more about phishing, they will avoid becoming victims.
- 2) If I hadn't clicked that link, I wouldn't have exposed my information.
- 3) If we were more cautious, we wouldn't fall for these scams.
- 4) If you report the scam, it _____ (help) others avoid being tricked.

16. Choose the correct word to complete each sentence.

- 1) The hacker _____ (modified/manipulated) the document to make it look authentic.
- 2) Users should _____ (suspect/susceptible) websites that ask for unnecessary information.
- 3) Scammers often _____ (fabricate/disseminate) stories to gain your trust.
- 4) The goal of phishing is to _____ (amplify/destabilize) trust in institutions.

17. Write a social media post with 3 tips on how to identify fake news and misinformation online. Word count: 120–150 words.

UNIT 26. Phishing

TASKS:

1. Read the text and briefly write its meaning.



Dangers of Phishing

Phishing a form of cybercrime where attackers attempt to deceive individuals into providing sensitive information, is a pervasive and insidious threat. Unlike traditional forms of fraud, phishing is incredibly subtle and adaptable, making it one of the most dangerous digital threats today. It lurks in every corner of the internet, from emails and social media to websites and even text messages, exploiting the trust and vulnerability of unsuspecting victims.

Phishing is everywhere. Cybercriminal's craft deceptive emails that mimic legitimate institutions, convincing recipients to click on malicious links or provide personal information. These emails often look astonishingly genuine, featuring official logos, correct grammar, and convincing language. It's like a wolf in sheep's clothing, designed to exploit the slightest lapse in judgment.

Social media platforms are another breeding ground for phishing. Fake accounts and messages that appear to come from friends or trusted brands lure users into divulging passwords or financial details. The rapid spread of information on social media amplifies

the reach of these scams, making it easy for phishers to cast a wide net and catch numerous victims.

Phishing can also take the form of websites that look almost identical to legitimate sites. These spoofed websites are designed to trick users into entering their login credentials, which are then harvested by the attackers. This method is particularly dangerous because it preys on the routine actions of internet users who believe they are interacting with a trusted site.

What makes phishing particularly dangerous is its subtlety. Unlike obvious scams, phishing attacks are meticulously crafted to avoid detection. Cybercriminals use sophisticated techniques to create messages and websites that are nearly indistinguishable from the real ones. This subtlety means that even the most cautious individuals can fall victim if they are not vigilant.

Phishers often exploit current events or popular trends to make their messages more convincing. For example, during tax season, phishers might send emails purporting to be from the IRS, while during a pandemic, they might send messages claiming to offer information on vaccines or relief funds. This adaptability makes phishing a moving target, constantly evolving to stay one step ahead of detection.

Certain segments of society are particularly vulnerable to phishing attacks. Elderly individuals, who may not be as familiar with digital security practices, are often prime targets. They might receive a phone call or an email that appears to be from a legitimate source, and without the knowledge to verify its authenticity, they could easily be deceived.

Young people, including teenagers and young adults, are also at risk. Their extensive use of social media and reliance on digital communication makes them susceptible to social media phishing attacks. Moreover, their tendency to share personal information online can make them easy targets for identity theft.

Small businesses are another vulnerable group. Lacking the robust cybersecurity measures of larger corporations, small businesses can easily fall prey to phishing attacks. An employee might inadvertently click on a phishing email, compromising the entire network and exposing sensitive business data.

Even tech-savvy individuals are not immune. Phishers use increasingly sophisticated tactics, such as spear phishing, where they target specific individuals with highly personalized messages. These messages might include details gleaned from social media profiles or previous data breaches, making them particularly convincing.

Phishing is a pervasive and dangerous threat that exploits the trust and vulnerabilities of individuals and organizations alike. Its ubiquity, subtlety, and variability make it a formidable challenge to combat. By understanding the tactics used by phishers and recognizing the vulnerable segments of society, we can better protect ourselves and our communities from this insidious form of cybercrime. Vigilance, education, and robust security measures are essential in the fight against phishing, ensuring that we stay one step ahead of the attackers.

2. Answer these questions.

1) How do cybercriminals make phishing emails look genuine?

2) Why are social media platforms particularly susceptible to phishing attacks?

3) What tactics do phishers use to exploit current events and trends?

4) Which segments of society are especially vulnerable to phishing, and why?

3. The sentence is True or False.

1) Phishing attacks are easily detectable because they are obvious and poorly crafted.

2) Phishers often create fake websites that look almost identical to legitimate sites to steal login credentials.

3) Social media platforms are not commonly used for phishing attacks.

4) Elderly individuals are particularly vulnerable to phishing attacks due to their lack of familiarity with digital security practices.

5) Phishers never exploit current events or popular trends to make their messages more convincing.

6) Small businesses are often targeted by phishing attacks because they typically lack robust cybersecurity measures.

4. Translate the following English units into Ukrainian:

1) *Cast a wide net*-_____

2) *Lurk in every corner*-_____

3) *Exploiting trust*-_____

4) *Moving target*-_____

5) *Fall victim*-_____

6) *Slip through the cracks*-_____

5. Give synonyms to the words in **bold** type.

1) Phishing is an **insidious** threat that exploits the trust and vulnerability of unsuspecting victims.

2) Cybercriminals **craft** deceptive emails that mimic legitimate institutions.

3) These emails often look **astonishingly** genuine, featuring official logos and convincing language.

4) Phishers use increasingly **sophisticated** tactics, such as spear phishing.

5) Certain segments of society are particularly **vulnerable** to phishing attacks.

6. Translate Ukrainian to English:

- Шахрайство-_____
- Логотип-_____
- Мережева атака-_____
- Кібератака-_____
- Обман-_____
- Зловмисник-_____
- Довіра-_____

7. Explain this word in English without using the given word itself.

- *Insidious*-_____
-

- *Spear phishing*-_____
-

- *Subtlety*-_____
-

8. Fill in the blanks with the necessary words in the box.

become	exploit	trick	fall	deceive	craft
--------	---------	-------	------	---------	-------

- 1) Phishing attacks can _____ individuals into providing sensitive information.
- 2) Cybercriminals often _____ emails that appear legitimate to deceive recipients.
- 3) Many people _____ victim to phishing scams due to their subtlety.
- 4) Social media platforms can _____ a breeding ground for phishing activities.

9. Complete the sentences using reported speech and the vocabulary provided.

- 1) The IT expert said, "Using antivirus software is essential for online protection."
→ The IT expert said that _____.
- 2) "Phishing scams are designed to deceive people," the instructor reminded us.
→ The instructor reminded us that _____.
- 3) A cybersecurity professional warned, "Once a Trojan horse is installed, attackers can control your device."
→ A cybersecurity professional warned that _____.
- 4) "Malware evolves constantly, which makes it harder to detect," she explained.
→ She explained that _____.

10. Transform the following sentences into passive voice.

- 1) Cybercriminals exploit weaknesses in outdated software.
→ Weaknesses in outdated software _____.
- 2) Many users download malicious attachments without realizing it.
→ Malicious attachments _____.
- 3) Hackers have stolen sensitive data from the company's database.
→ Sensitive data _____.
- 4) The organization is implementing new measures to prevent phishing.
→ New measures _____.

11. Match the terms with their correct definitions.

- 1) Adware
 - 2) Spyware
 - 3) Rootkit
 - 4) Ransomware
- a) A program that bombards users with unwanted advertisements.
 - b) A covert malware designed to monitor user activities and steal information.
 - c) A malicious software that demands payment to unlock encrypted files.
 - d) A type of malware that hides deep within a system to avoid detection.

12. Rewrite the sentences using conditionals.

- 1) If you don't keep your software updated, malware might exploit vulnerabilities.

- If _____, _____.
- 2) You won't fall victim to phishing if you verify email sources carefully.
- If _____, _____.
- 3) If users were more cautious, they could avoid downloading Trojan horses.
- If _____, _____.
- 4) Malware won't spread easily across the network if antivirus programs are installed.
- If _____, _____.

13. Identify and correct the errors in the following sentences.

- 1) Viruses spread like wildfire, corrupt files and causes system crashes.
- 2) Cybercriminals tricks users by sending fraudulent emails.
- 3) Users should updating their devices regularly to prevent malware infections.
- 4) The antivirus software scan the system for threats every day.

14. Fill in the blanks using the vocabulary from the unit.

- 1) Social engineering is a tactic used by attackers to _____ individuals into revealing personal information.
- 2) A _____ is a type of malware that replicates itself and spreads across other devices.
- 3) Antivirus software must _____ updated regularly to maintain its effectiveness.
- 4) Cybersecurity experts recommend caution when clicking on _____ links in emails.

15. Complete the sentences with the correct form of the verbs in parentheses.

- 1) If users (install) antivirus software, they (reduce) the risk of malware infections significantly.
- 2) Cybercriminals (target) individuals who (not be) careful about verifying email senders.
- 3) While the antivirus software (detect), the user (decide) whether to quarantine the file.
- 4) If someone (click) on a malicious link, their device (can become) compromised.
- 5) Experts recommend that users (always check) for software updates before vulnerabilities (be) exploited.

16. Match the terms with their definitions.

- 1) Worm
 - a. Software designed to monitor and send user data to attackers.
- 2) Spyware
 - b. Malware that replicates and spreads across networks without human action.
- 3) Ransomware
 - c. A program that encrypts files and demands payment to restore access.

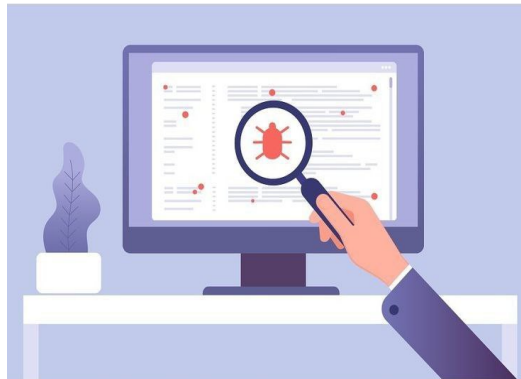
- 4) Adware
 - d. Software that displays intrusive advertisements on a user's computer.
- 5) Trojan horse
 - e. A program disguised as legitimate software that enables unauthorized access.

17. Write an email to a friend warning them about a phishing attempt and explaining how to recognize such scams. Word count: 140–170 words.

UNIT 27. Viruses and Trojan horses

TASKS:

1. Read the text and briefly write its meaning.



In the vast landscape of cyber threats, viruses, and Trojan horses stand out as some of the most insidious and damaging forms of malware. These digital pathogens can infiltrate systems, wreak havoc on data, and compromise security in ways that can leave even the most tech-savvy individuals reeling. The ever-evolving nature of malware underscores the absolute necessity of robust antivirus protection, as these threats become more sophisticated and harder to detect.

Malware comes in many shapes and sizes, each with its own unique method of causing harm. Viruses, for instance, attach themselves to legitimate programs and replicate whenever the infected program runs. They spread like wildfire, corrupting files, stealing data, and causing system crashes. It's akin to a biological virus, silently infecting and spreading, often before the user is even aware of the problem.

Trojan horses, named after the legendary Greek story, are a different beast altogether. These malicious programs disguise themselves as harmless or useful software. Once the user installs the Trojan horse, it opens a backdoor to the system, allowing cybercriminals to access and control the device remotely. This can lead to a wide range of malicious

activities, from data theft and spying to turning the computer into a part of a botnet for launching further attacks.

The variability of malware is astonishing. There are ransomware programs that encrypt your files and demand payment for their release, spyware that monitors your activities and sends the information to an attacker, and adware that bombards you with unwanted advertisements. Rootkits can hide deep within your system, evading detection by standard antivirus programs, while worms can spread across networks, infecting multiple devices with ease.

In this digital age, having robust antivirus protection is not just an option – it's a necessity. Antivirus software acts as a first line of defense, detecting and eliminating malware before it can cause significant harm. It scans files, monitors system activities, and provides real-time protection against a wide array of threats. The importance of antivirus software cannot be overstated. It is like having a security guard for your digital life, constantly vigilant and ready to fend off intruders. However, antivirus alone is not a silver bullet. The ever-changing landscape of malware means that users must also stay informed and practice safe computing habits. Regular updates, cautious downloading, and being wary of suspicious emails or links are all critical components of a comprehensive security strategy.

The constantly evolving nature of malware is what makes it particularly dangerous. Cybercriminals are always finding new ways to bypass security measures and exploit vulnerabilities. Zero-day exploits, which take advantage of unknown security flaws, can render even the best antivirus software temporarily ineffective until updates are developed. The adaptability of malware means that it can strike anywhere, at any time. It can be delivered through email attachments, malicious websites, compromised software, or even through social engineering tactics that trick users into voluntarily installing the malware. This chameleon-like ability to change form and function makes malware a perpetual threat that requires constant vigilance.

In conclusion, the threat posed by viruses and Trojan horses is both significant and multifaceted. These forms of malware, along with their numerous variants, highlight the critical need for robust antivirus protection and a proactive approach to cybersecurity. The variability and adaptability of malware make it a formidable adversary, but with the right tools and practices, individuals and organizations can defend themselves against these digital threats. In the ever-shifting landscape of cyber threats, staying informed, protected, and cautious is the key to safeguarding our digital lives.

2. Answer these questions.

1) How do viruses differ from Trojan horses in their method of causing harm to computer systems?

2) Why is it essential to have robust antivirus protection in today's digital age?

3) What are some of the different types of malwares mentioned in the text, and how do they operate?

4) How do cybercriminals use zero-day exploits to bypass security measures?

5) What additional steps, besides using antivirus software, can individuals take to protect themselves from malware?

3. The sentence is True or False.

1) Viruses attach themselves to legitimate programs and replicate whenever the infected program runs.

2) Trojan horses disguise themselves as harmless or useful software to gain access to a system.

3) Malware can only be delivered through email attachments.

4) Ransomware encrypts files and demands payment for their release.

5) Having antivirus software is sufficient protection against all types of malware.

6) Zero-day exploits take advantage of known security flaws that have already been addressed.

4. Translate the following English units into Ukrainian.

1) *Infiltrate systems*-_____

2) *Wreak havoc*-_____

3) *Stand out*-_____

4) *First line of defense*-_____

5) *Spread like wildfire*-_____

6) *Прозрама-вимагач*-_____

5. Give synonyms to the words in **bold** type.

1) Malware can **infiltrate** systems and cause significant harm.

2) Viruses often **replicate** within legitimate programs, spreading quickly.

3) Trojan horses can **disguise** themselves as useful software to deceive users.

4) Antivirus software is **essential** for protecting against digital threats.

5) The **adaptability** of malware makes it a constant threat.

6. Translate Ukrainian to English.

- Шкідливе програмне забезпечення- _____
- Антивірус- _____
- Троянський кінь- _____
- Вимогливе програмне забезпечення- _____
- Шпигунське програмне забезпечення- _____
- Руткіт- _____
- Хробак- _____

7. Explain this word in English without using the given word itself.

- *Insidious*- _____
 - *Sophisticated*- _____
 - *Vulnerabilities*- _____
-

8. Fill in the blanks with the necessary words in the box.

<i>viruses</i>	<i>antivirus</i>	<i>encrypt</i>	<i>malware</i>
<i>trojan horses</i>	<i>exploits</i>	<i>ransomware</i>	<i>worms</i>

- 1) In the vast landscape of cyber threats, _____ can infiltrate systems and compromise security.
- 2) _____ protection is essential for detecting and eliminating digital threats.
- 3) _____ attach themselves to legitimate programs and replicate when the infected program runs.
- 4) _____ disguise themselves as harmless software but open backdoors for cybercriminals.

- 5) _____ encrypt your files and demand payment for their release.
- 6) _____ can spread across networks, infecting multiple devices with ease.

9. Complete the sentences using the correct forms of the given words.

<i>phishing</i>	<i>spyware</i>	<i>backdoor</i>	<i>vulnerabilities</i>
<i>cyber attack</i>	<i>scam</i>	<i>firewall</i>	<i>adware</i>

- 1) A _____ is designed to extract sensitive information by luring individuals to fake websites.
- 2) _____ monitors your actions online, gathering information without your consent.
- 3) An open _____ in an application can expose the system to unauthorized access.
- 4) A _____ can bypass security measures, allowing attackers to infiltrate networks.
- 5) It's important to install a _____ to safeguard your system against unauthorized access.
- 6) _____ can disrupt user experience by displaying unwanted advertisements on devices.

10. Fill in the sentences with *little, a little, few, or a few*.

- 1) There are _____ effective measures when dealing with sophisticated cyber threats like ransomware.
- 2) A _____ training on cybersecurity can make a big difference in awareness.
- 3) _____ hackers are skilled enough to exploit vulnerabilities in well-protected systems.
- 4) _____ effort is needed to strengthen the password policy in organizations.
- 5) Only _____ people truly understand the intricacies of network security.
- 6) After installing the patch, there was _____ improvement in system performance.

11. Choose the correct word to complete the sentences: *something, anything, or nothing*.

- 1) The IT team discovered _____ unusual in the network traffic logs.
- 2) Is there _____ we can do to fix the issue immediately?
- 3) _____ you post online can be used against you in cyber harassment cases.
- 4) The hackers stole _____ from the database despite the encryption measures.
- 5) _____ is more frustrating than dealing with a virus that keeps reinstalling itself.
- 6) If you notice _____ suspicious while browsing, report it to your IT department.

12. Match the terms with the correct definitions.

<i>keylogger</i>	<i>botnet</i>	<i>brute force attack</i>	<i>spoofing</i>
<i>denial of service</i>	<i>rootkit</i>	<i>phishing</i>	<i>malware</i>

- 1) _____: A collection of compromised computers used to perform attacks.
- 2) _____: A type of attack aimed at overwhelming a server to make it unavailable.

- 3) _____: A malicious program designed to hide in the system and grant access to attackers.
- 4) _____: Using forged communication to mislead someone into thinking it's legitimate.
- 5) _____: Stealing sensitive information by recording keystrokes.
- 6) _____: Repeatedly trying different password combinations to gain access.

13. Read the sentences and decide if they are true or false.

- 1) A botnet can be used for legitimate purposes, like processing scientific data.
- 2) Phishing emails are easy to identify because they always contain spelling errors.
- 3) A firewall can completely prevent all types of cyber attacks.
- 4) Encryption makes your data completely immune to vulnerabilities.
- 5) Denial of service attacks are targeted at individuals rather than organizations.

14. Complete the sentences using the correct auxiliary verbs: *can, could, might, or must*.

- 1) Hackers _____ attempt to exploit the software vulnerabilities if they notice them.
- 2) Cybersecurity professionals _____ take immediate action to patch vulnerabilities.
- 3) Users _____ be cautious when opening emails from unknown senders.
- 4) A virus _____ cause damage if the antivirus software is not updated regularly.
- 5) Organizations _____ put in place stricter policies to prevent data breaches.

15. Rewrite the sentences using conditional structures (if-clause, when-clause, etc.).

- 1) If the ransomware encrypts the files, you _____ not be able to access them without paying the ransom.
- 2) When a phishing attack targets a company, employees _____ need to report it immediately.
- 3) If the antivirus software detects malware, it _____ notify you to take action.
- 4) When hackers find a backdoor in the system, they _____ use it to steal sensitive data.
- 5) If you use strong passwords, you _____ reduce the chances of getting hacked.

16. Choose the correct preposition to complete the sentences (on, in, at, between, etc.).

- 1) The vulnerability was found _____ the application code.
- 2) Hackers often hide malware _____ legitimate-looking files.
- 3) A cyber attack happened _____ midnight, targeting the server.
- 4) The firewall blocks suspicious traffic coming _____ external networks.
- 5) Sensitive data must be stored _____ encrypted drives for better security.

17. Write a helpdesk message explaining to a user how a virus or Trojan horse infected their system and how to fix it. Word count: 160–190 words.

UNIT 28. Harassment/Bullying

TASKS:

1. Read the text and briefly write its meaning.



In the vast and often unforgiving landscape of the internet, harassment and bullying have taken on new, insidious forms. Unlike traditional bullying, which might happen in the schoolyard or workplace, online harassment can reach its victims anywhere and at any time, making it a relentless and pervasive threat. The digital world offers a cloak of anonymity, allowing bullies to launch their attacks without fear of immediate repercussions, and this can escalate the cruelty to alarming levels.

One of the most terrifying aspects of online harassment is the sheer scale at which it can occur. Imagine being targeted not by one or two bullies, but by a coordinated group of hundreds, or even thousands, of individuals. This is not just a schoolyard spat; it's a digital lynch mob. The onslaught can come in waves of abusive messages, hateful comments, and even threats, leaving the victim feeling besieged and utterly helpless. The mental and emotional toll of such an experience is profound, as the constant barrage can lead to anxiety, depression, and in extreme cases, suicidal thoughts.

Adding another layer of complexity and horror to this modern scourge is the use of artificial intelligence. AI can be weaponized to perpetuate harassment and bullying in several ways. AI-generated content, such as deepfakes or manipulated images, can be used to humiliate or discredit individuals. Imagine waking up to find a convincingly realistic video of yourself saying or doing something you never did, spreading like wildfire across social media. The potential for damage to one's reputation and mental health is staggering.

Moreover, AI can automate the harassment process, creating bots that can spam victims with abusive messages around the clock. These bots can be programmed to circumvent blocking measures, ensuring that the harassment is relentless. AI-generated art, which can be a powerful tool for creativity, can also be twisted into a means of bullying. For instance, creating grotesque, mocking, or sexually explicit images of someone and sharing them widely can cause immense distress and humiliation.

The emotional impact of online harassment and bullying is exacerbated by the feeling of isolation it can create. When the attacks are coming from every corner of the internet,

it can feel as though there's no safe space left. The victim is left to deal with the fallout alone, often feeling like there's no escape from the digital tormentors.

But it's not all doom and gloom. AI also holds the potential to be part of the solution. Advanced algorithms can be used to detect and filter out abusive content before it reaches the intended target. Social media platforms are increasingly employing AI to monitor and flag harmful behavior, although this technology is still in its infancy and far from foolproof. AI can also help provide support to victims, using chatbots to offer resources and emotional support, and guiding them on how to report abuse and seek help.

In conclusion, harassment and bullying in the internet age have evolved into a terrifyingly pervasive threat, with the potential to impact victims on an unprecedented scale. The anonymity and reach of the digital world, combined with the power of AI, have given bullies new tools to inflict harm. Yet, the same technology that facilitates this abuse can also be harnessed to combat it. By staying informed, vigilant, and compassionate, we can work towards creating a safer and more supportive online environment for everyone.

2. Answer these questions.

1) How does online harassment differ from traditional forms of bullying?

2) What makes being targeted by a group of hundreds or thousands of people online particularly terrifying?

3) In what ways can AI be used to perpetrate harassment and bullying?

4) What are some potential emotional impacts of relentless online harassment on victims?

5) How can AI be utilized to help combat online harassment and provide support to victims?

3. The sentence is True or False.

- 1) Online harassment can happen anywhere and at any time, unlike traditional bullying.
- 2) AI-generated content can only be used for positive purposes and creativity.
- 3) Being targeted by hundreds of people online can lead to anxiety and depression.
- 4) AI can be used to create bots that send abusive messages continuously.
- 5) Victims of online harassment often feel supported and not isolated.
- 6) Social media platforms are not using AI to monitor and flag harmful behavior.

4. Translate the following English units into Ukrainian.

- 1) *Vast and unforgiving landscape*-_____
- 2) *Cloak of anonymity*-_____
- 3) *Digital lynch mob*-_____
- 4) *Spread like wildfire*-_____
- 5) *Relentless and pervasive threat*-_____
- 6) *Escalate the cruelty*-_____

5. Give synonyms to the words in **bold type**.

- 1) Online harassment can be a **relentless** experience for many victims.

2) The **impact** of being bullied by hundreds of people online can be devastating.

- 3) AI-generated content can be **manipulated** to harm individuals.

- 4) Victims of online harassment often feel **isolated**.

- 5) Social media platforms use AI to **monitor** harmful behavior.

6. Translate Ukrainian to English:

- *Ландшафт*-_____
- *Анонімність*-_____
- *Жорстокість*-_____
- *Загроза*-_____
- *Розповсюджувати*-_____
- *Технологія*-_____

- *Penyтація*-_____

7. Explain this word in English without using the given word itself.

- *Insidious*-_____

- *Pervasive*-_____

- *Escalate*-_____

8. Fill in the blanks with the necessary words in the box.

<i>escalate</i>	<i>harass</i>	<i>compromise</i>	<i>disseminate</i>	<i>monitor</i>	<i>infiltrate</i>
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- 1) Online bullies often _____ their attacks when they find a vulnerable target.
- 2) Social media platforms use AI to _____ harmful behavior and content.
- 3) Cybercriminals can _____ malicious content rapidly through various online channels.
- 4) Malicious actors can _____ systems and spread malware undetected.
- 5) It is easy for bullies to _____ individuals repeatedly online due to the anonymity provided by the internet.

9. Complete the sentences using Passive verb forms.

- 1) Many people _____ (harass) online through social media platforms.
- 2) AI-generated images _____ (use) to bully individuals in various ways.
- 3) Victims _____ (target) by hundreds of online bullies can feel overwhelmed.
- 4) Online harassment _____ (combat) by implementing stronger cybersecurity measures.
- 5) Sensitive information _____ (compromise) during a cyber attack.
- 6) Thousands of harmful messages _____ (send) to victims by automated bots.
- 7) Social media accounts _____ (monitor) by AI to detect abusive behavior.
- 8) The severity of online harassment _____ (highlight) in recent studies.

10. Complete the text using Passive verb forms.

Bots designed to harass people are a growing problem in the digital age. These bots _____ (program) to send abusive messages and _____ (deploy) on social media platforms to target individuals. Often, these bots _____ (create) to mimic real users, making them harder to detect. Victims _____ (bombard) with hateful comments and threats, which can lead to severe emotional distress. To combat this issue, advanced AI

systems _____ (develop) to identify and block these malicious bots. Despite these efforts, many harmful messages still _____ (deliver) to unsuspecting users, showing that more robust solutions are needed.

11. Complete the sentences using appropriate modal verbs.

- ❖ Victims of online harassment _____ (should) seek support from trusted individuals or organizations.
- ❖ Social media platforms _____ (must) enforce stricter policies to prevent cyberbullying.
- ❖ Harmful behavior _____ (can) be reported by users to make platforms safer.
- ❖ Everyone _____ (ought to) respect others' privacy and personal boundaries online.
- ❖ Governments _____ (might) introduce new laws to combat cybercrime effectively.

12. Use relative clauses to complete the sentences.

- ❖ Cyberbullies, _____ (who) often hide their identities, target vulnerable individuals.
- ❖ Victims _____ (whose) accounts are hacked feel violated and unsafe.
- ❖ The online platforms _____ (where) cyberbullying occurs are often the ones least equipped to deal with it.
- ❖ Bots _____ (which) send hateful messages are programmed to mimic human interactions.
- ❖ Measures _____ (that) aim to protect online users are not always effective.

13. Rewrite these sentences in reported speech.

- ❖ "We will introduce stronger policies to combat cyberbullying," said the social media manager.
- ❖ The victim stated, "I feel overwhelmed by the constant harassment."
- ❖ "Everyone should be aware of the risks of sharing sensitive information online," the cybersecurity expert advised.
- ❖ The researcher explained, "Bots have become more sophisticated in imitating real users."
- ❖ "We need to develop better AI systems to detect malicious activity," the team leader suggested.

14. Complete the sentences using conditional forms.

- ❖ If victims _____ (report) harassment immediately, they might receive timely support.
- ❖ Cyberbullying _____ (decrease) significantly if stricter regulations were enforced.
- ❖ If bots _____ (not identify) quickly, they will continue to harm users.
- ❖ Social media platforms _____ (be able to prevent) cyberbullying if they invested in advanced AI technologies.

- ❖ If everyone _____ (educate themselves) on online safety, fewer people would fall victim to cyber attacks.

15. Fill in the blanks with appropriate prepositions.

- ❖ Individuals are often targeted _____ social media platforms by anonymous users.
- ❖ Online safety can be improved _____ strengthening privacy settings.
- ❖ Many people feel overwhelmed _____ the scale of cyberbullying.
- ❖ Victims must always report abusive behavior _____ the platform administrators.
- ❖ Awareness campaigns can help prevent harassment _____ online communities.

16. Choose the correct form of the verbs in these sentences.

- ❖ The cyberbully _____ (has sent/sent) hundreds of abusive messages before their account was blocked.
- ❖ Victims _____ (are receiving/receive) support through helplines and online networks.
- ❖ AI systems _____ (detects/detect) harmful behavior on social media platforms.
- ❖ Thousands of harmful messages _____ (were delivered/deliver) by automated bots last week.
- ❖ Social media accounts _____ (monitor/are monitored) to ensure compliance with community guidelines.

17. Write an open letter to a school or company about preventing cyberbullying and supporting victims. Word count: 180–220 words.

UNIT 29. The influence of Internet standards of beauty

TASKS:

1. Read the text and briefly write its meaning.



In the age of social media, the internet has become a powerful force in shaping our perceptions of beauty. Beauty trends spread like wildfire across platforms, creating an almost unattainable standard that many strive to emulate. These trends, often curated and propagated by influencers and celebrities, can profoundly affect individuals, reshaping their views on what is considered beautiful. The consequences of this digital beauty culture are far-reaching, affecting mental health, promoting overconsumption, and fostering a relentless pursuit of perfection.

The internet's beauty standards are not just trends; they are dictating how we see ourselves and others. Filters, photo-editing apps, and carefully curated images present an illusion of flawlessness that is nearly impossible to achieve in real life. As a result, individuals often find themselves trapped in a cycle of comparison and self-criticism. The constant exposure to these idealized images can lead to a distorted body image, where people perceive themselves as falling short of the beauty norms set by the online world.

This relentless comparison can have severe mental health repercussions. Many individuals experience anxiety and depression as they struggle to meet these unrealistic standards. Eating disorders such as anorexia and bulimia can also be triggered or exacerbated by the pressure to conform to a certain body type. The symptoms of these mental illnesses are debilitating: constant preoccupation with weight and appearance, extreme dieting, binge eating, and an overwhelming sense of inadequacy. The internet's beauty standards can thus trap individuals in a vicious cycle of unhealthy behaviors and thoughts, constantly chasing an illusion of perfection.

Moreover, the internet's beauty trends fuel a culture of overconsumption. The latest skincare routines, makeup products, and fashion trends are incessantly promoted, encouraging individuals to buy more and more in the pursuit of beauty. This constant

bombardment of new products and trends creates an insatiable desire for the next best thing, leading to financial strain and a sense of emptiness. The beauty industry thrives on this overconsumption, with marketing strategies designed to exploit insecurities and create a perpetual state of dissatisfaction.

The emotional toll of chasing internet beauty standards cannot be overstated. The pressure to look a certain way, to have the perfect skin, the ideal body, and the trendiest clothes, can lead to burnout and a diminished sense of self-worth. People start to lose sight of their intrinsic value, equating their worth with their appearance. This superficial valuation of self can erode self-esteem and make individuals more susceptible to mental health issues.

The influence of internet beauty standards extends beyond personal impact; it shapes societal norms and values. As these trends become ingrained in our culture, they perpetuate a narrow definition of beauty that excludes diversity and individuality. This homogenized view of beauty marginalizes those who do not fit the mold, leading to social exclusion and stigmatization.

In conclusion, the internet's standards of beauty are reshaping our perception of what it means to be beautiful, often with detrimental effects on mental health and well-being. The pursuit of these unrealistic standards can lead to anxiety, depression, eating disorders, and overconsumption. It's crucial to recognize the emotional and psychological toll of these trends and to promote a more inclusive and realistic view of beauty. By fostering self-acceptance and celebrating diversity, we can begin to counteract the negative influence of internet beauty standards and create a healthier, more balanced perspective on beauty.

2. Answer these questions.

1) How do internet beauty trends influence our perception of beauty?

2) What are some of the mental health repercussions of trying to meet unrealistic online beauty standards?

3) How does the pursuit of internet beauty standards contribute to overconsumption?

4) What are some of the symptoms of mental illnesses that can be triggered by online beauty pressures?

5) How can promoting self-acceptance and diversity help counteract the negative influence of internet beauty standards?

3. The sentence is True or False.

- 1) Internet beauty standards often promote realistic and attainable body images.
- 2) The pressure to conform to online beauty trends can lead to mental health issues like anxiety and depression.
- 3) Filters and photo-editing apps contribute to a distorted body image by presenting an illusion of flawlessness.
- 4) Overconsumption in the beauty industry is fueled by the constant promotion of new products and trends.
- 5) The pursuit of internet beauty standards does not affect an individual's self-worth and self-esteem.
- 6) Promoting self-acceptance and diversity can help counteract the negative effects of internet beauty standards.

4. Translate the following English units into Ukrainian.

- 1) *Spread like wildfire*-_____
- 2) *Trapped in a cycle*-_____
- 3) *Relentless pursuit of perfection*-_____
- 4) *Distorted body image*-_____
- 5) *Vicious cycle*-_____
- 6) *Emotional toll*-_____

5. Give synonyms to the words in bold type.

1) Beauty trends spread like **wildfire** across platforms, creating an almost unattainable standard.

2) The internet's beauty standards can profoundly **affect** individuals, reshaping their views on what is considered beautiful.

3) The constant exposure to these idealized images can lead to a **distorted** body image.

4) The pursuit of these unrealistic standards can lead to **anxiety** and depression.

5) This constant bombardment of new products and trends creates an **insatiable** desire for the next best thing.

6. Translate Ukrainian to English:

- *Краса*-_____
- *Переслідування*-_____
- *Тиск*-_____
- *Зовнішність*-_____
- *Тенденція*-_____
- *Нездоровий*-_____
- *Самоцінність*-_____

7. Explain this word in English without using the given word itself.

- *Exacerbated*-_____
- *Homogenized*-_____
- *Perpetuate*-_____

8. Fill in the blanks with the necessary words in the box.

<i>anxieties</i>	<i>consequences</i>	<i>perception</i>	<i>diversity</i>
<i>consumed</i>	<i>distorted</i>	<i>standards</i>	<i>pursuit</i>

- 1) The internet's beauty _____ have created almost unattainable goals for many people.
- 2) Constant exposure to idealized images can lead to a _____ body image.
- 3) The relentless _____ of perfection can take a significant toll on mental health.
- 4) Online beauty trends have reshaped our _____ of what is considered attractive.
- 5) Trying to meet these unrealistic standards can lead to increased _____ and depression.
- 6) The pressure to look a certain way often results in overconsumption, as people are _____ by the need to buy more products.
- 7) Promoting self-acceptance and _____ can help counteract the negative effects of internet beauty trends.

8) The _____ of internet beauty standards can have severe mental health consequences for individuals.

9. Complete the sentences with the correct form of the verbs in brackets (Mixed Conditionals).

1. If she had studied computer science, she ____ (have) a great job in tech now.
2. We wouldn't be late if we ____ (leave) earlier.
3. If I ____ (know) about the deadline, I wouldn't be so stressed now.
4. They'd have saved the files if they ____ (back up) their data regularly.
5. If he spoke better English, he ____ (get) the job last year.
6. I wouldn't feel so tired now if I ____ (go) to bed earlier.
7. If we ____ (install) the antivirus last week, the system would be working now.
8. She ____ (travel) abroad last summer if she had enough money.
9. If you hadn't skipped the training, you ____ (understand) how this system works.
10. My code would be running perfectly now if I ____ (fix) the bug yesterday.

10. Rewrite the sentences using a mixed conditional structure.

1. I didn't finish the project, so I'm not presenting today.
2. If I had finished the project, I would be presenting today.
3. He isn't good at math, so he didn't pass the test.
4. She was late, so she's not allowed to join the webinar now.
5. I don't know how to program, so I didn't apply for the position.
6. They didn't sign up for the course, so they don't have access now.
7. He doesn't know her number, so he didn't call her.
8. I forgot the password, so I can't log in now.
9. They didn't listen to the instructions, and now they're confused.
10. She doesn't live in the city, so she missed the event yesterday.
11. We didn't save the document, and now we can't find it.

11. Write 5 sentences explaining what could happen if someone neglects their online privacy. Use the second conditional (e.g., "If people ignored privacy settings, they could expose sensitive information"). Reflect on possible consequences related to the level of exposure.

12. Create a dialogue between two friends discussing cyberstalking. Use reported speech to demonstrate how one friend reports a suspected event (e.g., "She told me that someone was following her online"). Include at least 5 exchanges in the dialogue.

13. Describe a scenario in which someone avoids being stalked online. Use modal verbs to express advice and necessity (e.g., "You should double-check your settings" or "You must not share your location publicly"). Write the scenario in 5 to 7 sentences.

14. Write 6 sentences about how individuals can protect their privacy using past perfect tense to describe actions taken (e.g., "Before realizing the risks, they had already shared too much information"). Include examples relevant to the topic.

15. Create a short story in 8 sentences where someone resolves an issue of cyberstalking. Include at least one sentence using passive voice (e.g., "Her account was hacked by someone she didn't know") and focus on the resolution process.

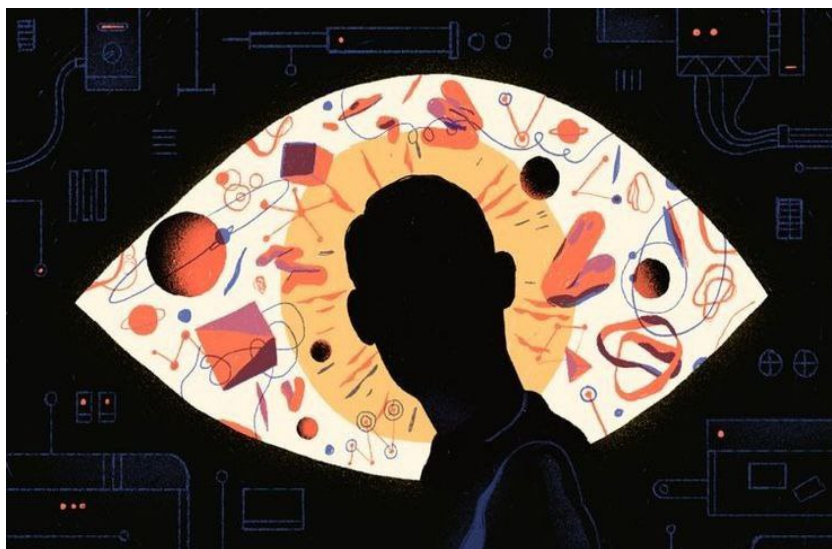
16. Write 5 sentences explaining why stalking is a global issue and what measures governments might take. Use conditional sentences (both first and second conditionals) to suggest possible actions (e.g., "If governments enforced stricter regulations, fewer people would fall victim to stalking").

17. Write a blog post exploring how social media affects people's self-esteem and body image. Word count: 170–200 words.

UNIT 30. Persecution/Stalking

TASKS:

1. Read the text and briefly write its meaning.



In the interconnected world of the internet, the dark shadow of persecution and stalking has become alarmingly easy to cast. With just a few clicks, a stalker can gain access to an overwhelming amount of personal information, making the digital landscape a perilous place for those who find themselves targeted. The ease with which one can track another's online presence is both astonishing and terrifying, underscoring the urgent need for vigilance and self-protection.

The internet, for all its wonders, has inadvertently provided a fertile ground for stalkers. Social media platforms, where users freely share snippets of their lives, can become a virtual treasure trove of information. Photos, check-ins, status updates, and even comments can be pieced together to create a disturbingly detailed picture of someone's daily routine. It's as if the walls of privacy have crumbled, leaving individuals exposed to the prying eyes of those with malicious intent.

If you suspect that you are being stalked, the first step is to take a deep breath and remain calm. It's easy to feel overwhelmed and powerless, but there are practical steps you can take to protect yourself. First and foremost, review your social media privacy settings. Ensure that your profiles are set to private, and be mindful of the information you share publicly. Limit the audience for your posts and avoid sharing your location in real time.

In addition to tightening privacy settings, it's crucial to be vigilant about your online presence. Regularly search your name and review what information is publicly accessible. If you find anything that compromises your privacy, take steps to remove or secure it. Also, be cautious about accepting friend requests or connections from people you do not know personally. A stalker can easily create fake profiles to gain your trust and access your personal information.

Another key aspect of protecting yourself is securing your devices. Use strong, unique passwords for your accounts and enable two-factor authentication wherever possible. This extra layer of security can make it significantly harder for a stalker to access your accounts. Additionally, be wary of phishing attempts and suspicious links, as these can be used to install malware on your devices, giving the stalker access to your personal information.

If you believe you are being actively stalked, document everything. Keep records of any unwanted contact, whether it's emails, messages, or social media interactions. This documentation can be invaluable if you decide to involve law enforcement. Speaking of which, do not hesitate to report your suspicions to the authorities. Stalking is a serious crime, and law enforcement agencies have the tools and expertise to help protect you.

Emotionally, the experience of being stalked can be incredibly draining. It's important to reach out for support. Talk to friends, family, or a mental health professional about what you're going through. Isolation can amplify fear and anxiety, but having a support system can provide much-needed strength and reassurance.

In conclusion, while the internet has made it frighteningly easy for stalkers to invade our lives, we are not powerless. By being proactive about our online security and privacy, we can create barriers that make it much harder for stalkers to succeed. Remember, you have the right to feel safe and secure, both online and offline. Stay vigilant, protect your personal information, and don't hesitate to seek help if you feel threatened. Together, we can build a safer digital world where everyone can enjoy the benefits of the internet without fear.

2. Answer these questions.

1) How has the internet made it easier for stalkers to gain access to personal information?

2) What are the first steps you should take if you suspect you are being stalked online?

3) Why is it important to regularly review your social media privacy settings and online presence?

4) What are some methods to secure your online accounts and devices from potential stalkers?

5) Why is it important to document unwanted contact and involve law enforcement if you believe you are being stalked?

3. The sentence is True or False.

1) Social media platforms provide limited information that stalkers can access about their targets.

2) Setting your social media profiles to private is an important step in protecting yourself from online stalkers.

3) Regularly searching your name online and reviewing publicly accessible information can help protect your privacy.

4) Accepting friend requests from people you do not know personally can enhance your online security.

5) Using strong, unique passwords and enabling two-factor authentication can make it harder for stalkers to access your accounts.

6) Documenting unwanted contact and reporting it to law enforcement is recommended if you believe you are being stalked.

4. Translate the following English units into Ukrainian:

1) *Dark shadow of persecution*-_____

2) *Prying eyes*-_____

3) *Virtual treasure trove*-_____

4) *Walls of privacy have crumbled*-_____

5) *Take a deep breath*-_____

6) *Amplify fear and anxiety*-_____

5. Give synonyms to the words in **bold type**.

1) The internet has inadvertently provided a **fertile** ground for stalkers.

2) Social media platforms can become a virtual **treasure trove** of information.

3) It's important to remain **vigilant** about your online presence.

4) Use strong, **unique** passwords for your accounts.

5) Isolation can **amplify** fear and anxiety when being stalked.

6. Translate Ukrainian into English.

- *Переслідування*-_____
- *Анонімність*-_____
- *Приватність*-_____
- *Інформація*-_____
- *Вразливість*-_____
- *Аутифікація*-_____
- *Документація*-_____

7. Explain this word in English without using the given word itself.

- *Persecution*-_____
- *Inadvertently*-_____
- *Circumvent*-_____

8. Fill in the blanks with the necessary words in the box.

<i>secure</i>	<i>documentation</i>	<i>surveillance</i>	<i>vulnerabilities</i>
<i>anonymity</i>	<i>compromise</i>	<i>malicious</i>	<i>personal</i>

- 1) Online stalkers often exploit _____ in social media platforms to track their targets.
- 2) Ensuring your accounts are _____ with strong passwords is crucial for online safety.
- 3) The feeling of _____ provided by the internet can embolden stalkers.
- 4) Victims should keep thorough _____ of any unwanted contact to help authorities.
- 5) Stalkers can use _____ software to gather information about their targets.
- 6) Sharing too much _____ information online can make you vulnerable to stalking.
- 7) Regularly updating your software can help protect against _____ attacks.
- 8) Stalkers may _____ your privacy by accessing your accounts without permission.

**9. Complete the sentences with a correct word of the type in brackets.
(Use your own words or choose from teacher-provided word banks.)**

1. I need a new ____ for storing large amounts of data. (noun)
2. Can you ____ the software before tomorrow's meeting? (verb)
3. The interface was very ____ and easy to understand. (adjective)
4. She explained the issue very _____. (adverb)
5. The laptop is under the desk, not ____ it. (preposition)
6. I clicked "Save", ____ nothing happened. (conjunction)
7. ____ asked for admin rights, but I refused. (pronoun)
8. There are ____ reasons why we rejected the update. (determiner)
9. ____! That's not the right password! (interjection)
10. You ____ update your password every 60 days. (modal verb)

10. Fill in each blank with an appropriate word that matches the part of speech in brackets.

1. She works as a freelance ____ for a tech magazine. (noun)
2. Please ____ your password before logging in again. (verb)
3. That was an extremely ____ workshop. (adjective)
4. They answered the technical questions _____. (adverb)
5. The email came from a fake address, not ____ the official one. (preposition)
6. You can upload the file now, ____ wait until it's verified. (conjunction)
7. ____ told me that the files were corrupted. (pronoun)
8. I found ____ errors in the code this morning. (determiner)
9. Yikes! I just formatted the wrong drive! (interjection)
10. You ____ not share your login credentials with anyone. (modal verb)

11. Fill in the blanks using the correct form of the verbs in parentheses.

- a. If you ____ (be) careful, you won't fall for online scams.
- b. I ____ (never/see) such a realistic phishing email before.
- c. While he ____ (browse) the website, he noticed some suspicious pop-ups.
- d. You must ____ (update) your antivirus software regularly.
- e. If hackers ____ (gain) access to your data, it could be disastrous.

12. Complete the sentences with the correct modal verb.

- a. You ____ turn off your webcam when not in use.
- b. It's essential that you ____ create strong, unique passwords.
- c. Hackers ____ steal personal information through fake websites.
- d. I ____ send the document yesterday, but the internet was down.
- e. You ____ be joking if you think this platform is 100% secure!

13. Rewrite the following sentences in passive voice.

- a. The IT team is updating the security software.
- b. Someone sent the email from an encrypted server.
- c. Hackers have stolen the company's private data.
- d. The administrator will activate your account tomorrow.
- e. They are investigating the source of the suspicious traffic.

14. Match the sentence halves to form complete conditional sentences.

- a. If you use a public Wi-Fi network, ____
- b. Unless you enable two-factor authentication, ____
- c. Your data will be safe ____
- d. If phishing emails weren't so convincing, ____
- e. Imagine what would happen ____
- i. you might accidentally reveal sensitive information.
- ii. hackers would have a harder time stealing identities.
- iii. if your password were shared publicly.
- iv. if you use strong encryption methods.
- v. your account could be compromised.

15. Choose the correct preposition to complete the sentences.

- a. The warning message appeared ____ the screen. (in/on/at)
- b. You should never share your password ____ email. (through/by/via)
- c. The attachment was disguised ____ an invoice. (as/like/for)
- d. She uploaded the file ____ the wrong folder. (on/into/at)
- e. He wrote a blog post ____ the dangers of weak passwords. (about/in/of)

16. Identify the error in each sentence and correct it.

- a. He don't trust links in unsolicited emails.
- b. I've downloaded the file yesterday.
- c. Two-factor authentication are essential for account security.
- d. The website looked like legitimate, but it was fake.
- e. You must to update your browser to avoid vulnerabilities.

17. Write an information leaflet for teenagers on how to recognize and respond to online stalking. Word count: 160–190 words.

SELF-STUDY PRACTICE

Unit 1. Living in a digital age

1. Complete this customer review from a website using the words from the box.

perform word processor online download digital built-in store personal monitor data
--

4 of 4 people found the following review helpful:

5 out of 5 stars: **The best professional laptop on the market**

12 Feb 2008

By nrobinson – See all my reviews

I bought a new MacBook Pro last month, and I've been very happy with it so far. The Intel Core 2 Duo processor is a real bonus, allowing the computer to (1) _____ tasks faster than earlier MacBook models; the 160GB hard drive is large enough to (2) _____ all of my music, photos and videos; and I didn't even need to buy an external (3) _____ – the widescreen 17" display is easy to look at, even for long periods of time.

Another great feature is the (4) _____ iSight camera; it can be used for webchats, to make video podcasts, or even just to take (5) _____ photos. Software updates are easy, too: if you're (6) _____ – just surfing the Web or checking email – and an update becomes available, a box appears asking if you want to (7) _____ the update. You just click *OK*, and it's done. I don't even have to worry about security either. Every time I transmit (8) _____ from my computer on the Internet, Apple's Safari web browser protects my (9) _____ information, such as bank details and credit card numbers, using a firewall.

The only criticism I have is the lack of a good (10) _____, such as Microsoft Word. I had to buy a copy of Microsoft Office 2008 in the end, which cost an extra £99.95 – and that's *with* a student discount!

2. Look at these extracts from various websites. Are the words in bold verbs, nouns, adjectives or adverbs?

1. Click here to begin your **download**.

2. **Download** the MP3 file now!

3. Buy now by visiting our **store**.

4. We will not **store** your details for more than 14 days.

5. Click here for an **online** discount.

6. Buy **online** by clicking here.

3. Choose the correct verb to complete these collocations.

1. _____ texts

4. _____ data

2. _____ calls

5. _____ records

3. _____ transactions

4. Complete these extracts from websites using collocations from Exercise 3. Use the correct verb forms.

1. We will not _____ of your online activities.

2. The Toyota Prius has a built-in monitor which _____
_____ about your location, speed and fuel consumption.
3. Skype lets you _____ over the Internet
for free.
4. With our latest online tariff, you can _____
to your friends for free.
5. Our secure server allows you to _____
_____ with absolute confidence.

Unit 2. Computer essentials

1. Look at these extracts from reviews on a consumer website. Which piece of hardware is each extract describing?

1. Available in 15" or 21" models, ...
2. With both wired and wireless versions to choose from, ...
3. ... you can back up over 4GB of data in minutes.
4. ... , and the pages per minute increases for black and white jobs.
5. ... surprisingly at this price, it even works in very low light conditions.

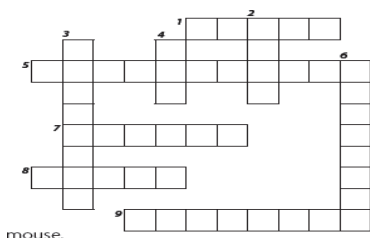
2. Complete the crossword using the words.

ACROSS

1. The data that goes into a computer.
5. Often attached to the computer via a USB connector.
7. Information from the computer, presented on the monitor, through the speakers or on the printer.
8. Hard or DVD .
9. The physical parts of a computer.

DOWN

2. A socket on the computer for an external device.
3. Probably the most used input device, along with the mouse.
4. Otherwise known as the 'brain' of the computer. (Abbreviation)
6. Programs, for example Microsoft Word or Apple iTunes.



3. Look at these extracts from emails to an online helpdesk. Which type of computer is each person talking about?

1. I dropped it as I was getting out of a taxi, and now it won't turn on.

2. I lost the stylus. Is it safe to use a pencil to input directly onto the screen?
3. As soon as it went offline, every PC on the network crashed.
4. I was rotating the screen round to show something to a colleague, and now it won't move.
5. Can you send someone down to show me the best position for my monitor and keyboard? I want to avoid getting any back or neck problems. Now listen to the sentences.

4. Which prepositions are used with the following words?

- | | | |
|-------------|------------|----------|
| 1. classify | 3. consist | 5. class |
| 2. divide | 4. Type | |

5. Complete this description of a basic PC system using the words from the box.

into classes type consists divided

A basic PC system can be (1)_____ into two main parts: hardware and software. Software basically means computer programs; for example, your media player is a (2)_____ of software. Hardware, on the other hand, (3)_____ of mechanical and electronic equipment. It can be divided (4)_____ three main types: the CPU, main memory and peripherals. There are three main (5)_____ of peripheral: input devices (keyboard, mouse, etc.), output devices (monitor, printer, etc.) and storage devices (DVD drives, flash drives, etc.).

Unit 3. Inside the system

1. Are these sentences true or false?

1. RAM stands for Random Access Memory.
2. If memory is *volatile*, it means that information is lost when the computer is turned off.
3. RAM is non-volatile.
4. ROM is volatile.
5. DIMMs can be used to expand RAM capacity.

2. For each abbreviation, write the correct unit of memory.

- | | | |
|-------|--------------|------|
| 1. TB | 3. MB | 5. B |
| 2. GB | 4. KB (or K) | 6. b |

3. Now complete these sentences using a unit of memory from Exercise 2.

1. A is the smallest unit of memory, equivalent to a single character. Eight of these make a .
2. A is approximately one million bytes.
3. One of the largest units of memory is a – equivalent to all the books in a large library.
4. A DVD-RW can usually store 4.7 of data.
5. A is around 1000 bytes.

4. Complete the rules for defining relative clauses.

1. We use the relative pronoun to refer to people.
2. We use the relative pronoun to refer to things.
3. We can use to replace *which* and *who*.
4. Relative pronouns can be left out when they are the of the relative clause, for example: *The amount of memory (that) you need depends on how many programs you want to run at the same time.*

5. Complete these definitions from an ICT dictionary using the terms from the box. Then make defining relative clauses.

chip buses central processing unit clock speed control unit

1. The, or CPU, is like a 'brain' performs tasks for your computer.
2. The CPU is built into a single executes program instructions and coordinates activities within the system.
3. The is the part of the processor is responsible for loading and interpreting the individual instructions that make up a computer program.
4. is measured in gigahertz; for example, a processor running at 4Ghz would give you all the performance you need to run most applications.
5. are electrical channels allow devices inside the computer to communicate.

Unit 4. Buying a computer

1. Nick has gone to his local computer shop to buy a new laptop. Complete his conversation with the sales assistant using the words from the box.

running storage lighter feature any bigger for
got specs more cost cheaper both

Shop assistant: Hello there! Do you need (1) _____ or are you just taking a look around?

Nick: Actually, yes – I could use a hand. I'm looking (2) _____ a new laptop. Have you (3) _____ any that are really trustworthy? Mine has been nothing but trouble lately.

Shop assistant: Sure thing. That depends on your price range, but we do have two models on offer – the Acer Aspire 4920 and the Samsung R60.

Nick: OK. And how do these two compare? Are the (4) _____ pretty much the same?

Shop assistant: The Samsung is more of a basic model. It's got a Pentium Dual Core processor (5) _____ at 1.4GHz – suitable for most everyday uses, but not ideal for high-performance gaming. The Acer, on the other hand, has a 2GHz processor and double the RAM — that's 2GB instead of just 1GB.

Nick: Right. What about (6) _____ space?

Shop assistant: The Samsung provides 80GB, whereas the Acer comes with 250GB.

Nick: That's quite a difference. Is there (7) _____ else I should know?

Shop assistant: Yes – (8) _____ laptops support wireless internet and Bluetooth. They also come pre-installed with Windows Vista. Plus, both (9) _____ DVD writers, which makes saving files simple. The Acer has a slightly (10) _____ screen, and it's (11) _____ in weight, so it's handier if you'll be traveling with it.

Nick: Sounds good. What do they (12) _____?

Shop assistant: Let me check. The Samsung is significantly (13) _____ - priced at £439.97, while the Acer is £769.97. But remember, the Acer is much (14) _____ powerful.

Nick: Hmm, that's a bit too much for me. I think I'll go with the Samsung.

2. Which categories do these sentences from Exercise 1 fit into?.

1. Do they have similar specs?
2. It has a Pentium Dual Core processor running at 1.4Ghz.
3. The Acer also has twice as much RAM as the Samsung.
4. And what's the storage capacity of each model?
5. The Acer has a slightly bigger screen, and it's lighter.
6. The Samsung is quite a bit cheaper than the Acer.
7. The Acer's processor runs at 2Ghz.
8. The Acer is much more powerful.

Unit 5. Type, click and talk!

1. The following extracts come from sales assistants in computer shops describing the features and functions of various input devices. Complete the sentences using the words from the box and then choose which device they're talking about.

to can which allows used by features works for

1. This model _____ a backlight, so you can see what you're typing in the dark.
2. We have a Bluetooth version which _____ without wires, but the surface you use it on needs to be dark.
3. Why don't you try this? It's _____ drawing, as if you were using a pen and paper.
4. You'll need one of these – it's _____ to control your movements while you play.
5. For more precision, I'd recommend this. It's like an upside-down mouse, and it works _____ running your hand over the plastic ball here.
6. This is our most popular model. It _____ you _____ reproduce exact copies of your documents in digital format.
7. This works just like a mouse, except you _____ write directly onto the screen with it.
8. This is a model _____ works particularly well with Skype.

2. Complete these FAQs from a word processing program.

1. Question: How do I start a new line in my document?

Answer: Just hit _____.

2. Question: How can I delete a letter or word that I've typed?

Answer: Position the cursor after the letter or word and hit _____ once per letter.

3. Question: Do I have to use the mouse to navigate around my document?

Answer: No, you can also use the _____ keys.

4. Question: How can I type in UPPER CASE characters?

Answer: If you want to type one or two letters in upper case, then simply hold down _____ and type the letters at the same time. If you want to type a whole sentence in upper case, you should use _____.

3. Complete this call to a helpdesk using the words from the box.

click double-click (x2) drag select

Caller: Hello, can you help? I've lost a really important document. I deleted it by mistake, and now it's gone!

Helpdesk operator: OK, don't panic. Just (1) _____ on the Recycle Bin icon on your desktop.

Caller: It's not working!

Helpdesk operator: Don't worry. It won't open if you only (2) _____ on it once. Just try again.

Caller: OK, it's open now. Oh ... there's the file.

Helpdesk operator: Right, just (3) _____ it with the mouse and (4) _____ it back to the My Documents folder. Then just (5) _____ on the file to open it and check it's OK.

Unit 6. Capture your favourite image

1. Which piece of hardware would you need for the following tasks?

1. You need to email a copy of a letter that you received in the post.
2. You want to make a video of a friend's wedding.
3. You want to take some photos while on holiday.

2. These extracts all come from a product description of a scanner. Decide if each extract is expressing a fact or an opinion.

1. We think that you'll agree that the extraordinarily thin Scantech ODB25 is the obvious choice for ...

2. ... a single USB cable connected to your computer is the only lead you need.

3. Despite its diminutive size, you'll find that the ODB25 is big on resolution.

4. ... the 1200 x 2400dpi and 48 bit colour depth specification reproduces fine details

...

5. A 'Scan to PDF' function scans documents straight to PDF ...

3. Complete this review of a digital camera using the superlative form of the adjectives in brackets.

With 6.0 megapixels and 3x optical zoom, the D930 is (1) (good) the high resolution digital camera available in this price range. You can use the D930 to produce some of (2) (sharp) the images possible and take detailed photos for printing up to poster size. In addition, it has a 3x optical and 5x digital zoom, giving 15x total zoom when combined – (3) (high) the in any digital camera under £50. ASR technology prevents the degradation of image clarity and colour common in flash photography. With ASR, the effects of camera shake are reduced in lower light conditions; you can even take well exposed, sharper pictures in low light without using a flash at all. It guarantees (4) (bright) the and (5) (natural) the pictures possible at this price.

4. Choose the correct suffix to change each of these words into an adjective or noun.

1. addition _____ (adjective)
2. play _____ (noun)
3. control _____ (noun)
4. process _____ (noun)
5. optimize _____ (adjective)
6. power _____ (adjective)

5. Now complete this review of a digital camcorder using the nouns and adjectives from Exercise 4.

The DF201 benefits from a (1) _____ optical zoom lens and a video image (2) _____ designed for High Definition (HD) recording. Features include a 'Quick Start' button and an intuitive menu system, easily navigated using a joystick (3) _____. The camcorder is (4) _____ for high-resolution true widescreen recording and offers (5) _____ features such as a 2.7" LCD and a 0.27" 16:9 colour EVF (Electronic Viewfinder), which allow users to compose and play back video in the same dimensions that it will be displayed on a widescreen TV set. It is then a simple process to finalize the DVD in-camera before playing it back in a compatible home DVD (6) _____.

Unit 7. Display screens and ergonomics

1. Complete these display screen specifications using the missing words. The first letter is given.

1. r _____ : 1280x768
2. a _____ ratio : 16:9
3. s _____ size: 19"
4. c _____ depth : 16.7 million
5. b _____ : 400 cd/m²

2. Decide which words are being defined in these extracts from an ICT dictionary.

1. One of the small units that make up an image on a computer or television screen.
pixel _____ cathode ray tube (CRT)
2. Flat-screen technology using noble gases; popular with movie fans.

video projector

plasma screen

3. The most common computer display technology, made of two glass plates with ...

liquid crystal display (LCD)

cathode ray tube (CRT)

4. Card that plugs into a computer to give it display capabilities.

video projector

video adapter

5. Device used to show images on a wall or large screen.

video projector

video adapter

3. Complete this extract from a workplace health and safety guide using the words from the box. Then use the correct verb forms.

footrest ache swivel idea copyholder strain repetitive

The following guidelines can help you avoid the common pitfalls of daily computer use – eye (1) _____, back (2) _____ and (3) _____ strain injury (RSI).

a comfortable chair that supports your lower back

_____ for a (4) _____ to place under your desk and a tilt and (5) _____ stand for your screen

Position your keyboard correctly: your arms perpendicular to the desk surface

Your monitor at, or just below, your head height

at least 50 cm away from the monitor

It's a good (6) _____ to take regular breaks in order to rest your eyes

You _____ from hard copy documents without using a (7) _____
to clean your screen regularly

to clean your screen regularly

Unit 8. Choosing a printer

1. Look at these extracts from people talking about printing jobs. Which type of printer is each person talking about?

1 “Can you order some more toner for the printer on the third floor?”

2. "The plans for the new office building on Vyner Street are almost ready. Shall I print a copy for the meeting tomorrow?"

3. “We’re almost out of bar codes. Simon, can you print some more?”

4. “I couldn’t believe it – I was in the middle of printing my report and I ran out of ink!”

5. “As soon as the client approves this version, you need to print a high-quality colour copy for them to check.”

6. "Andrew, can you print off another set of address labels for me?"

7. “Lisa, this job’s ready to go. Can you output it directly to the printing plates for me?”

2 Complete these descriptions of the printers in Exercise 1 using the comparative form of the adjectives in brackets.

1. Laser printers are (expensive) than inkjets.

2. Thermal transfer printers are (good) for printing bar codes than dot-matrix printers.

3. Inkjets are (small) than imagesetters.

4. Dot-matrix printers are (noisy) than laser printers.

5. Imagesetters are (convenient) than platesetters, as you still need to print to film before making the printing plates.

3. Put these connectors into the correct column of the table.

to begin with since such as because for instance then finally

Giving examples	Listing/Sequencing	Giving reason/ cause

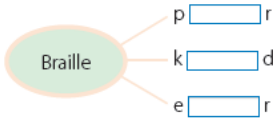
4. Complete this customer review from a website using the connectors from Exercise 3. There may be more than one possible answer for some of the gaps.

I bought this printer after reading some positive reviews here and on other sites. (1)_____ my budget was only £50, I was looking for something that would be fine for day-to-day jobs, (2)_____ printing Word documents and maps from the Internet. (3)_____, everything worked fine. (4)_____ the problems started: paper jams, error messages, etc. (5)_____ I had to send it back. It might have just been a defective model, but I don't think I'd risk buying one again.

Unit 9. Devices for the disabled

1. Put in the missing letters to make noun phrases common to assistive technology. The first and last letters are given.

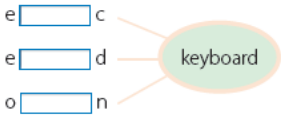
1



2



3



4



5



2. Decide whether the technology from Exercise 1 would be most useful for blind or motor-impaired computer users. One piece of technology can go in both columns of the table. Put in your choice.

Blind users	Motor-impaired users

3. Complete these descriptions of assistive technology for deaf users with the correct terms.

- _____ help deaf users see when they have new email or when there has been a system error.
- _____ allow deaf users to make calls by typing and reading.
- _____ are used in meetings to summarize what is being said.

Unit 10. Magnetic storage

1 Complete this conversation in a computer shop using the words or phrases from the box.

storage head crash holds read/write back up don't portable hard shouldn't
platters should external capacity formatted

Sales assistant: Can I help you with anything?

Anna: Yes, please. I need a new (1)_____ drive.

Sales assistant: OK. Are you looking for an internal drive or an (2)_____ one?

Anna: Well, I need it for moving files between home and work.

Sales assistant: Sure. Well, you've basically got two options. If you need a lot of (3)_____ for secondary (4)_____, then you could try this Freecom drive. It (5)_____ 750GB. That's probably enough to (6)_____ your whole computer many times over. You'd probably have lots of space left for archiving any files that you don't need on a day-to-day basis. This one's £140.

Anna: That's a little expensive, to be honest. And I probably don't need 750GB. My home computer only has a 120GB drive! And it looks a bit heavy to carry around.

Sales assistant: In that case, you need something more (7)_____. This might be what you're looking for: the ATMT HD160 Ultra-Portable. It's only 20GB, but it's light and relatively cheap – only £80.

Anna: That sounds perfect. I'll take it. Is it already (8)_____ ?

Sales assistant: Yes, it's all ready to use. Just bear a couple of things in mind if you're carrying it between home and work a lot. Inside the drive there is a stack of metal (9)_____ that are used to store the information. (10)_____ move the disk while the platters are spinning – you'll be able to hear them – or the drive could suffer a (11)_____. That's when the (12)_____ head touches the disk surface.

Anna: Right, OK. Anything else I need to know?

Sales assistant: Just a couple of things. You (13)_____ unplug the drive without using the 'Remove hardware' command first. And you (14)_____ check the drive regularly for viruses, especially if you're moving it between machines.

Anna: OK, well thanks for all your help. Now where do I go to pay?

2. Complete these sentences using the correct phrase.

1. The average time it takes the read/write heads to move and find data on a disk is called the _____.

2. _____ is another way of saying *seek time*.

3. _____ is the average speed required to transmit data to the CPU from the disk; it is measured in megabytes per second.

4. Once formatted, a disk's surface is organized into circular _____. Each of these is then divided into _____.

5. When a disk is formatted, a _____ is created by the operating system to record the location of files.

6. If you have more than one _____ on your hard drive, you can install more than one operating system.

Unit 11. Optical storage

1. Put in the missing letters to make a term related to optical storage.

1. optical d

2. laser b

3. backward-c

4. double-s

5. dual l

6. multi-f

7. Blu-r

2. Complete these extracts from an ICT textbook using the terms from Exercise 1. You may have to use the plural form.

1. Portable DVD players usually support _____ playback; this means the user can watch a wider variety of different file types (DivX, MP4, etc.).

2. _____ differ from magnetic ones, in terms of both internal structure and storage capacity.

3. CDs and DVDs are read using a red _____. In _____ discs, however, it is blue-violet, hence the name.

4. Unlike a CD, a DVD can be _____ and _____, giving it a capacity of up to 17GB.

5. DVD drives are _____, meaning that they can play older technologies such as CD-ROMs.

3. Label the three columns of the table with the correct title.

furthermore besides and in addition moreover	however although whereas but on the other hand	therefore so consequently as a result thus because

4. Complete these descriptions of optical storage technology using a connector from Exercise 3. More than one answer may be possible. Then decide if the sentences are true or false.

- _____ to CDs and DVDs, there are other types of optical storage; Blu-ray and HD-DVD, for example.
- CDs are 120 mm in diameter and 12 mm thick. DVDs, _____, are 122 mm in diameter and 12.5 mm thick.
- DVDs have more tracks, and the pits used to store data are smaller; _____, they have a greater storage capacity than CDs.
- DVDs can be played on CD players, _____ there's no need to invest in new hardware.
- Blu-ray may soon become the dominant optical storage technology, _____ Toshiba, Microsoft and the DVD Forum are supporting HD-DVD technology instead.

Unit 12. Flash memory

1. Choose words from each box to make terms related to flash technology. Write in the words.

flash smart memory-based state LAN

card player drive technology card drive

- flash _____
- solid- _____
- wireless _____
- USB _____
- flash- _____
- U3 _____

2. Complete these product descriptions using the terms from Exercise 1.

- With the 4GB Gridfire _____, you can back up, store, carry and offload large files with one affordable, convenient device. What's more, _____ means no moving parts, and therefore less chance of damage if the device is dropped.
- The 2GB One-Tech _____ is the best choice for high-performance results from your digital camera and other handheld devices.

3. The STM _____ gives you the ability to carry your files AND your software on a secure USB drive, by using separate partitions to ...
4. The Airlink _____ connects your desktop PC to a network, using the latest advanced silicon chip technology.
5. With 80GB of storage capacity, the iSing _____ is the only device you'll need for audio and video playback on the move.

3. Complete these technical specs from an MP4 player. Use a dictionary if necessary.

1. 1GB of solid-state flash memory _____.
2. 1.5" true _____ LCD display.
3. Screen _____ for avoiding scratches.
4. View _____ photos as well as videos.
5. _____ video AMV files as well as audio AAC files.
6. _____ multi music format: MP1, MP2, MP3, WMA, WMV, ASF and WAV.
7. Includes digital voice _____ with up to 36 hours _____ time.
8. _____ FM radio.
9. _____ files direct from the Internet.
10. Standby _____ for power saving.

Unit 13. The operating system

1 What do the following stand for?

1. GUI
2. OS
3. WIMP

2. Which elements of a GUI would you need to click on to carry out the following tasks?

1. To open a letter that you'd been writing in Word.
document icon program icon
2. To launch your internet browser software.
folder icon program icon
3. To move up and down through a window.
drop-down menu scroll bar
4. To restart or shut down your computer.
menu bar hard drive icon
5. To find out how much space is left on your C: drive.
program icon hard drive icon

3. Complete this extract from a wiki entry about Windows Vista.

Windows Vista is (1) _____ operating system created by Microsoft to be used on (2) _____ personal computers. Its development wrapped up on November 8, 2006; during (3) _____ following three months, it was released in phases – first to (4) _____ computer manufacturers, then to (5) _____ corporate clients, and finally to (6) _____ retail outlets.

On January 30, 2007, it was officially launched worldwide for public use and could also be purchased or downloaded directly from Microsoft. (7) _____ launch of Vista marked more than five years since (8) _____ debut of Windows XP.

Vista introduced many new features and enhancements. Among the most notable were (9) _____ redesigned user interface and visual theme known as Windows Aero, an improved search function, new tools for multimedia creation, and major overhauls in networking, audio, printing, and display systems. Still, possibly the biggest advancement was in (10) _____ security. Windows XP had been known for (11) _____ susceptibility to viruses and malicious software, so it remains to be seen how well Vista has managed to solve those problems.

4. Decide if these words (which appear in bold in Exercise 3) are countable or uncountable, depending on how they are used in this context.

1. development
2. public
3. security
4. vulnerability
5. malware

Unit 14. Word processing

1. Type in words from the box to make instructions from Microsoft Word.

left/right table indent picture hyperlink

1. Increase/Decrease
2. Insert
3. Insert
4. Insert
5. Align

2. Decide if these features and functions from Microsoft Word appear on the Standard Toolbar or the Formatting Toolbar.

1. Typeface
2. Hyperlink
3. Italic/Bold/Underline
4. Print Preview
5. Bullets
6. Columns
7. Undo
8. Open

3. Nathaniel is explaining to his classmate, David, how to set up a Macro on Microsoft Word. Complete his instructions using the words in the box.

next like right first finally you what everything then
then that

David: Nathaniel, I've been asked to set up a Macro to help me edit this document on Word, but I'm not sure how to do it. Actually, I'm not even sure what Macros do. Can you give me a hand?

Nathaniel: Sure. Macros are basically mini-programs that you can set up within a Word document which carry out automated tasks for you. One of the most useful Macros allows you to go through a whole document and delete any accidental double spaces. I'll show you how to do it. (1)_____, open up any Word document. (2)_____ put in a couple of double spaces between words, just so you can check that it's worked at the end.

David: OK, I've done (3)_____ now. (4)_____ next?

Nathaniel: (5)_____, you go to *Tools, Macros*, (6)_____ click on *Record New Macro*.

David: (7)_____ this?

Nathaniel: That's it. Give the Macro a name like 'Doublespace' – it has to be one word. Once you click *OK*, Word is recording your actions so that it can replicate them later. So, do the following commands: *CTRL + Home* – that takes the cursor to the start of the document – *Find and replace, Find*, then hit the space bar twice to do a double space, then click *Replace with* and hit the space bar once before clicking *Replace all*.

David: Is that (8)_____ ?

Nathaniel: Yes, that looks good. (9)_____, press the little red circle on the Macro command, which will stop the recording. The Macro should now be saved under your Macro menu, just hit *Run* to run it on any Word doc.

David: Is that (10)_____ ? Seems quite simple. Thanks, Nathaniel.

Unit 15. Spreadsheets and databases

1. Many terms related to spreadsheets and databases are easily confused. Look at these extracts from definitions in an ICT dictionary and decide which word is being defined.

1. The vertical part of a spreadsheet.
2. The horizontal part of a spreadsheet.
3. The name of the computer program that displays data in rows and columns, and the table which displays data in rows and columns.
4. A collection of cells in one layer of an Excel file.
5. In databases, information is added to , which are grouped together into .
6. You can a database for specific information, or the information by a number of different criteria.

2 Choose words from each box to make expressions used to write letters in English and write them in.

a

I am
Dear
We would be
I
Please

b

Ms
writing
am
contact
grateful if

c

me ...
Smith,
to ...
you could ...
enclosing ...

- 1.
- 2.
- 3.
- 4.
- 5.

3. Complete this letter using expressions from Exercise 2.

(1) _____,

(2) _____ raise a **query** about the most recent **invoice** your **company** sent us, dated 7 January 2008. The **order** was correct – an optical **mouse** and two Norton anti-**virus** programs – but it seems that you have miscalculated the VAT. By my calculations, the **amount** of VAT should be £456.93. (3) _____ a **copy** of the invoice so that you can check for yourself.

(4) _____ send a new invoice once the **mistake** has been corrected. (5) _____ if you have any questions, or if you would like to discuss the **matter** further. I can be reached by **phone, fax, email** or at the **address** at the top of this **letter**.

Yours sincerely,

Abbi Truman

4. Write the plural form of the nouns that appear in bold in the text in

Exercise

- | | |
|------------|-------------|
| 1. query | 9. mistake |
| 2. invoice | 10. matter |
| 3. company | 11. phone |
| 4. order | 12. fax |
| 5. mouse | 13. email |
| 6. virus | 14. address |
| 7. amount | 15. letter |
| 8. copy | |

Unit 16. The Internet and email

Complete the conversation between an Internet Service Provider (ISP) and a customer. Write the words from the box into spaces 1–16. Then choose the correct words to complete spaces a–j.

email Web spam IP modem wireless newsreader username browser internet
 attachments messaging file transfer protocol newsgroups broadband mail program

ISP Helpdesk Operator (HO): Customer support, good morning.

Customer (C): Yeah, hi. (a) _____ am I speaking to?

HO: My name's Martin. (b) _____ can I help?

C: I'm having some problems with my (1) _____ connection. I can't get online.

HO: OK. I'm sure I can help. Let me just quickly check your (2) _____ address ...

C: My what? What (c) _____ that mean?

HO: It's just a unique series of numbers that identifies your computer when it's online. OK, just wait a sec ... Mmm ... Is your (3)_____ plugged in and working OK?

C: Is that the same as the (4)_____ router? The thing that plugs into the phone line?

HO: Yes. (d)_____ the lights flashing?

C: Yes, they're flashing really fast.

HO: OK. Just turn the router off and on at the back. (e)_____ it working now?

C: Yes, it is. (f)_____ did that happen?

HO: It's nothing serious – sometimes you just need to reset the router. Is there anything else I can help you with?

C: Actually, yes. I'm paying all this money for one of those fast, what do you call them, (5)_____ connections, but all I'm using the computer for is checking (6)_____ and looking up information on the (7)_____. (g)_____ else can I do with all this technology?

HO: Well, have you tried instant (8)_____? You know, having real-time chats with friends over the Internet?

C: (h)_____ do you think I am? That sounds like the kind of thing my 15-year-old son would be into, not me!

HO: OK, well (i)_____ is your connection? If it's very fast, then you can take advantage of (9)_____ – that means downloading files from the Internet onto your hard drive. It's a feature that is built into your web (10)_____, so it's very easy to use. You can download music, films, anything you want, really.

C: That sounds expensive. (j)_____ does it cost to download a song?

HO: It depends on the site. Another thing you might want to try is (11)_____ – public discussion areas on nearly any topic. It's part of a system called Usenet. You'll need a (12)_____ – that's a program that lets you view and post messages – and a (13)_____ and password. It's all very easy.

C: OK, that all sounds interesting. Thanks for all ...

HO: Actually, you might be interested in a new product we've launched this week. Can I ask which (14)_____ you use?

C: Outlook Express.

HO: OK, we have some new anti-(15)_____ software that helps detect junk email by looking for suspicious words in the subject line of the email. It also looks for suspicious (16)_____ – that's how viruses are normally sent between computers. It only costs £5.99 a month and ...

Unit 17. The Web

1. What kind of site is each web extract from?

1.

Wednesday 20 February

Happy birthday, Sam!

I'm really excited because it's Sam's birthday today, so we're all meeting up later to go for something to eat and then see a film. I'll let you know what we saw in tomorrow's post.

2.

Coen Brothers

Joel and Ethan Coen, known as The Coen Brothers, are internationally known American filmmakers. For over 20 years, they have written and directed award-winning films such as ...

3.

Shopping cart Your account Log in Browse Help

Welcome to storefront.co.uk, Britain's largest and most reliable online store for ...

4.

Buy Sell Search Categories Help

Before you can bid on any item listed on the site, you need to create an account.

5.

Welcome to Connect-O!

Use Connect-O to send messages to friends and family around the world, to share photos and videos, and much, much more!

2. What type of collocation are the underlined phrases below?

- | | |
|--------------------------|-----------------------------|
| 1. really excited | 6. online store |
| 2. see a film | 7. bid on |
| 3. internationally known | 8. create an account |
| 4. award-winning films | 9. send messages |
| 5. Welcome to | 10. share photos and videos |

3. Make collocations connected with web browsers using the words from the box.

the home page the current page favourites the current transfer one page (x2)

- | | | |
|------------|------------|---------------|
| 1. go back | 3. stop | 5. go forward |
| 2. go to | 4. refresh | 6. show |

4. Complete these definitions by choosing the correct word from the drop-down menu.

1. _____: a public place where you can pay to use the Internet and also buy food and drink
2. _____: buying and selling goods on the Internet
3. _____: a way of describing the Internet
4. _____: learning using technology, for example, the Internet
5. _____: a book in electronic format

Unit 18. Chat and conferencing

1. Complete the crossword by writing in the words.

ACROSS

4 Internet _____: also known as VoIP.

6 Windows Live Messenger and ICQ are both examples of _____ messaging programs.

7 An angry or negative comment posted online.

8 Many methods of online communication allow you to communicate in _____ time – that is, instantly.

10 To talk to another person in a different part of the world and see each other on television screens.

DOWN

1 The list of your friends or contacts, used in programs such as Windows Live Messenger and ICQ; a _____ list.

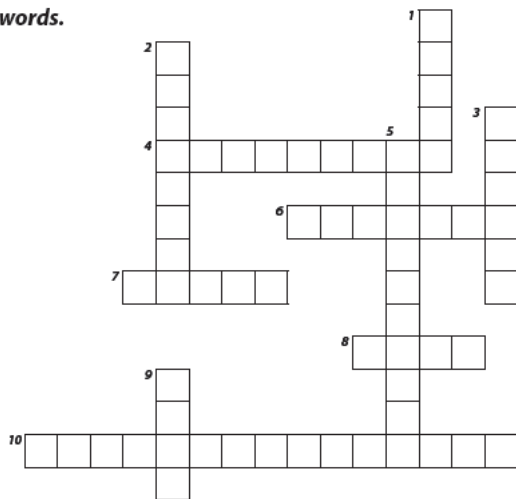
2 VoIP stands for Voice Over Internet _____.

3 An image that represents a user in a virtual reality environment such as Second Life.

5 An unofficial set of rules for how you should behave when communicating online.

9 A chat _____ is a public online space where you can meet people and discuss topics of mutual interest.

words.



2. *For each abbreviation, choose the correct meaning.*

1 IOW

5. TIA

2. IMO

6. BBS

3. ASAP

7. BTW

4. F2F

8. LOL

3. *Complete the online chat by choosing the correct abbreviations.*

Will: How _____ things?

Nick: Good, thanks. _____ ?

Will: Not bad. Need 2 talk _____ 2 discuss the new website.

Nick: OK. _____ or on the phone?

Will: Meet _____ coffee? I need 2 get out of the house! _____
 Nick: _____ ! _____ u at the cafe at 3.30?
 Will: Great. _____.

4. Choose the correct word to complete the list of things that you can do at a typical cybercafé.

1. _____ the Internet
2. _____ the Web
3. _____ telephony
4. _____ gaming
5. _____ coffee
6. chat _____ people

Unit 19. Internet security

1. Complete this product description of an internet security program. Write in the missing words using the mixed-up letters in brackets.

EFG

EFG (1) [inta-riuv] _____ software is the only program you need for complete protection from online threats.

EFG scans all incoming and outgoing email attachments, helping to protect your PC against (2) [rivessu] _____, (3) [romsw] _____, (4) [Torsjan] _____ and other types of (5) [lawmare] _____. A (6) [lawlrife] _____ shields your system from attack by (7) [reschak] _____, while the program can also detect if a website's (8) [igidlat ercteacfiti] _____ is out-of-date or suspicious, allowing you to carry out financial transactions online with total security.

In addition to all of the above, the EFG Professional Edition also comes with email (9) [crynetipon] _____ and the EFG (10) [rawsyep] _____ scanner, helping you to keep your system free of unwanted advertising and (11) [socoiek] _____.

EFG Basic is available to download as (12) [warfeeer] _____ by clicking here. Alternatively, you can purchase the EFG Professional Edition for only £29.95. Click [here](#) to visit our (13) [rescue witebes] _____ or pay using PayPal by clicking [here](#).

2. Complete these extracts from wikis about cybercrime using the past simple form of the verbs in brackets. Then decide what kind of cybercrime each wiki is describing.

1. In July 2001, the online file-sharing network *Napster* (shut) _____ its website following legal action from several major record labels.

2. In late 2006, a computer worm (take) _____ control of hundreds of pages on MySpace and (change) _____ links to direct surfers to websites designed to steal their login details.

3. The first well-known worm (be) _____ the *Internet Worm* of 1988, which (infect) _____ SunOS and VAX BSD systems.

4. A 2007 study (find) _____ that 28% of female internet users had experienced online harassment. In 84% of cases, the incidents (happen) _____ in a chat room.

5. In 2008, author J K Rowling (say) _____ that a company trying to publish an online Harry Potter encyclopedia had ‘stolen her words’.

Unit 20. Graphics and design

Complete the following wikis about graphics by typing in words from the box in the spaces (1–13). Then choose the correct forms of the words (a–m) by choosing from the drop-down menus.

resolution CAD raster 3-D wireframes texturing toolbox vector compositing
rendering computer animation solid modelling filters

Computer graphics

There are two types of computer graphic: (1) _____ graphics, where each pixel is separately defined, and (2) _____ graphics, where mathematical formulae are used to draw lines and shapes. (a) _____ this second type of graphic results in sharper graphics with no loss of (3) _____ when the object is scaled up.

During the late 1970s, personal computers became more powerful, capable of (b) _____ more complex shapes and designs. In the 1980s, artists and graphic designers started (c) _____ personal computers as a serious and (d) _____ new design tool. (4) (Computer Aided Design) _____ allowed designers to make (5) _____ to show the edges of an object, and then add colour and filters to (e) _____ it look more realistic, a process known as (6) _____. They could even add light and shadow, known as (7) _____.

Three-dimensional, or (8) _____, computer graphics became possible in the late 1980s with the invention of powerful SGI computers, which were later used to create some of the first (9) _____ films at the Pixar movie studio. 3-D graphics became more popular in the 1990s, in gaming, multimedia and animation. Computer graphics continue to (f) _____ even more detailed, due to more advanced computers and better (10) _____ software applications – the tool which allows designers to make graphics appear in 3-D.

Web graphics

In the 1990s, internet speeds increased, and web browsers that could view images were released. Websites began to use the GIF format to display small graphics, such as banners and adverts. Nowadays, web browsers can (g) _____ a much wider variety of image formats. Plugins can expand the web browser functions to display animated, interactive and 3-D graphics, contained within file formats such as SWF and X3D.

Most modern web graphics are made with either Adobe Photoshop or Corel Paint Shop Pro. Windows users have access to MS Paint, but many people think the program has insufficient features, with only a very basic (11) _____ of (h) _____ and (i) _____ tools.

Numerous online communities and websites have been created for web graphics artists, but easy-to-use software – especially photo-editing software – means that it's not

only professionals who are (j) _____ graphics online. More and more people now create internet forum signatures and other types of digital art, for example (k) _____ (12) _____ to photos to change their appearance, or (13) _____, which involves (l) _____ several different images to (m) _____ one image.

Unit 21. Desktop publishing

1. Unscramble the letters to make words connected to desktop publishing.

- 1 peag luatyo

p _ _ _ _

l _ _ _ _ _

- 2 nosft

f _ _ _ _

- 3 eidtrc ot latpe

d _ _ _ _ _

_ _

p _ _ _ _ _

- 4 xett lowf

t _ _ _ _

f _ _ _ _

- 5 torceupm-ot-peatl

c _ _ _ _ _ _ _ _

- _ _

- p _ _ _ _ _

2. Choose the correct order of words.

1. He's recently started working for a _____ design company.
2. I need to replace this _____ laptop – it's embarrassing when I meet clients.
3. Let me show you this _____ design program I've started using.
4. We use the _____ technology to make sure that our clients get what they need.
5. Why are you still using that _____ Walkman? You should get an iPod.

3. Complete the letter to a desktop publishing company using the words from the box.

look forward faithfully would grateful currently could writing

Dear Sir/Madam,

I am (1) _____ to enquire about the possibility of doing work experience with your company this summer. I am (2) _____ in my first year of a desktop publishing course at York Technical College and am keen to gain some hands-on experience of the workplace.

I (3) _____ be (4) _____ if you could let me know if you have any openings for work experience candidates this summer. If so, please (5) _____ you also tell me what kinds of task I would be able to do during the placement?

I have enclosed a copy of my CV, and I (6) _____ to hearing from you.

Yours (7) _____,

Anna Bernard

Unit 22. Multimedia

1. Make collocations connected with multimedia.

1. animation
2. CD/DVD
3. interactive
4. sound
5. stereo
6. information
7. streaming
8. digital
9. video
10. virtual

2. Unscramble the letters to complete the definitions from an online dictionary. Write in your words.

1. dheasenpho _____ : device which covers each ear and allows you to listen to audio without other people hearing
2. pertyhtex _____ : text with links to other text or other parts of a document or web page
3. tacvitiyniter _____ : allowing two-way communication between a program and the user
4. pormicnohe _____ : equipment that allows you to record your voice
5. batscew _____ : a concert or other event broadcast over the Internet

3. Complete the following blog entry, which one of your classmates wrote for Exercise 5c on page 113 of the Infotech Student's Book, by writing in terms from 1 and 2 above into spaces 1–10. (You will not need to use all of the terms.) Then use the correct verb forms (a–e).

22nd February

So, what exactly is multimedia? If you (a) _____ on <http://dictionary.cambridge.org>, you'll find the following definition: *using a combination of moving and still pictures, sound, music and words, especially in computers or entertainment*. This definition refers specifically to (1) _____ such as educational CD-ROMs or digital encyclopaedias. It could also be referring to the touch-screen (2) _____ that you sometimes see in banks and estate agents. This type of multimedia commonly uses (3) _____ – links that take you to other pages of the document or program. However, I think multimedia can mean anything from using a (4) _____

to burn MP3s, to listening to an online radio show using (5) _____ (that is, in real time).

As long as you (b) _____ a fast CPU, a good monitor and a (6) _____ (hardware that allows you to play digital audio through your computer), you'll be able to use basic multimedia applications. If you (c) _____ to go a step further, you could invest in a (7) _____ to record yourself, or a digital video camera to make videos in (8) _____. If you wanted to make a whole movie, then you (d) _____ also need (9) _____ software such as Apple's iMovie.

The future of multimedia looks very exciting. If current trends continue, then (10) _____ (e) _____ more and more popular – we could eventually be living most of our lives in these 3-D worlds, interacting with each other just as we do in real life. Just look at the success of *Second Life* ...

Posted by Jordi Pons (Barcelona)

Unit 23. Web design

Complete the conversation between a web designer and his client.

Web Designer (WD): So, could I begin by asking what kind of (1) _____ you're looking for?

Client (C): I'm a vocalist in a band, and I need a bit of an online presence – mainly for promo purposes, you know? Nothing too complex, but I'd like it to have a nice (2) _____ and some eye-catching (3) _____.

WD: Got it. That sounds fairly straightforward. Are you thinking of including (4) _____ and (5) _____ as well? Like having your music and videos directly on the site?

C: Yes, that'd be awesome if people (6) _____ stream content straight from the website.

WD: Sure, that's doable. Visitors might need to have the right (7) _____ installed, but it's usually no trouble. Would you also want to include an (8) _____ ? It's handy for notifying visitors about any fresh updates or content.

C: Definitely. But I'm curious – is this going to cost a lot?

WD: You (9) _____ stress about that. It sounds like something we can build using a program like (10) _____, which helps us move quicker and save money compared to coding everything by hand. We also work with (11) _____ now – they make applying design changes much more efficient across the whole site. When would you like the site to (12) _____ ?

C: Ideally in about four weeks. I've already drafted all of the (13) _____. (14) _____ I just send that over via email?

WD: Yes, that would be perfect. I (15) _____ likely get started early next week.

C: Actually, I should also check in with my bandmates and ask for any images they want featured. Which file types work best for you?

WD: Jpeg or gif are ideal for pictures, and avi or mpeg for any videos. As for audio, it's best if everything (16) _____ in mp3 or wav. Try to avoid Real Audio – not all media players (17) _____ it anymore.

C: Got it.

WD: Once I receive all the materials, I'll format the (18) _____, add visuals and sound files, link the pages, and we'll be ready to publish. Just make sure you (19) _____ the site regularly. I can help maintain it for a small additional fee.

C: That sounds great. Thanks so much.

Unit 24. Program design and computer languages

1. Decide if the following words collocate with code or language.

- | | | |
|----------------|------|----------|
| 1. low-level | code | language |
| 2. machine | code | language |
| 3. object | code | language |
| 4. high-level | code | language |
| 5. programming | code | language |
| 6. markup | code | language |
| 7. source | code | language |
| 8. assembly | code | language |

2. Complete the definitions from an online dictionary by writing in terms from

Exercise 1. Then use the correct verb forms.

1. _____ : general term for a formal language used _____ instructions that can _____ translated into machine language and then executed by a computer.
2. _____ : a set of instructions that a computer can _____ directly; it is expressed in binary code and is very difficult _____.
3. _____ : a type of low-level language that uses abbreviations such as ADD, SUB and MPY _____ instructions; then translated into machine code using an assembler.
4. _____ : a language such as an assembly language, which does not _____ a compiler or interpreter.
5. _____ : developed _____ programs easier _____ ; for example, FORTRAN, BASIC, C and Java.
6. _____ : the original work of a programmer, which must _____ translated by a compiler.
7. _____ : instructions that a compiler _____ from source code written in a higher-level language, for example C++.
8. _____ : a language for _____ web documents.

3. Complete these steps in the writing of a program using the words from the box.

debug documentation flowchart problem compile instructions

1. Understand the _____ and plan a solution.
2. Make a _____, which shows the steps of the program.
3. Write _____ in a programming language.

4. _____ the program – that is, turn it into machine code.
5. Test for errors and _____ the program.
6. Prepare _____, for example the instruction manual.

Unit 25. Java

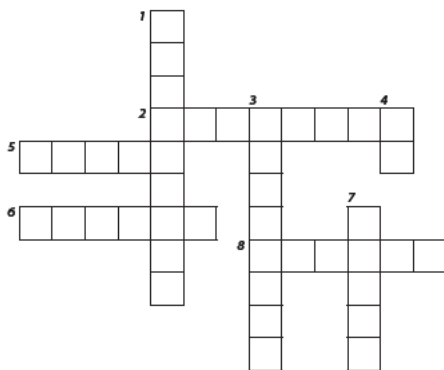
1. Complete the crossword.

ACROSS

2. If a piece of software can run on any OS, it is _____ independent.
5. A competitor to Java, developed by Adobe.
6. Java and C++ are both examples of _____-oriented languages.
8. The name of a Java application which runs automatically on a web page.

DOWN

1. Java is used to create _____ objects (bar charts, diagrams, etc.) which are more interactive than the standard versions.
3. Java is multi-_____, which means that a Java program can have multiple parts operating at the same time; this saves on CPU power.
4. Java _____ was created for use on mobile devices.
7. When Java source code is compiled, it is converted into bytecode, with a file extension _____.



2. Two of your classmates, Paula and Antonio, are discussing their experience with computers for Exercise 4 on page 128 of the Infotech Student's Book. Complete this part of their conversation.

Paula: So, Antonio, let's look at the first question. When did you first (1) _____ a computer game?

Antonio: Wow, it's so long ago! I think I probably (2) _____ my first game when I (3) _____ 8 or 9. I can't remember what it was (4) _____, though. OK, a question for you now, Paula. How old were you when you (5) _____ your first computer lesson at school?

Paula: Mmm ... Well, I (6) _____ learning about computers properly three years ago. But I've (7) _____ computers nearly all my life – for as long as I can remember! I

didn't use the Internet until I was about 12, though. My parents wouldn't allow it. They were (8) _____ about safety, that kind of thing.

Antonio: Mine, too. I didn't (9) _____ my first chat online until I was about 13, I think. And even then my parents (10) _____ everything I did! I (11) _____ them to let me have my privacy after a few months, though.

3. Choose the correct pronunciation of the -ed endings of the following verbs.

- | | |
|--------------|--------------|
| 1. played | \t\ \d\ \Id\ |
| 2. called | \t\ \d\ \Id\ |
| 3. started | \t\ \d\ \Id\ |
| 4. used | \t\ \d\ \Id\ |
| 5. worried | \t\ \d\ \Id\ |
| 6. watched | \t\ \d\ \Id\ |
| 7. persuaded | \t\ \d\ \Id\ |

Unit 26. Jobs in ICT

1 Choose the correct word to make common jobs in ICT.

- | | | |
|----------------------|---------------|------------|
| 1. software | operator | engineer |
| 2. computer security | operator | specialist |
| 3. blog | administrator | engineer |
| 4. help desk | specialist | technician |
| 5. DTP | operator | engineer |
| 6. hardware | operator | engineer |
| 7. network | administrator | operator |

2. David is having an interview for a job as a webmaster. Put in the correct words.

Interviewer: So why (1) _____ for this position?

David: Well, (2) _____ the last three years I (3) _____ in an interesting, but very small, company, and I now feel ready to move on to a bigger challenge. I'd welcome the opportunity to continue my career at a company such as yours.

Interviewer: Right. And can you describe what your responsibilities are at – what's your current company called again? Ah, yes, at *Intertech*?

David: Of course. Well, I (4) _____ working there three years (5) _____, as I (6) _____, and (7) _____ July 2007 I (8) _____ responsible for one aspect of the company's online presence – specifically, the online catalogue. However, I was then promoted and put in charge of the design and maintenance of the entire website. In January 2008, I (9) _____ to implement a new e-commerce system, which allows people to buy directly from the catalogue using 'one-click' ordering. It (10) _____ very successful so far.

Interviewer: That's very impressive. What about foreign languages? Your English is obviously very good, but do you speak any other languages?

David: Well, French – my mother tongue – obviously. I also (11) _____ some time in Spain five years (12) _____ as part of my degree, so I'd say I have intermediate Spanish. I (13) _____ it much recently, though.

Interviewer: Well, it is hard to find the time, isn't it? OK, just one more thing. (14) _____ ever had experience of people management?

David: Yes, absolutely. At *Intertech* I'm in charge of one member of staff – a web editor. I've (15) _____ had any problems with the management side of my role; in fact, I really enjoy it.

Interview: OK, well that's good news. Well, we need to have a think about it, but we'll let you know ASAP.

David: Thank you for seeing me today. I look forward to hearing from you soon.

Unit 27. Communication systems

1. Which ICT device or system is being used in the examples below?

1. **A:** This sounds great, doesn't it? The signal's really clear.

B: Can you still get all of your favourite stations?

2. **A:** This is so frustrating! Why can't he just email me instead? Has he not heard of modern technology?

B: I know, I know. But he doesn't have the image in digital format, and he needs you to see what it looks like. This is the quickest way.

3. In 200 metres, turn right and then left.

4. **A:** Hello. Are you happy with your current gas and electricity supplier? If not, we can save you up to £100 a year –

B: No, thanks! I don't talk to telemarketers.

5. 160 channels in widescreen high-definition, and there's *still* nothing to watch!

6. Not another work email. It's Saturday morning! I need to turn this thing off!

7. **A:** Do you know what the football results were? The Internet's not working.

B: Here, let's have a look. Pass me the remote control.

2. Complete the following blog entry, which one of your classmates wrote for Exercise 4d on page 139 of the Infotech Student's Book, by writing in the passive form of the verbs in brackets.

23rd February

We had an interesting discussion about mobile phones in class today. Opinion (1) _____ (divide) about whether they're a good thing or not. Despite the fact that mobile phones (2) _____ (invent) to make our lives more convenient (supposedly!), it's clear that we've become totally dependent on them. Most of the class even use them to watch videos or listen to music.

They're expensive, too. Most people said they spent over £20 a month on their phone, despite the fact that free calls and text messages (3) _____ (include) in most tariffs these days. Part of the problem is that MMS messages aren't free, and many calls (4) _____ (make) during the day, when the free minutes don't count.

There was also some worry about the potential health problems of mobile phones. Despite all the warnings, mobile phones (5) _____ (use) by children as young as

five or six these days! The really worrying thing is that the true damage done by mobile phones (6) _____ (not know) until we're all much older. By then, it'll be too late! No one was suggesting that they should (7) _____ (ban), but clearly more research needs to (8) _____ (do).

Posted by Gemma H

3. Unscramble the letters to make features of mobile phones. Write the words in.

1. MIS crad: _____
2. DCL neecsr: _____
3. tubil-ni meraca: _____
4. cagalhnebe cepfatale: _____
5. peykad: _____
6. notegrin: _____
7. wileress trsuppo: _____

Unit 28. Networks

1. What do the following abbreviations stand for?

- | | | |
|--------|----------------------|---------------------------|
| 1. LAN | local area network | large area network |
| 2. PAN | private area network | personal area network |
| 3. MAN | managed area network | metropolitan area network |
| 4. WAN | wide area network | wireless area network |

2. Look at these four extracts from a computing textbook. Which criteria is the writer using to classify the networks he's describing?

1. The most common examples of networks are LANs, PANs, MANs and WANs.
2. There are several languages that the computers on a network can use to communicate with each other. For example, the Internet uses TCP/IP.
3. A client-server network differs from a peer-to-peer network in several ways, the most important being that on a peer-to-peer network, there is no need for a separate computer to act as a server.
4. The most common layouts for networks are bus, star and ring.

3. Complete the presentation describing the network on page 144 of the Infotech Student's Book by writing in words from the box.

central computer made up cables consists of log on modem file sharing type
in satellite wired telephone lines set up look for fibre optic cable look at

Clare: If you (1) _____ the diagram, you can see that it represents a wide area network, or WAN, connecting two networks via (2) _____. The two networks are probably two offices of the same company.

Chris: The (3) _____ network on the right – the one in Barcelona – is (4) _____ of a number of PCs connected by (5) _____. You'll be able to see the (6) _____ there, which acts as a file server, allowing (7) _____ between the other PCs on the network. In order to access files on the server, you would probably need to (8) _____ a username and password.

Clare: That's right, Chris. In contrast, the Los Angeles network (9) _____ a wireless router, which links all of the hardware devices without the need for cables. Workers using PDAs or laptops, like those shown in the diagram, would be able to (10) _____ to the network if they had wireless capabilities. Interestingly, while in Barcelona the (11) _____ is linked to the dish aerial with a (12) _____, in Los Angeles they're using regular (13) _____. This may mean slower speeds for the Los Angeles office.

Chris: It looks like this network was (14) _____ to allow the two offices to (15) _____ and share information and resources on each other's systems, and it's a sensible network solution for a company with offices in several different locations.

Unit 29. Video games

1. Make game platforms and game genres.

1. _____ phone _____
2. _____ online games
3. video _____
4. _____ device
5. 3G _____

2. Look at the customers' questions asked in a computer and electronics shop. Which type of game is each customer asking about?

1 A: Will this work with Windows XP?

B: It will, but it'll run faster if you have Windows Vista.

2 The graphics are incredible, considering how small the screen is. How much is it for the Nintendo version?

3 A: Is there anything else I need in order to play this game?

B: No, you just use the games controller that came with your machine.

4 A: And do I need an internet connection to play this?

B: Ideally, yes. The whole point of games like this is to play with people from all over the world.

5 A: Is this the only game that comes with it?

B: Yes, but you can download other Java-based games for free. Just ask your network about it.

3. Complete this extract from the interview with Matt Robinson (see Infotech Student's Book page 148) using correct adjective or adverb.

Interviewer: So which game genres do you think will be the most popular in the future?

Matt: I think console games will play a (1) _____ part in shaping the future of games, while (2) _____ helping to attract a (3) _____ audience. Games like *Wii Sports* have already proven (4) _____ popular, just by emulating real-world games such as tennis and bowling, and making them as (5) _____ to play as their

real-life counterparts. You (6) _____ move the controller around. Of course, the more (7) _____ video game genres, such as *Halo* and *Burnout*, will continue to sell just as (8) _____ as they always have. (9) _____, there's online gaming. As connection speeds increase, and hardware improves, so does the potential to create (10) _____ living online worlds, much like you see in *Second Life*, for example.

Unit 30. New technologies

Anthony Then and Beth are discussing a magazine article about new technologies. Complete their conversation using the correct verb forms (a–l). Decide what type of new technology they are discussing in each part of the conversation (1–4).

(1) _____

Anthony: Have you seen this article in the *New Scientist*? It's all about new technologies. It's fascinating.

Beth: Go on, then. How (a) _____?

Anthony: It's predicting that pretty soon scientists (b) _____ to be able to make devices like computers and robots using single cells and atoms.

Beth: Wow. To do what?

Anthony: Well, they're talking about being able to treat diseases at a cellular level by injecting one of these miniature robots, or using the technology to make new, more flexible materials from carbon atoms.

Beth: What (c) _____ next?

(2) _____

Anthony: Well, it's funny you should ask. The article goes on to talk about things like robotics and androids.

Beth: Androids?

Anthony: Yeah. It says that by 2050, scientists (d) _____ androids that look like humans and have the capacity to interact like humans.

Beth: I don't think I like that idea. I think it (e) _____ more trouble than it's worth. Imagine everything that could go wrong!

(3) _____

Anthony: OK, I think you (f) _____ this next one more. How about having a computer that controlled all of the appliances and electronic equipment in our house? It would save money because the house would know when you weren't home, and it'd make sure everything was turned off.

Beth: It (g) _____ expensive, though, I imagine.

Anthony: Who knows how much things (h) _____ in future! Perhaps (i) on the Moon by then!

(4) _____

Beth: What does that last bit of the article say? The bit with the photo of that small microchip?

Anthony: Hang on a minute, I (j) _____ look. Umm ... it's talking about a type of technology that uses radio waves and these things called 'tags' to identify people.

Beth: People? So they could embed one of these tags in me?

Anthony: Well, in theory, yes. But they're mainly used on animals – so you can track your pet if they vanish – and on products in shops – so that they can stop people stealing.

Beth: Mmm. It still sounds suspicious to me.

Anthony: Well, it does say here that some organizations are worried about privacy issues.

Beth: I do worry that in the future, governments and big corporations (k) _____ all of these new types of technology to keep us under control.

Anthony: You worry too much. Here, you finish the article. I (l) _____ us a nice cup of tea.



IDIOMS FOR THE FUTURE EXPERTS

- 1 **Break the code** – зрозуміти або знайти рішення складного алгоритму чи проблеми.
- 2 **In the loop** – бути в курсі поточних справ або обговорень у команді.
- 3 **Hit the ground running** – почати працювати ефективно з самого початку.

- 4 **Burn the midnight oil** – працювати допізна, часто для завершення проекту.
- 5 **Throw a wrench in the works** – створити проблеми або перешкоди в процесі.
- 6 **Back to the drawing board** – повернутися до початкової стадії проекту після невдачі.
- 7 **Push the envelope** – експериментувати з новими технологіями або ідеями.
- 8 **A bug in the system** – помилка в програмному забезпеченні.
- 9 **On the same page** – мати спільне розуміння або бачення ситуації в команді.
- 10 **Cutting-edge technology** – новітня технологія, яка є передовою у своїй галузі.
- 11 **Get the ball rolling** – почати процес або проект.
- 12 **In the weeds** – бути зануреним у деталі, що ускладнює бачення загальної картини.
- 13 **Nip it in the bud** – зупинити проблему на ранній стадії.
- 14 **Think outside the box** – мислити креативно, не за стандартними схемами.
- 15 **Go the extra mile** – докласти додаткових зусиль для досягнення кращого результату.
- 16 **The ball is in your court** – тепер твоя черга приймати рішення або діяти.
- 17 **Hit a snag** – зіткнутися з проблемою або затримкою під час роботи.
- 18 **Light at the end of the tunnel** – знак того, що важка робота наближається до завершення.
- 19 **Keep your eye on the ball** – залишатися зосередженим на важливих завданнях.
- 20 **All hands on deck** – ситуація, коли всі повинні брати участь у вирішенні проблеми.
- 21 **Chasing ghosts** – витрачати час на вирішення неіснуючих або незначних проблем.
- 22 **Face the music** – прийняти наслідки своїх дій.
- 23 **Get your ducks in a row** – організувати все перед початком роботи.
- 24 **Keep it simple, stupid (KISS)** – принцип, що наголошує на простоті рішень.
- 25 **Low-hanging fruit** – легкі завдання, які можна швидко виконати.

- 26 **Run it up the flagpole** – представити ідею для оцінки та відгуків.
- 27 **Put all your eggs in one basket** – ризикувати, зосереджуючи всі ресурси на одному проєкті.
- 28 **Read between the lines** – зрозуміти приховане значення.
- 29 **The proof is in the pudding** – результат покаже якість роботи.
- 30 **Reinvent the wheel** – робити те, що вже було зроблено раніше, витрачаючи час даремно.
- 31 **On the back burner** – поставити завдання на паузу або відкласти його.
- 32 **Break new ground** – відкривати нові шляхи або досягати нових технологічних вершин.
- 33 **Drop the ball** – допустити помилку або забути про важливе завдання.
- 34 **In over your head** – бути занадто зануреним у складну ситуацію.
- 35 **Out of the box** – нестандартне рішення або мислення.
- 36 **Under the hood** – те, що відбувається всередині системи, непомітне для користувача.
- 37 **A silver bullet** – просте рішення складної проблеми (часто у вигляді ілюзії).
- 38 **Hard to crack** – складна задача, яку важко вирішити.
- 39 **Rocket science** – щось дуже складне або технічно важке.
- 40 **Plug and play** – система, яку можна встановити і одразу використовувати без налаштувань.
- 41 **Take it offline** – обговорити питання поза основною зустріччю або публічною дискусією.
- 42 **Dead in the water** – проєкт або задача, яка не просувається або втратила перспективу.
- 43 **Hit the nail on the head** – точно вирішити проблему або зробити правильне зауваження.
- 44 **Garbage in, garbage out (GIGO)** – якість вихідних даних залежить від якості вхідних.
- 45 **Bandwidth** – здатність виконувати кілька завдань одночасно (або пропускна здатність системи).

- 46 **Eat your own dog food** – використовувати власну продукцію для демонстрації її якості.
- 47 **Smoke and mirrors** – технічні трюки або ефекти, які приховують недоліки продукту.
- 48 **Patch things up** – тимчасово вирішити проблему або баг, часто не остаточно.
- 49 **Blue screen of death (BSOD)** – критична помилка, яка зупиняє роботу операційної системи.
- 50 **Mission-critical** – критично важливе завдання або функція, без якої система не може працювати.

GLOSSARY OF COMPUTING WORDS AND ABBREVIATIONS

A

Account – обліковий запис

Avatar – Аватар (графічне зображення, що представляє реальну людину у кіберпросторі)

API (Application Programming Interface) – програмний інтерфейс, який дозволяє різним програмам взаємодіяти одна з одною, визначаючи способи обміну даними.

Algorithm – алгоритм, чіткий набір інструкцій для виконання певної задачі або обчислення.

Artificial Intelligence (AI) – штучний інтелект, галузь комп'ютерних наук, що досліджує можливість створення машин, здатних виконувати задачі, що вимагають інтелекту.

Agile – гнучка методологія управління проектами, що акцентує увагу на гнучкості, співпраці та швидкому реагуванні на зміни.

Architecture – архітектура, загальний план або структура системи, що описує її компоненти та взаємозв'язки.

Authentication – аутентифікація, процес перевірки особи або системи, що намагається отримати доступ до ресурсу.

Authorization – авторизація, процес надання прав доступу до ресурсів після успішної аутентифікації.

Automation – автоматизація, процес використання технологій для виконання задач без людського втручання.

Array – масив, структура даних, що зберігає колекцію елементів одного типу.

Artificial Neural Network (ANN) – штучна нейронна мережа, модель обчислень, натхненна структурою та функціями біологічних нейронних мереж.

Access Control – контроль доступу, методи обмеження доступу до систем, даних або ресурсів.

Agile Development – гнучка розробка, методологія, що передбачає ітеративний процес розробки програмного забезпечення.

Anomaly Detection – виявлення аномалій, процес виявлення незвичних або підозрілих патернів у даних.

App (Application) – програма, програмне забезпечення, яке виконує певну функцію на комп'ютері або мобільному пристрої.

ASP.NET – фреймворк для розробки веб-додатків, створений компанією Microsoft, який дозволяє створювати динамічні веб-сайти та служби.

В

Backend – серверна частина веб-додатка, що відповідає за обробку запитів, управління базами даних і логіку програми.

Big Data – великі дані, обсяги інформації, які занадто великі або складні для обробки традиційними методами.

Blockchain – технологія, що забезпечує безпечне зберігання та передачу даних у дистрибутивному реєстрі.

Browser – веб-браузер, програмне забезпечення для перегляду веб-сторінок в Інтернеті.

Bug – помилка або дефект у програмному забезпеченні, який призводить до неналежної роботи програми.

Bootstrap – фреймворк для створення адаптивних веб-дизайнів, що забезпечує набори готових компонентів та стилів.

BI (Business Intelligence) – бізнес-аналітика, процес збору, аналізу та представлення бізнес-даних для прийняття рішень.

Buffer – буфер, область пам'яті, що використовується для тимчасового зберігання даних під час їх обробки.

Bash – Bourne Again SHell, командна оболонка для Unix-подібних операційних систем, що дозволяє виконувати команди в текстовому режимі.

Browser Compatibility – сумісність браузера, здатність веб-додатка або веб-сайту працювати в різних браузерах без помилок.

Byte – байт, одиниця вимірювання інформації, що складається з 8 бітів.

Business Logic – бізнес-логіка, правила та алгоритми, які визначають, як бізнес-операції виконуються в програмному забезпеченні.

Bootstrap – методологія, що використовується для створення системи, яка може самостійно завантажуватися або ініціювати свою роботу.

Burnout – вигорання, стан фізичної і емоційної втоми, яке може виникнути у розробників через надмірне навантаження.

Backup – резервна копія, копія даних, створена для захисту інформації в разі втрати або пошкодження основних даних.



Cloud Computing – хмарні обчислення, технологія, що дозволяє зберігати та обробляти дані на віддалених серверах, доступних через Інтернет.

Containerization – контейнеризація, технологія, яка дозволяє упаковувати програмне забезпечення та його залежності в контейнери для забезпечення портативності та ізоляції.

CI/CD (Continuous Integration / Continuous Deployment) – безперервна інтеграція та безперервне розгортання, практики автоматизації, які дозволяють часті оновлення програмного забезпечення.

Cache – кеш, тимчасове сховище даних, що використовується для зменшення часу доступу до інформації та покращення продуктивності системи.

Cybersecurity – кібербезпека, захист комп'ютерних систем і мереж від крадіжки, пошкодження або несанкціонованого доступу.

Client-Server Architecture – архітектура "клієнт-сервер", модель обробки даних, в якій клієнт запитує ресурси від сервера.

Cryptography – криптографія, наука про шифрування та захист інформації.

Compiler – компілятор, програма, яка перетворює код, написаний на високорівневій мові програмування, у машинний код.

Database Management System (DBMS) – система управління базами даних, програмне забезпечення для створення та управління базами даних.

CSS (Cascading Style Sheets) – каскадні таблиці стилів, мова, що використовується для стилізації веб-сторінок.

Continuous Testing – безперервне тестування, практика тестування програмного забезпечення в процесі розробки.

Cross-platform – крос-платформний, описує програмне забезпечення, яке може працювати на різних операційних системах або пристроях.

Content Management System (CMS) – система управління контентом, платформа для створення та управління цифровим контентом, часто використовується для веб-сайтів.

Command Line Interface (CLI) – інтерфейс командного рядка, текстовий інтерфейс для введення команд і управління системою.

Checksum – контрольна сума, значення, яке використовується для перевірки цілісності даних, щоб виявити помилки або зміни.

D

DVD (- ROM) – Цифровий універсальний диск, тільки для читання

DVD (+RW) – Цифровий універсальний диск, що використовує або - або + для читання та запису даних

Database – база даних, організована структура для зберігання, управління та отримання інформації.

Data – дані, факти або інформація, які можуть бути оброблені комп'ютерами.

Debugging – налагодження, процес виявлення і виправлення помилок у програмному забезпеченні.

Deployment – розгортання, процес перенесення програми або системи з розробницького середовища в продуктивне.

DDoS (Distributed Denial of Service) – атака, яка намагається зробити ресурс недоступним шляхом перевантаження його запитами з багатьох джерел.

Domain – домен, частина адреси веб-сайту, що визначає його унікальність в Інтернеті.

Docker – платформа для створення, розгортання та управління контейнерами, яка дозволяє ізолювати програми від середовища виконання.

Data Mining – видобуток даних, процес аналізу великих обсягів інформації для виявлення корисних шаблонів та зв'язків.

DHTML (Dynamic HTML) – динамічна HTML, технологія, яка дозволяє створювати інтерактивні та анімовані веб-сторінки.

DSL (Domain-Specific Language) – мова, що спеціалізується на певній галузі, з метою полегшення розробки в цій області.

DevOps – методологія, яка об'єднує розробку програмного забезпечення (Dev) і операційні процеси (Ops) для покращення співпраці та швидкості розробки.

Distributed System – розподілена система, комп'ютерна система, в якій компоненти, що знаходяться на різних мережевих пристроях, працюють разом як єдине ціле.

Dependency – залежність, зв'язок між двома компонентами, при якому один компонент вимагає іншого для правильного функціонування.

Data Warehouse – сховище даних, централізоване репозиторій, що зберігає дані з різних джерел для аналізу та звітності.

DPI (Deep Packet Inspection) – глибока інспекція пакетів, технологія аналізу даних, що передаються в мережі для виявлення шкідливих дій або контролю трафіку.

Е

Encryption – шифрування, процес перетворення даних у формат, який неможливо прочитати без відповідного ключа.

Entity – сутність, об'єкт або елемент даних, що має свою унікальну ідентичність у системі, часто використовується в базах даних.

Endpoint – точка доступу в мережі або API, через яку клієнт може взаємодіяти з сервісом.

Error Handling – обробка помилок, механізм управління помилками, що виникають під час виконання програми.

Environment – середовище, в якому виконується програма або система, може бути локальним, тестовим або продуктивним.

Executable – виконуваний файл, програма, яку можна запустити на комп'ютері.

E-commerce – електронна комерція, процес купівлі та продажу товарів або послуг через Інтернет.

ETL (Extract, Transform, Load) – процес обробки даних, що включає вилучення, перетворення та завантаження даних у цільову систему.

Embedded Systems – вбудовані системи, комп'ютери, інтегровані в інші пристрої для виконання специфічних функцій.

Extensible Markup Language (XML) – мова розмітки, що використовується для зберігання та обміну структурованими даними.

Event-Driven Architecture – архітектурний стиль, заснований на обробці подій, які генеруються системами або користувачами.

Elasticity – еластичність, здатність системи автоматично масштабувати ресурси вгору або вниз відповідно до змінних навантажень.

Edge Computing – крайові обчислення, концепція, при якій обробка даних виконується ближче до джерела їх отримання для зменшення затримки.

Email – електронна пошта, система обміну повідомленнями через Інтернет.

ERP (Enterprise Resource Planning) – система управління ресурсами підприємства, що інтегрує всі аспекти бізнесу в єдину платформу

F

Framework – набір інструментів і бібліотек, що забезпечує структуру для розробки програмного забезпечення.

Frontend – частина веб-додатка, яка відповідає за інтерфейс користувача та взаємодію з ним (клієнтська частина).

Backend – частина веб-додатка, що обробляє запити, зберігає дані та взаємодіє з сервером (серверна частина).

Firewall – система безпеки, що контролює вхідний і вихідний трафік в мережі на основі заданих правил.

Full-Stack Developer – розробник, який має знання та навички як в frontend-, так і в backend-розробці.

Function – функція, блок коду, що виконує певну задачу і може бути викликаний в різних частинах програми.

Failover – процес автоматичного переключення на резервну систему або компонент у разі відмови основної системи.

Firmware – програмне забезпечення, яке є частиною апаратного забезпечення та відповідає за управління його функціями.

Flask – мікрофреймворк для веб-розробки на мові Python, відомий своєю простотою та гнучкістю.

FTP (File Transfer Protocol) – протокол для передачі файлів між комп'ютерами в мережі.

Fuzzy Logic – нечітка логіка, підхід до обробки даних, що використовує значення, які не є чітко визначеними, для моделювання невизначеності.

Feature – функціонал або характеристика програмного забезпечення, що додає певну цінність для користувача.

Functionality – функціональність, можливості програмного забезпечення або системи, які визначають, що вона може робити.

Framework-as-a-Service (FaaS) – модель хмарних обчислень, яка дозволяє розробникам створювати та розгортати програми без управління інфраструктурою.

First In, First Out (FIFO) – принцип управління чергами, при якому елементи обробляються в порядку їх надходження.



Gnome — Гном (може також означати середовище робочого столу в Linux)

Google — Google (залишається незмінним)

GPRS — GPRS (залишається незмінним, може означати "General Packet Radio Service")

GPS — GPS (залишається незмінним, може означати "Global Positioning System") – глобальна позиційна система

Graphic equalizer — Графічний еквайзер

Grep — команда для пошуку в текстових файлах

GUI (Graphical User Interface) - Графічний інтерфейс користувача

Git – система контролю версій, яка дозволяє розробникам відстежувати зміни в коді та співпрацювати над проектами.

GitHub – платформа для хостинга Git-репозиторіїв, яка надає інструменти для співпраці, управління проектами та контролю версій.

GUI (Graphical User Interface) – графічний інтерфейс користувача, який дозволяє взаємодіяти з комп'ютерними програмами за допомогою графічних елементів (кнопок, вікон тощо).

Golang (Go) – мова програмування, розроблена Google, відома своєю простотою, продуктивністю та підтримкою паралельного програмування.

GCP (Google Cloud Platform) – платформа хмарних обчислень від Google, що надає різноманітні сервіси для зберігання, обробки даних та розгортання додатків.

GDPR (General Data Protection Regulation) – загальний регламент захисту даних, законодавство ЄС, яке регулює обробку особистих даних.

Game Development – розробка ігор, процес створення відеоігор, що включає програмування, графіку, звук і дизайн.

Gantt Chart – діаграма Ганта, інструмент для планування проектів, що ілюструє графік виконання завдань.

Garbage Collection – автоматичний процес управління пам'яттю, що звільняє не використовувану пам'ять для запобігання витоків пам'яті.

GPU (Graphics Processing Unit) – графічний процесор, що використовується для обробки графіки і відео, а також для паралельних обчислень.

Grid Computing – мережеві обчислення, модель розподілених обчислень, яка використовує ресурси комп'ютерів у мережі для вирішення складних задач.

Gateway – шлюз, пристрій або програмне забезпечення, що забезпечує з'єднання між різними мережами або системами.

Globalization – глобалізація, процес адаптації програмного забезпечення для підтримки різних мов і культур.

Graph Database – графова база даних, що зберігає дані у вигляді графів з вузлами та ребрами, що дозволяє легко моделювати зв'язки між даними.

Gzip – алгоритм стиснення, який використовується для зменшення розміру файлів і швидшої передачі даних через мережу.

Н

HTML (Hypertext Markup Language) – мова розмітки, що використовується для створення веб-сторінок.

HTTP (Hypertext Transfer Protocol) – протокол для передачі гіпертексту на вебу, що використовується для завантаження веб-сторінок.

HTTPS (Hypertext Transfer Protocol Secure) – захищена версія HTTP, що забезпечує шифрування даних для безпечної передачі інформації.

Hashing – процес перетворення вхідних даних у фіксовану довжину виходу (хеш) для забезпечення цілісності даних.

Hardware – апаратне забезпечення, фізичні компоненти комп'ютера або пристрою.

Hypervisor – програмне забезпечення, яке дозволяє створювати та запускати віртуальні машини на фізичному сервері.

Hacking – процес несанкціонованого доступу до комп'ютерних систем або мереж з метою отримання інформації або внесення змін.

Heuristic – евристичний метод, використовуваний для вирішення проблем або ухвалення рішень, заснований на досвіді та практичних рекомендаціях.

HTTP/2 – оновлена версія HTTP, що покращує швидкість та ефективність завантаження веб-сторінок.

Human-Computer Interaction (HCI) – взаємодія людини з комп'ютером, область досліджень, що вивчає, як люди використовують комп'ютерні системи.

Hackathon – захід, на якому розробники, дизайнери та інші фахівці працюють разом протягом короткого часу для створення нових проєктів або рішень.

Help Desk – служба підтримки, що надає допомогу користувачам у вирішенні технічних проблем.

Hybrid Cloud – гібридна хмара, комбінація публічних та приватних хмарних рішень, що дозволяє інтегрувати та переміщати дані між ними.

High Availability – висока доступність, концепція, що забезпечує безперервну роботу системи навіть у разі відмови окремих компонентів.

IPv6 (Internet Protocol version 6) – нова версія IP-протоколу, що використовує 128-бітні адреси для забезпечення великої кількості унікальних адрес.

I

Internet – глобальна мережа, що з'єднує мільйони комп'ютерів і пристроїв для обміну даними.

IP Address (Internet Protocol Address) – унікальна адреса, що ідентифікує пристрій у мережі, використовується для маршрутизації даних.

IoT (Internet of Things) – Інтернет речей, концепція підключення фізичних пристроїв до Інтернету для збору та обміну даними.

IDE (Integrated Development Environment) – інтегроване середовище розробки, яке поєднує інструменти для програмування, налагодження та тестування.

HTTP (Hypertext Transfer Protocol) – протокол для передачі гіпертексту на вебу, що використовується для завантаження веб-сторінок.

HTTPS (Hypertext Transfer Protocol Secure) – захищена версія HTTP, що забезпечує шифрування даних для безпечної передачі інформації.

Inheritance – успадкування, концепція в об'єктно-орієнтованому програмуванні, яка дозволяє одному класу успадковувати властивості та методи іншого.

Interface – інтерфейс, набір методів, які клас повинен реалізувати, що забезпечує взаємодію між об'єктами.

IPv4 (Internet Protocol version 4) – версія IP-протоколу, яка використовує 32-бітні адреси.

IPv6 (Internet Protocol version 6) – нова версія IP-протоколу, яка використовує 128-бітні адреси для забезпечення великої кількості унікальних адрес.

Intrusion Detection System (IDS) – система виявлення вторгнень, що моніторить мережеву активність для виявлення підозрілих дій.

Input/Output (I/O) – введення/виведення, операції, що залучають взаємодію між комп'ютером і зовнішніми пристроями або користувачами.

IPSec (Internet Protocol Security) – набір протоколів для забезпечення безпеки IP-з'єднань шляхом шифрування та аутентифікації.

Instance – екземпляр, об'єкт, створений з класу в об'єктно-орієнтованому програмуванні.

Information Security – інформаційна безпека, практика захисту інформації від несанкціонованого доступу та зловмисних дій.

J

Java – популярна мова програмування, що використовується для розробки веб-додатків, мобільних додатків і серверних рішень.

JavaScript – мова програмування, що використовується для створення інтерактивності на веб-сторінках.

JSON (JavaScript Object Notation) – легкий формат обміну даними, зручний для людей і машин, часто використовується для передачі даних між сервером і клієнтом.

JDBC (Java Database Connectivity) – API для підключення до баз даних з Java-додатків.

JVM (Java Virtual Machine) – віртуальна машина, що виконує Java-програми, перетворюючи байт-код у машинний код.

JUnit – фреймворк для написання тестів на мові Java, що підтримує модульне тестування.

Jenkins – система безперервної інтеграції та доставки (CI/CD), яка автоматизує процеси розробки програмного забезпечення.

JIRA – система управління проектами та відстеження помилок, що використовується командами для планування, контролю та звітності.

Jupyter Notebook – інтерактивне середовище для програмування, що дозволяє писати та виконувати код на Python та інших мовах у формі нотаток.

Java EE (Enterprise Edition) – версія Java, що включає специфікації для корпоративних додатків, таких як сервлети і JavaServer Pages (JSP).

Jar (Java Archive) – файл, що містить зібрані Java-класи та ресурси, які можна використовувати як бібліотеки або для розгортання додатків.

JAX-RS (Java API for RESTful Web Services) – API для створення RESTful веб-сервісів на Java.

JSP (JavaServer Pages) – технологія для створення динамічних веб-сторінок, що поєднує HTML та Java.

JIT (Just-In-Time Compilation) – техніка компіляції, яка дозволяє компілювати байт-код Java в машинний код під час виконання програми для покращення продуктивності.

JupyterLab – розширене інтерактивне середовище для роботи з Jupyter Notebook, що надає більш потужні можливості для аналізу даних і наукових досліджень.

К

Kernel – ядро, центральна частина операційної системи, що управляє апаратними ресурсами та забезпечує взаємодію між програмами та апаратним забезпеченням.

Kubernetes – система оркестрації контейнерів, що автоматизує розгортання, масштабування та управління контейнеризованими додатками.

Keylogger – шкідливе програмне забезпечення, яке записує натискання клавіш на клавіатурі без відома користувача.

KVM (Kernel-based Virtual Machine) – технологія віртуалізації для Linux, що дозволяє запускати віртуальні машини на базі ядра Linux.

Kotlin – мова програмування, що використовується для розробки додатків на платформі Android і сумісна з Java.

KPI (Key Performance Indicator) – ключовий показник ефективності, метрика, що використовується для оцінки успішності досягнення цілей.

Kafka – розподілена система обробки потоків даних, що забезпечує високошвидкісний обмін повідомленнями.

Key Management – управління ключами, процес створення, зберігання, використання та знищення криптографічних ключів.

Knowledge Base – база знань, централізоване сховище інформації, яке використовується для підтримки прийняття рішень і обслуговування клієнтів.

KNN (K-Nearest Neighbors) – алгоритм машинного навчання, який використовує відстані до найближчих сусідів для класифікації або регресії.

Knockout – JavaScript бібліотека для побудови веб-додатків, яка використовує патерн MVVM (Model-View-ViewModel).

Kubernetes Pod – базова одиниця розгортання в Kubernetes, що складається з одного або кількох контейнерів.

K8s – скорочене позначення для Kubernetes, де "8" означає кількість літер між "K" та "s".

KPI Dashboard – інформаційна панель, що відображає ключові показники ефективності візуально для швидкого аналізу.

Knapsack Problem – класична задача оптимізації в комп'ютерних науках, що стосується вибору елементів для максимізації значення при обмеженій вазі.

L

Linux – відкритий операційна система, заснована на ядрі Linux, популярна серед розробників та серверних адміністраторів.

Load Balancer – балансувальник навантаження, пристрій або програма, що розподіляє навантаження між кількома серверами або ресурсами.

Latency – затримка, час, необхідний для передачі даних з одного місця в інше в мережі.

Library – бібліотека, набір попередньо написаних функцій або класів, які можна використовувати в програмуванні.

Loop – цикл, структура програмування, що дозволяє повторювати виконання коду, поки певна умова залишається істинною.

Logging – ведення журналу, процес запису інформації про виконання програми або систему для подальшого аналізу.

Link – зв'язок або посилання між двома елементами, наприклад, між веб-сторінками.

LDAP (Lightweight Directory Access Protocol) – протокол для доступу до інформації в каталогах, використовується для аутентифікації і авторизації користувачів.

Load Testing – тестування навантаження, процес оцінки продуктивності системи під різними умовами навантаження.

LAMP – технологічний стек, що складається з Linux, Apache, MySQL і PHP (або Python/Perl), використовується для створення веб-додатків.

Logic Gate – логічний елемент, який виконує логічну операцію над однією або кількома входними змінними (наприклад, AND, OR, NOT).

Lifecycle – життєвий цикл, фаза розвитку продукту або проекту, від початкового етапу до завершення.

Linux Kernel – ядро Linux, центральна частина операційної системи, що відповідає за управління ресурсами комп'ютера.

Localization – локалізація, процес адаптації програмного забезпечення для використання в певній культурі або мовній області.

Logic Programming – логічне програмування, парадигма програмування, що базується на формальному логічному висловлюванні.

M

Machine Learning – машинне навчання, підрозділ штучного інтелекту, що дозволяє комп'ютерам вчитися на даних і робити прогнози.

Malware – шкідливе програмне забезпечення, яке призначене для шкоди комп'ютерам або мережам.

Microservices – архітектурний стиль, який розбиває додатки на невеликі, незалежні сервіси, кожен з яких виконує певну функцію.

Middleware – проміжне програмне забезпечення, яке забезпечує зв'язок між різними програмами або сервісами.

Markdown – мова розмітки, яка дозволяє легко формувати текст, часто використовується в документації та на платформах для ведення блогів.

MySQL – популярна система управління реляційними базами даних з відкритим кодом.

Memory Leak – витік пам'яті, коли програма не звільняє пам'ять, яку більше не використовує, що призводить до зменшення доступної пам'яті.

Module – модуль, частина програмного забезпечення, що виконує певну функцію і може бути використана в інших програмах.

Monitoring – моніторинг, процес відстеження стану системи або програми для виявлення аномалій або проблем.

Multithreading – багатопотоковість, здатність програми виконувати кілька потоків одночасно для підвищення продуктивності.

Network – мережа, група комп'ютерів або пристроїв, що з'єднані для обміну даними.

Node – вузол, точка з'єднання в мережі або частина програми, що виконує певну функцію.

NAT (Network Address Translation) – трансляція мережевих адрес, технологія, що дозволяє кільком пристроям в локальній мережі ділити одну публічну IP-адресу.

NuGet – система управління пакетами для платформи .NET, що дозволяє легко додавати бібліотеки в проекти.

Nginx – веб-сервер з відкритим кодом, який також може працювати як зворотний проксі-сервер і балансувальник навантаження.



Node – вузол (елемент мережі або системи).

Nginx – веб-сервер і зворотний проксі-сервер.

Namespace – простір імен (механізм, який дозволяє розмежовувати імена змінних, функцій тощо).

Network – мережа (система з'єднаних між собою комп'ютерів або пристроїв).

Neural Network – нейронна мережа (модель у машинному навчанні, яка імітує роботу людського мозку).

Null – нульове значення (відсутність значення в програмуванні).

NLP (Natural Language Processing) – обробка природної мови (галузь штучного інтелекту).

NAT (Network Address Translation) – трансляція мережевих адрес.

Node.js – платформа для запуску серверного JavaScript.

Nonce – однократне випадкове значення, використовується для шифрування або аутентифікації.

NFS (Network File System) – мережевий файловий протокол.

NoSQL – тип баз даних, які не використовують реляційний підхід.

Normalization – нормалізація (процес структурування даних).

NPM (Node Package Manager) – менеджер пакетів для JavaScript.

NIC (Network Interface Card) – мережева карта (інтерфейсний адаптер для підключення до мережі).

Nagios – система моніторингу для мереж і серверів.

Network Security – мережева безпека.

Notebook – записник або інтерактивне середовище для виконання коду, як у Jupyter.

NFT (Non-Fungible Token) – незамінний токен, унікальний цифровий актив на блокчейні.



Object – об'єкт (основний елемент об'єктно-орієнтованого програмування).

Open Source – відкритий код (програмне забезпечення з відкритим вихідним кодом, яке можна змінювати і поширювати).

Operating System (OS) – операційна система (програмне забезпечення, що керує апаратними ресурсами комп'ютера).

OAuth – протокол авторизації, що дозволяє передавати інформацію про аутентифікацію між сервісами без передачі паролів.

ORM (Object-Relational Mapping) – об'єктно-реляційне відображення (технологія, яка дозволяє перетворювати дані між базами даних і об'єктами в програмуванні).

OOP (Object-Oriented Programming) – об'єктно-орієнтоване програмування (парадигма програмування, що базується на об'єктах і класах).

Optimization – оптимізація (процес підвищення ефективності програмного коду або систем).

Overflow – переповнення (ситуація, коли значення перевищує обсяг пам'яті, що виділено для його зберігання).

Orchestration – оркестрація (автоматизація управління складними системами або процесами, часто використовується в DevOps).

OAuth2 – оновлена версія OAuth, протокол аутентифікації і авторизації для захищеного доступу до ресурсів.

Octet – восьмибітний блок даних, аналог байта.

On-premises – рішення, яке розміщується на локальних серверах компанії, а не в хмарі.

Observability – спостережуваність (здатність системи надавати інформацію про свою роботу та стан у реальному часі).

Opcode – операційний код (інструкція процесора).

OpenGL – стандарт для рендеринга 2D та 3D графіки.

Outage – збій у роботі системи або сервісу.

Operator – оператор (символ або функція, що виконує операції над змінними в програмуванні).

Overhead – накладні витрати (додаткові ресурси, необхідні для виконання задачі або процесу).

Object Storage – об'єктне сховище даних (тип системи зберігання, в якій дані організовані у вигляді об'єктів).

Optical Fiber – оптоволокно (середовище для передачі даних за допомогою світлових імпульсів).

P

Packet – пакет (одиниця передачі даних у мережі).

Protocol – протокол (набір правил для передачі даних у мережі).

Programming – програмування (процес створення програмного забезпечення).

Python – мова програмування високого рівня.

Port – порт (віртуальна точка підключення для передачі даних між комп'ютерами або програмами).

Proxy – проксі (сервер, що діє як посередник між клієнтом і іншим сервером).

PaaS (Platform as a Service) – платформа як сервіс (модель хмарних обчислень, що забезпечує середовище для розробки додатків).

Pipeline – конвеєр (послідовність процесів або етапів обробки даних або виконання завдань).

Polymorphism – поліморфізм (здатність об'єктів різних типів реагувати на одні й ті ж методи).

Patch – патч (виправлення програмного забезпечення, яке усуває помилки або покращує функціонал).

Packet Switching – комутація пакетів (метод передачі даних, де повідомлення розбивається на менші частини – пакети).

Perl – мова програмування, особливо популярна в системному адмініструванні та обробці тексту.

Permission – дозвіл (права доступу до файлів або ресурсів).

Public Key – публічний ключ (ключ для шифрування даних, який може бути відкритим для всіх).

Private Key – приватний ключ (секретний ключ, який використовується для дешифрування даних або підпису).

Phishing – фішинг (шахрайська техніка для отримання конфіденційної інформації).

Ping – утиліта для перевірки доступності хостів у мережі.

Proxy Server – проксі-сервер (сервер, який діє як посередник для запитів від клієнтів до інших серверів).

Pivot Table – зведена таблиця (інструмент для обробки даних у електронних таблицях).

Pixel – піксель (найменший елемент зображення на екрані).

PHP – мова програмування для розробки веб-додатків.

Process – процес (виконання програмного коду або завдання в операційній системі).

PostgreSQL – система управління реляційними базами даних з відкритим вихідним кодом.

PowerShell – автоматизаційна оболонка і мова сценаріїв для Windows.

Penetration Testing (Pentest) – тестування на проникнення (процес виявлення вразливостей у систем безпеки).

Q

Query – запит (інструкція або команда для отримання даних із бази даних або іншої системи).

Queue – черга (структура даних або механізм для зберігання елементів у порядку їх надходження).

Quicksort – швидке сортування (алгоритм сортування, який працює за принципом "розділяй і володарюй").

QoS (Quality of Service) – якість обслуговування (технології для управління та оптимізації продуктивності мережі).

Quorum – кворум (мінімальна кількість учасників або вузлів, необхідна для прийняття рішення в розподілених системах).

Quantum Computing – квантові обчислення (нова парадигма обчислень, заснована на принципах квантової механіки).

Quick Response Code (QR Code) – QR-код (двовимірний штрихкод, який може бути сканований для швидкого доступу до інформації).

Qubit – кубіт (основна одиниця інформації в квантових обчисленнях, аналог бітів у класичних комп'ютерах).

Query Language – мова запитів (мова для взаємодії з базами даних, наприклад, SQL).

Quiesce – стан спокою (переведення системи в стан, коли всі активні процеси завершені або тимчасово зупинені).

Quota – квота (обмеження на використання ресурсів, наприклад, дискового простору або мережевої пропускної здатності).

QEMU – відкрита програма для емуляції апаратного забезпечення та віртуалізації.

R

Router – маршрутизатор (пристрій для пересилання даних між комп'ютерними мережами).

RAM (Random Access Memory) – оперативна пам'ять (енергонезалежна пам'ять, яка використовується для тимчасового зберігання даних).

REST (Representational State Transfer) – архітектурний стиль для створення вебсервісів.

Repository – репозиторій (місце зберігання коду або інших даних, як-от GitHub).

Runtime – час виконання (період, коли програма виконується).

Regular Expression (Regex) – регулярні вирази (шаблони для пошуку і маніпулювання текстом).

RPC (Remote Procedure Call) – віддалений виклик процедур (технологія, що дозволяє одній програмі виконувати процедури на іншому комп'ютері).

RDBMS (Relational Database Management System) – система управління реляційними базами даних.

React – JavaScript-бібліотека для створення інтерфейсів користувача.

Recursive – рекурсивний (алгоритм або функція, яка викликає сама себе для вирішення задачі).

Redundancy – надлишковість (введення додаткових компонентів для підвищення надійності системи).

Rollback – відкат (процес скасування змін у базі даних або іншій системі).

RSA (Rivest-Shamir-Adleman) – криптографічний алгоритм з відкритим ключем.

Root – кореневий доступ (найвищий рівень привілеїв у системі).

Relational Database – реляційна база даних (база даних, яка організована у вигляді таблиць, пов'язаних між собою).

Redis – база даних типу key-value, яка працює в оперативній пам'яті.

Rollback Segment – сегмент відкату (частина бази даних, яка використовується для зберігання інформації про незавершені транзакції).

Round Robin – алгоритм розподілу ресурсів або процесів по колу.

Replication – реплікація (процес копіювання даних з однієї бази даних до іншої для забезпечення надійності та доступності).

Responsive Design – адаптивний дизайн (підхід до веброзробки, що забезпечує правильне відображення сайту на різних пристроях).

S

Server – сервер (пристрій або програма, що надає ресурси або послуги іншим пристроям або програмам в мережі).

SQL (Structured Query Language) – мова структурованих запитів для роботи з реляційними базами даних.

SSH (Secure Shell) – протокол для захищеного віддаленого доступу до серверів.

SSL (Secure Sockets Layer) – криптографічний протокол для забезпечення захищеного з'єднання через Інтернет.

SaaS (Software as a Service) – програмне забезпечення як послуга (модель надання програм через Інтернет).

Switch – комутатор (мережевий пристрій, що пересилає дані між пристроями в локальній мережі).

Script – сценарій (набір команд або інструкцій, які виконуються послідовно).

Scrum – методологія управління проєктами, особливо популярна в Agile-розробці.

Scaling – масштабування (процес збільшення або зменшення ресурсів системи для відповідності потребам).

SDK (Software Development Kit) – набір інструментів для розробки програмного забезпечення.

Snapshot – знімок (фіксація стану системи або даних у певний момент часу).

SQL Injection – ін'єкція SQL (тип атаки, яка дозволяє виконати несанкціоновані SQL-запити до бази даних).

Session – сесія (період взаємодії між користувачем і сервером або програмою).

Stack – стек (структура даних, яка працює за принципом "останній прийшов, перший пішов").

Source Code – вихідний код (код програми, написаний на мові програмування, доступний для читання і редагування).

Subnet – підмережа (частина комп'ютерної мережі, виділена в межах більшої мережі).

SOAP (Simple Object Access Protocol) – протокол обміну структурованими даними між системами через Інтернет.

Storage – сховище (місце для зберігання даних, наприклад, на жорсткому диску або в хмарі).

Semaphore – семафор (механізм синхронізації доступу до спільних ресурсів у багатопотоковому програмуванні).

SQL Server – система управління реляційними базами даних від Microsoft.

Scalability – масштабованість (здатність системи до зростання, підтримуючи ефективність і продуктивність).

Spam – спам (небажані або масові повідомлення, особливо в електронній пошті).

Shell – командна оболонка (інтерфейс для взаємодії з операційною системою через команди).

Spring – фреймворк для розробки Java-додатків.

Spyware – шпигунське ПЗ (шкідливе програмне забезпечення для збору інформації про користувача без його відома).

T

TCP (Transmission Control Protocol) – протокол керування передачею (основний протокол Інтернету для передачі даних).

Thread – потік (найменша одиниця виконання програми в багатозадачній системі).

Token – токен (об'єкт, що представляє собою право доступу або іншу інформацію, використовується в аутентифікації).

TLS (Transport Layer Security) – протокол для забезпечення захищеного з'єднання через Інтернет.

Tuple – кортеж (структура даних, яка містить фіксовану кількість елементів).

Transaction – транзакція (послідовність операцій з даними, які виконуються як одна неподільна одиниця).

Tunneling – тунелювання (процес передачі даних через інші протоколи для забезпечення безпеки або функціональності).

TypeScript – мова програмування, яка є надмножиною JavaScript і додає статичну типізацію.

Trigger – тригер (автоматизована процедура, яка викликається у відповідь на певну подію в базі даних).

Tokenization – токенизація (процес розбиття тексту на менші частини – токени, або заміна конфіденційної інформації токенами).

Throughput – пропускна здатність (кількість даних, що можуть бути передані через систему за одиницю часу).

Tab – вкладка (елемент інтерфейсу користувача, що дозволяє переключатися між різними сторінками або розділами програми).

Table – таблиця (структура для організації даних в базі даних або електронній таблиці).

TCP/IP (Transmission Control Protocol/Internet Protocol) – набір протоколів для з'єднання і передачі даних в Інтернеті.

Throttling – обмеження продуктивності (контроль або обмеження швидкості виконання процесів або передачі даних).

Test Case – тестовий випадок (набір умов і кроків, що використовуються для перевірки функціональності програми).

TDD (Test-Driven Development) – розробка через тестування (методологія розробки, при якій тести пишуться перед кодом).

Tag – тег (елемент для позначення або класифікації даних, часто використовується в HTML та XML).

Traffic – трафік (обсяг даних, що передається через мережу).

Terminal – термінал (інтерфейс для взаємодії з операційною системою через командний рядок).

TTL (Time to Live) – час життя (параметр, що вказує, скільки часу або стрибків пакету залишилося перед видаленням з мережі).

Token Ring – топологія мережі, де комп'ютери з'єднані в кільце і передають токен для управління доступом до мережі.

Terraform – інструмент для автоматизації управління інфраструктурою як кодом.

Turing Machine – машина Тюрінга (математична модель обчислень, яка використовується для вивчення алгоритмів і теорії обчислень).

Topology – топологія (спосіб організації або з'єднання елементів у мережі або системі).

U

UDP (User Datagram Protocol) – протокол передачі датаграм користувача, забезпечує швидку, але ненадійну передачу даних.

URL (Uniform Resource Locator) – уніфікований вказівник ресурсу, адреса для доступу до ресурсів в Інтернеті.

UI (User Interface) – інтерфейс користувача, система взаємодії між користувачем і програмним забезпеченням.

UX (User Experience) – досвід користувача, загальне враження користувача від взаємодії з продуктом чи послугою.

UML (Unified Modeling Language) – уніфікована мова моделювання, стандарт для створення діаграм і моделювання систем.

Unicode – стандарт кодування, який охоплює всі символи світу, дозволяє підтримувати багато мов в одному наборі символів.

Uptime – час безперервної роботи системи або сервісу без збоїв.

USB (Universal Serial Bus) – універсальна послідовна шина, стандарт інтерфейсу для підключення зовнішніх пристроїв до комп'ютера.

URI (Uniform Resource Identifier) – уніфікований ідентифікатор ресурсу, строка, яка визначає ім'я або адресу ресурсу.

User Agent – агент користувача, програмне забезпечення, яке діє від імені користувача, наприклад, веб-браузер.

Usability – зручність використання, міра ефективності, з якою користувачі можуть досягти своїх цілей за допомогою системи.

Update – оновлення, процес внесення змін або покращень до програмного забезпечення або системи.

Upgrade – модернізація, процес переходу на нову версію апаратного або програмного забезпечення.

UUID (Universally Unique Identifier) – універсальний унікальний ідентифікатор, 128-бітове число для ідентифікації об'єктів.

Unicast – одностороння передача даних з одного відправника до одного отримувача в мережі.

Unix – багатокористувацька, багатозадачна операційна система, яка є основою для багатьох сучасних ОС.

Underflow – переповнення знизу, ситуація, коли результат операції менший за допустиме значення типу даних.

Unit Testing – модульне тестування, процес тестування окремих модулів або компонентів програми.

Unstructured Data – неструктуровані дані, інформація, яка не має чіткої структури, наприклад, текст або мультимедійні файли.

UTF (Unicode Transformation Format) – формат кодування Unicode, що дозволяє кодувати символи змінним числом байтів (наприклад, UTF-8).



VPN (Virtual Private Network) – віртуальна приватна мережа, створює захищене з'єднання через Інтернет.

Version Control – контроль версій, система для відстеження змін у файлах і координації роботи над ними.

Virtualization – віртуалізація, технологія, що дозволяє створювати віртуальні ресурси (сервери, мережі, сховища).

VM (Virtual Machine) – віртуальна машина, програмна емуляція фізичного комп'ютера.

VLAN (Virtual Local Area Network) – віртуальна локальна мережа, логічне розбиття фізичної мережі на сегменти.

VCS (Version Control System) – система контролю версій, наприклад, Git або Subversion.

VGA (Video Graphics Array) – стандарт для виведення відео, використовується для моніторів і дисплеїв.

Volatile Memory – енергозалежна пам'ять, яка втрачає дані після вимкнення живлення (наприклад, оперативна пам'ять).

Vendor – постачальник або виробник апаратного чи програмного забезпечення.

Vulnerability – вразливість, слабе місце в програмі або системі, яке може бути використане для атаки.

Viewport – вікно перегляду, область на екрані, яка відображає вміст, наприклад, в браузері або графічних додатках.

VoIP (Voice over Internet Protocol) – голос через Інтернет-протокол, технологія для передавання голосу через Інтернет.

Validation – валідація, перевірка коректності або відповідності даних заданим критеріям.

Vector Graphics – векторна графіка, зображення, що складаються з геометричних примітивів, таких як лінії і криві.

Virtual Reality (VR) – віртуальна реальність, комп'ютерно змодельоване середовище, яке відчувається як реальне.

Verbose – докладний режим (наприклад, виведення додаткової інформації при виконанні команди або програми).

Varnish – високопродуктивний HTTP-кешер для прискорення вебдодатків.

Variable – змінна, іменований простір в пам'яті для зберігання значень, які можуть змінюватися під час виконання програми.

Visibility – видимість, концепція, що визначає, які елементи коду (змінні, методи) доступні в різних частинах програми.

Viewport Meta Tag – мета-тег у HTML, який визначає, як вебсторінка відображатиметься на мобільних пристроях.

W

Web – веб, частина Інтернету, яка включає вебсайти та веб-додатки.

WWW (World Wide Web) – всесвітня павутина, система гіпертекстових документів, доступних через Інтернет.

WLAN (Wireless Local Area Network) – бездротова локальна мережа, яка дозволяє пристроям підключатися до мережі без фізичних кабелів.

Wi-Fi – технологія бездротової передачі даних, що дозволяє пристроям підключатися до Інтернету або локальної мережі.

W3C (World Wide Web Consortium) – організація, що розробляє стандарти для веба.

Web Browser – веб-браузер, програма для перегляда веб-сторінок (наприклад, Chrome, Firefox).

Web Server – веб-сервер, програма або пристрій, що обробляє запити на веб-сторінки та надає їх користувачам.

Workflow – робочий процес, послідовність завдань або операцій, які виконуються для досягнення певної мети.

Web Application – веб-додаток, програма, доступна через веб-браузер.

Web Development – розробка веб-сайтів і веб-додатків.

WYSIWYG (What You See Is What You Get) – "те, що ви бачите, те й отримуєте", редактор, який показує, як буде виглядати готовий продукт.

Web API – веб-інтерфейс програмування додатків, набір правил для взаємодії між програмами через Інтернет.

WordPress – популярна система управління контентом (CMS) для створення та керування веб-сайтами.

WebSocket – протокол для забезпечення двостороннього зв'язку між клієнтом і сервером через веб.

Wrapper – обгортка, структура, яка додає функціональність до існуючого коду або API.

White Hat – "білий капелюх", етичний хакер, який використовує свої навички для захисту систем.

Web Hosting – хостинг веб-сайтів, послуги, що дозволяють зберігати сайти на серверах для доступу через Інтернет.

Watchdog – механізм моніторингу, що перевіряє систему або програму на наявність збоїв або помилок.

Workstation – робоча станція, потужний комп'ютер, призначений для технічних або наукових завдань.

Wiki – вікі, веб-сайт, який дозволяє користувачам спільно редагувати та створювати вміст.

Workflow - Робочий процес



XML (eXtensible Markup Language) – розширювана мова розмітки, використовується для опису структурованих даних.

XSS (Cross-Site Scripting) – міжсайтовий скриптинг, тип вразливості, що дозволяє зловмисникам вбудовувати скрипти в веб-додатки.

XAML (eXtensible Application Markup Language) – мова розмітки, використовувана для опису графічного інтерфейсу в додатках на .NET.

XPath (XML Path Language) – мова запитів для навігації в XML-документах.

XOR (Exclusive OR) – логічна операція, яка повертає істину, якщо одна з операндів істинна, а інша – хибна.

Xcode – інтегроване середовище розробки (IDE) для macOS, призначене для створення додатків на платформах Apple.

Xen – технологія віртуалізації, яка дозволяє запускати кілька віртуальних машин на одному фізичному сервері.

X.509 – стандарт для формату публічних ключів та сертифікатів в системах аутентифікації.

XMPP (Extensible Messaging and Presence Protocol) – розширюваний протокол обміну повідомленнями та присутністю, який використовується для реального часу комунікації.

XServer – компонент системи X Window, що відповідає за графічний інтерфейс в Unix-подібних операційних системах.

Y

YAML (YAML Ain't Markup Language) – мова розмітки, яка використовується для серіалізації даних, популярна для конфігураційних файлів.

Y2K (Year 2000 Problem) – проблема з комп'ютерними системами, що виникла через використання двох цифр для позначення року (наприклад, "99" для 1999).

Yottabyte – одиниця вимірювання інформації, рівна $1024 \cdot 10^{24}$ байтів.

Yellow Hat – термін, що використовується для опису етичних хакерів, які тестують безпеку системи на предмет вразливостей, зазвичай в рамках легального договору.

Yield – у контексті програмування, ключове слово, яке використовується для повернення значення з генератора в Python.

Yubikey – апаратний пристрій для двофакторної аутентифікації, що забезпечує додатковий рівень безпеки для входу в системи.

Z

Zigbee – стандарт бездротової комунікації для низькоенергетичних пристроїв, часто використовуваний у систем автоматизації та IoT.

ZFS (Zettabyte File System) – файлова система, розроблена для забезпечення високої надійності та продуктивності з можливістю управління великими обсягами даних.

Zip – формат стиснення файлів, що дозволяє зменшувати їх розмір для зберігання або передачі.

Zero-Day – вразливість у програмному забезпеченні, для якої ще не існує патчу або виправлення на момент її виявлення.

Zig – мова програмування, що акцентує увагу на продуктивності, безпеці та простоті використання.

Z-Index – властивість CSS, що визначає порядок накладання елементів у двовимірному просторі.

Zettabyte – одиниця вимірювання даних, рівна $1021 \cdot 10^{21}$ байтів.

Zoom – платформа для відеоконференцій, що набула популярності для віддаленого спілкування та онлайн-зустрічей.

Zookeeper – система для управління розподіленими додатками, яка забезпечує централізоване управління конфігураціями та синхронізацію.

Z-Buffer – технологія рендерингу у 3D-графіці, що використовується для визначення, які об'єкти повинні бути видимими у сцені.

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**Навчальний посібник
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