

MODULE II. INFORMATION TECHNOLOGY

UNIT 1. THE HISTORY OF THE COMPUTER TECHNOLOGY.

TEXT 1. WHERE ARE WE IN THE HISTORY OF THE COMPUTER TECHNOLOGY?

Vocabulary

large-scale [lɑːdʒ'skeɪl] adj. – крупномасштабный

sizeable ['saɪzəbl] adj. – значительный, существенный, крупный

disrupt [dɪs'rʌpt] v. – нарушать, разрушить, подорвать

remained inaccessible [rɪ'meɪn ɪnək'sesəb(ə)l] – оставаться недоступным

eventually [ɪ'ventʃʊ(ə)li] adv. – в итоге, в конце концов

consolidate [kən'sɒlɪdɪt] v. – консолидировать, объединять, закрепиться

drastically ['dræstɪklɪ] adv. – коренным образом, кардинально

enable [ɪ'neɪbl] v. – давать возможность, активировать, задействовать

bespoke [brɪ'spəʊk] n, adj. – сделанный на заказ, специальный

challenge [ˈtʃælɪndʒ] n. – вызов, проблема, трудность, задача

competition [kəmprɪ'tɪʃn] n. – соревнование, конкурс, конкуренция

tough [tʌf] adj. – жесткий, крепкий, сильный

compatible [kəm'pætəbl] adj. – совместимый, сочетаемый

unbounded [ʌn'baʊndɪd] adj. – неограниченный, безграничный

market share ['mɑːkɪt ʃeə] – доля на рынке

connectivity [kənek'tɪvɪti] n. – связь, соединение, возможность подключения

concomitant [kən'kɒmɪtənt] adj. – сопутствующий, сопровождающий

cost reduction [kɒst rɪ'dʌkʃn] – снижение затрат, сокращение расходов

on devices [ɒn dɪ'vaɪsɪz] – на устройствах, на приборах

proliferation [prəlɪfə'reɪʃn] – распространение, размножение

be geared towards – быть ориентированным на что-л.

incremental performance – возрастающая производительность

function-specific structures – функциональные структуры

in narrowly focused jobs – на узконаправленных работах

1. Before you read:

- What do you know about the history of computers?
- How have computers changed since the beginning of the computer era?
- What are the most promising directions in IT sphere?

2. Look at the following international words, read them and guess their meanings:

mechanical [mɪ'kænikəl]

vacuum ['vækjuəm]

commercial [kə'mɜːʃəl]

microprocessor [maɪkrə(ʊ)'prəusesə]

segment ['segmənt]

Motorola [məʊtə'rəʊlə]

standardized ['stændədaɪzd]

era ['ɪərə]

function [fʌŋkʃn]

design [dɪ'zaɪn]

phenomenon [fɪ'nɒmɪnən]

operating ['ɒpəreɪtɪŋ]

Amazon ['æməzən]

transaction [træn'zækʃn]

generate ['dʒenəreɪt]

incremental [ɪnkrə'mentl]

structure ['strʌktʃə]

specific [spɪ'sɪfɪk]

3. Read the text.

WHERE ARE WE IN THE HISTORY OF THE COMPUTER TECHNOLOGY?

1940's and 1950's: First General-purpose computers

The ENIAC (Electronic Numerical Integrator And Computer) was the first large-scale computer to run at electronic speed without being slowed by any mechanical parts. The ENIAC used a record 18,000 vacuum tubes to run and was rather sizeable, requiring 15-by-9-meters of space.

1950's and 1960's: Transistors

Transistors brought about smaller and more reliable computers that disrupted the more expensive general-purpose computer. Decreased costs and smaller space requirements brought about increased demand for computers. However, the transistor computer remained inaccessible as it was too expensive and large for general households, so demand was still largely driven by firms.

The 1950s to '60s, therefore, marked the start of the modern computer industry which eventually consolidated around IBM.

1970's and 1980's: Microprocessor

Intel introduced the first commercial microprocessor – the Intel 4004 – in 1971. Microprocessors drastically lowered the costs of producing computers, enabling mass production of bespoke CPU systems. The

microprocessor enabled the minicomputer, PC, laptop and eventually the mobile phone, all of which challenged IBM's larger transistor computers.

Due to first mover advantage with the Intel 4004 and 8008, Intel controlled 100 % of the microprocessor market segment in the 1970s. Motorola eventually introduced the 6800 in 1974, which begun the microprocessor 'wars' between Intel and Motorola.

1980's and 1990's: The PC

The introduction of microprocessors brought about greater competition within the hardware layer of computers. The largest hardware manufacturers of this era were Intel, Zilog, Motorola, and MOS Tech. Competition became even tougher when Japanese chips from Hitachi, NEC, Fujitsu, and Toshiba came to market.

The mass production of computers brought about increased demand by users for a common operating system (OS) that ran standardized software. Most customers were drawn to the Windows platform as it had the largest number of compatible applications. As a result, Microsoft's operating system was running on 97% of all computing devices by the late 90s. Therefore, value in creating PCs transitioned up to the software layer, where a new, near unbounded design space was enabled.

2000 to 2010: the Web

The introduction of Linux offered a free, open-source operating system, and the Web (HTTP) enabled a free distribution network. Both Linux and HTTP brought about some key shifts in the computing market. The major is that computing consumption started shifting towards mobile – a phenomenon that was largely missed by Microsoft. By 2012 Microsoft's computing market share had dropped to 20 %, and the Linux-based mobile operating system, Android, controlled 85 % of the mobile computing market.

2010 to today: the Network and the Cloud

As connectivity improved, with concomitant cost reductions in hardware, the running of applications and the storage of user data began moving from on-device to the Cloud. Cloud is now a key focus of many of the tech giants; evidenced through Google, Amazon and Microsoft's competing cloud solutions to users and enterprises. As a result, market consolidation has happened around Facebook, Apple, Amazon, Netflix, and Google (FAANG).

Apple, albeit, is different from other FAANG companies, as it dominated as a result of the rapid proliferation of mobile technology. Apple has locked developers into their platform via the App Store and takes a 30 % fee on any transaction.

Lastly on the hardware front, intense competition continued. However, it has been supposed that the next wave of hardware design will be geared towards application or function-specific structures to generate incremental performance improvements in narrowly focused jobs.

DEVELOPING ACADEMIC VOCABULARY

4. The following words are all from the text above. Find them in the text:

reliable, inaccessible, proliferation, consolidation, enable

5. For each word, read the sentence it occurs in and answer the questions:

- a) Is the word positive, negative or neutral?
- b) Is it a noun, adjective, adverb or verb?
- c) Can you think of a word with a similar meaning (synonym) and one with an opposite meaning (antonym)?

READING COMPREHENSION

6. Answer the questions:

1. How many vacuum tubes did the ENIAC use?
2. How large was this computer?
3. Why did transistors disrupt the more expensive general-purpose computer?
4. Why did transistor computers remain inaccessible?
5. When was the first commercial microprocessor introduced?
6. Why did microprocessors enable mass production of bespoke CPU systems?
7. What appeared due to microprocessors?
8. What were the largest hardware manufacturers in the 1980's and 1990's?
9. Why was a common operating system (OS) running standardized software in increased demand?
10. What was the major key shift in the computing market in the 2000's?
11. What is a key focus of the major tech giants?
12. Why is Apple different from FAANG companies?
13. What will the next wave of hardware design be focused on?

7. Complete the sentences:

1. The ENIAC (Electronic Numerical Integrator And Computer) was the first... .
2. The 1950s to '60s marked the start of
3. Due to first ... , Intel controlled 100% of the microprocessor market segment.
4. Competition became even tougher when... .
5. Most customers were drawn to the Windows platform
6. Microsoft's operating system was running on
7. Computing consumption started shifting towards mobile
8. As connectivity improved, ... , the running of applications and the storage of user data began moving
9. Apple has locked developers into their platform... .
10. It is supposed that the next wave of hardware design... .

8. Give the English equivalents of the following words and word combinations:

Быть достаточно крупным, универсальный компьютер, бытовые потребители, закрепиться за IBM, системы ЦП на заказ, повышенный спрос, обеспечить неограниченное пространство для проектирования, операционная система с открытым исходным кодом, важные перемены на рынке вычислительной техники, сопутствующее снижение затрат, быстрое распространение мобильных технологий, постепенное улучшение производительности, быть ориентированными на что-л.

9. Make your own sentences with the words and phrases:

To run at speed, to mark the start of, to transition up to, unbounded, to drop to, intense competition, to dominate.

10. Explain the meaning of the following words and phrases in English:

To enable, sizeable, drastically, compatible, decreased costs, segment, phenomenon, to improve.

11. Translate into English:

1. Около ста пятидесяти лет назад предприятия полностью отличались от предприятий современной эпохи.
2. В то время люди работали при свечах, выполняя математические вычисления на бумаге.

3. Теперь большая часть цивилизованного мира не знает, что делать без технологий.

4. Трудно поверить, что люди смогут выжить без этих передовых инструментов, которые мы принимаем как должное каждый день.

5. Достижения в области коммуникации в сочетании с развитием ИТ-индустрии позволили людям вести бизнес по всему миру в режиме реального времени.

6. Спектр ИТ охватывает многие профессиональные области, такие как информационные системы управления, компьютерные сети и разработка программного обеспечения.

7. Врачи делают снимки с помощью таких аппаратов, как компьютерная аксиальная томография (CAT) или магнитно-резонансная томография (MRI).

8. Сейчас возможно распечатать трехмерные изображения костей, мышц и органов.

9. С каждым днем появляется все больше новых технологий, и сотрудники, работающие в сфере информационных технологий, должны постоянно переучиваться.

10. Это делает ИТ-отрасль очень требовательной, поскольку она постоянно развивается и совершенствуется.

11. Процесс улучшения – вот что делает этот аспект желанным практически для любого бизнеса.

12. Для всех, кто работает в ИТ-сфере, очень важно всегда быть в курсе всех новых технологий, связанных с их отраслью.

13. Сегодня ИТ – это основа практически любого бизнеса, обеспечивающая его конкурентоспособность и эффективность.

12. Read the text. Fill in the gaps in the sentences numbered 1–6 with the corresponding forms of words printed in capital letters to the right of each sentence.

The Internet – a Blessing or a Curse?

1. We live in the age of information technology and the Internet is a unique _____, which has influenced all areas of our lives. INVENT

2. Yet some people are _____ about the importance of the Web. Is it a blessing or a curse? CERTAIN

3. On the one hand, with the Internet, it is now possible to communicate _____ with people all over the world. EASY

4. In addition, the Internet is very useful, because it makes the world of facts and knowledge _____ to everyone. ACCESS

5. However, a huge amount of information on the Internet is also one of its _____. This diversity makes it difficult to find the type of information you want. WEAK

6. Moreover, the Internet can become _____ for our society, because of cybercriminals. The information wars of the future may be fought on Web sites. DANGER

13. Give the correct form of the words in brackets:

1. Some people are not aware of their computer (addict).
2. Video games are (harm) to the eyes.
3. The NASA is doing (science) research to see if there is life on Mars. NASA Internet Speed is about 13,000 times (fast) than what the current speed you have is.
4. The WiFi is (access) to all rooms in the hotel.
5. The device also can be provided with a screen, base (protect) shield and a remote control unit.
6. Movie piracy is the act of (legal) copying a movie onto another format and distributing it.

14. Do the Computer Vocabulary Quiz:

1. A computer program is a piece of _____.
 - a) hardware
 - b) underwear
 - c) software
2. Devices that are connected to computers, such as printers, scanners and modems, are called _____.
 - a) peripherals
 - b) formats
 - c) apps
3. What do we call a specific computer record containing data or a small program?
 - a) a file
 - b) a format
 - c) an icon

4. What do we call the part of a computer that stores programs and information?

- a) the hotspot
- b) the hard disk
- c) the notebook

5. What do we call a program for exploring the Web and viewing websites?

- a) a driver
- b) a browser
- c) a scanner

6. To open a particular folder, file or app, you just have to click on its

-
- a) pixel
 - b) icon
 - c) font

7. RAM, ROM and cache are different types of _____ that computers can use.

- a) Wi-Fi
- b) file
- c) memory

8. Which allows wireless data communication?

- a) a USB flash drive
- b) a Bluetooth connection
- c) an anti-virus app

9. What do people go to public hotspots for?

- a) Internet access
- b) software bugs
- c) free viruses

10. A computer's _____ is called its heart or "brains" because it's where data is processed.

- a) RAM
- b) USB
- c) CPU

LISTENING

15. a). Watch the video “The Evolution Of The Mouse | Modern World Inventions” <https://youtu.be/arMesDIVmL0?t=10>. Find out the answers to the following questions:

1. What is a constant companion for most of the people who work on computers?
2. What is considered to be the first developer of the mouse?
3. What was the mouse developed for?
4. Who conceived of the first prototype?
5. Why can a computer mouse be soul-sucking and cause the mouse rage syndrome?
6. What was the name of the early mouse's version?
7. Which popularity did it rival?
8. What can we use instead of a mouse for information input and output?
9. What kind of device was supposed to be introduced by Douglas Engelbart as an option to the mouse?
10. How are these dates related to the history of the mouse:
 1952 _____,
 1963 _____,
 1984 _____?

b) Watch the video again and complete the abstract with missing words and phrases:

It's the most essential of all the _____ and it looks the cutest. Yes, the mouse! Did you know that this _____ little thing was originally developed by the _____? Its initial models look like an _____ from faraway space but they resulted in a huge leap in the _____ aspect which they wouldn't deny, won't you? Since then several versions of it has hit the market _____ but the function remains essentially the same making your life much easier than you think it does. However, you might be taking your frustrations out on your mouse _____ against the desk, launching at the wall... Now can you _____ without it? Yes, maybe with the _____ and _____ pads. But remember these are just mere _____ of the mouse.

16. a). Watch the video “What is IT/OT Convergence and Why is it Important?” <https://youtu.be/WTPv3tzXIRg?t=7>. Find out the answers to the following questions:

1. What is IT/OT convergence?
2. What are IT and OT systems used for?
3. What does converging IT and OT enable?
4. What benefits does it provide?
5. What spheres is it mostly used in?

6. What does it enable in the oil and gas industry?
7. What does it enable in the the medical realm?
8. How many main types of IT/OT convergence exist?
9. Can you name them? What do they deal with?

b) Watch the video again and complete the abstract with missing words and phrases:

IT/OT convergence is the integration of information technology (IT) systems with operational technology (OT) systems. IT systems are used for _____ computing; OT systems are for monitoring and controlling _____. The idea of converging IT and OT came with industry 4.0 a small industrial movement to integrate _____, communication and _____. IT/OT convergence intends to close _____ gaps and provide complete news of every operation and how it is performing. Some experts say that IT/OT convergence, but rather required for innovation, but it will take effort and training to _____ it correctly. Dig deeper on IT/OT convergence challenges and training by clicking a link above or in the description below. Converging IT and OT enables more direct control and complete monitoring of complex systems from _____ in the world. With it, workers can do their _____ more _____ and decision making improves as organizations have access to real time data insights. IT/OT convergence brings benefits that separate IT and OT can not provide such as: less siloed IT and OT departments which must share their _____ areas of expertise; reduced development and support costs, in part due to predictive maintenance enabled by IOT devices; faster time to market for converge technology; improved _____ with regulatory standards; improved _____ and visibility into distributed OT; more efficient energy and resource usage and more efficient asset management.

SPEAKING

17. Speak about the Internet in our life. Use the following questions as a plan:

Do computers save time or do they just make us waste more time?

1. Do you use the Internet?
2. What Internet services do you use?
3. Do you feel any addiction to the Internet?
4. How much do you spend on the Internet a month?
5. How did the Internet influence such things as communication, correspondence, access to information?
6. Do you think that the Internet is the good or the evil?

18. Prepare dialogues using questions from ex. 17.

19. Make a plan of the text.

20. Speak about the history of computer technology. Search the Internet if necessary. Add some more details to the information in the text (ex.3).

UNIT 2. CYBERCRIME AND PREVENTIVE TIPS

TEXT 1. TOP 5 TYPES OF CYBERCRIMES

Vocabulary

phishing scams ['fɪʃɪŋ skæmz] n – фишинг-мошенничество

disseminate [dɪ'semɪneɪt] v – распространять

trending and booming mode – модный и процветающий способ

preventive [prɪ'ventɪv] adj. – профилактический предупредительный

earning ['z:ɪnɪŋ] n – заработок м доход м

illegal [ɪ'li:gəl] adj. – незаконный нелегальный

associate with [ə'səʊʃɪt wɪð] v – ассоциироваться

encompass [ɪn'kʌmpəs] v – охватывать включать

permission [pə'mɪʃn] n – разрешение

malicious [mə'liʃəs] adj. – злонамеренный вредоносный

penetration [penɪ'treɪʃn] n – проникновение, вторжение

trustworthy entity – организация, заслуживающая доверия

pretend [prɪ'tend] v – притворяться делать вид

lead to v – привести к ч.-либо

disrupt [dɪs'rʌpt] v – срывать нарушать

ransomware n – программа-вымогатель, программа-шантажист

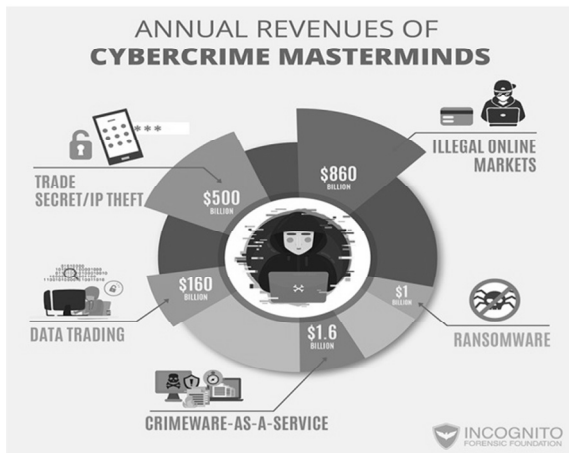
malware ['mælweər] n – вредоносная программа

spyware ['spaɪweər] n – шпионская программа

1. Look at the picture and answer the questions.

1. What is a cybercrime?
2. What types of cybercrime can you see? Can you name any other types of it?
3. What is the income of people who earn money by computer crime?
4. Why do people earn money in this way?

5. Can the problem be solved in our society? In what way?



<https://ifflab.org/top-5-types-of-cybercrimes-tips-for-cybercrime-prevention/>

2. Read the text and choose the most suitable heading from list A-E for each part of the article. There is one extra heading you don't need to use:

TOP 5 TYPES OF CYBERCRIMES

- A. Cybercrimes Are Now a Booming Mode of Income
- B. What is Cybercrime?
- C. Prevention Tips
- D. Types of Cybercrimes
- E. The Rise of the Digital Era

The computer and the Internet have changed the way we go about our routine lives, be it at home or at work.

WhatsApp messages and social media updates have replaced letters and physical gatherings. Boardroom meetings are now conducted through video conferences. Kids prefer learning from apps and laptops than books.

Yes, the Internet has made life simpler and more connected. But, as a result, cybercrimes have also become an unavoidable part of our lives. So much so that a cybercrime is now a trending and booming mode of income for some!

The least we can do it to educate ourselves and others about the different types of cybercrimes so that we may take the necessary preventive steps. Read on to find the list of cybercrimes that one must be wary of!

These statistics are shocking! Did you know that the individual earning of crooks from different types of cybercrimes is 10-15% higher than other traditional crimes? In fact, the highest earnings can go up to \$167000 per month while mid-level earners can make nearly \$75000 per month! Some cyber conmen rake in nearly half a million dollars in a year by simply trafficking embezzled data!

So exactly what is cybercrime? And, how do we classify a crime as a ‘cybercrime’?

Technically, a cybercrime constitutes any illegal or criminal activity involving a computing device and/or the internet. The term ‘cybercrime’ is usually associated with crimes directly involving a computer or the internet. Thus, a cybercrime encompasses any crime in which a computer or information stored in it is the medium, object or target of offense.

Here’s the list of cybercrimes that have at times brought the most prepared of all nations down to their knees.

1. Hacking

Hacking is the act of breaking into a computer without the user’s knowledge or permission. Hackers are usually skilled computer programmers having an outstanding knowledge of computer and programming languages. Malicious hackers are the ones who use their knowledge with the wrong intentions.

There is another form of hacking which is LEGIT. This kind of ethical hacking enables the hacker, also called a penetration tester, to assess the loopholes and vulnerabilities in a network/system.

2. Phishing

Phishing scams involve the use of electronic communication to extract sensitive information such as passwords, usernames, or financial details.

In a phishing scam, fraudsters disguise themselves as a trustworthy entity and contact the victim through a phone call, email, text message or social media. They often pretend to call from a bank, telephone company or internet provider.

Phishing scams often involve tricking the victim into clicking a malicious link that leads to the installation of a malware.

3. Virus Attack

Virus attacks are probably one of the most familiar types of cybercrimes. Viruses are nothing but computer programs that can disrupt the computer system and the files in it either by modifying them or deleting them altogether! Remember that unlike other types of cybercrimes, computer viruses can be easily disseminated through the internet or a removable device such as an infected CD-ROM or USB flash drive.

4. Malware

Almost everyone is familiar with a ‘malware’ after the infamous ‘WannaCry’ ransomware attack on networks across the globe. In the simplest terms, malware = malicious + software. A malware is a software created with the intent of causing damage or gain illegal access to a computer/network. Malware includes everything from viruses and worms to spyware and Trojan Horses.

DEVELOPING ACADEMIC VOCABULARY

3. The following words are all from the text above. Find them in the text:

Sensitive vulnerability installation access disseminate

4. For each word, read the sentence it occurs in and answer the questions:

- a) Is the word positive, negative or neutral?
- b) Is it a noun, adjective, adverb or verb?
- c) Can you think of a word with a similar meaning (synonym) and one with an opposite meaning (antonym)?

READING COMPREHENSION

5. Answer the questions:

1. What are benefits and threats of the Internet?
2. What is a cybercrime?
3. Why are the statistics related to cybercrimes shocking?
4. What is a hacker?
5. What is LEGIT?

6. What do phishing scams involve?
7. How do fraudsters disguise themselves?
8. How can viruses disrupt the computer system?
9. How are viruses disseminated?
10. What is a malware?
11. What does it include?

6. Complete the sentences:

1. WhatsApp messages and social media updates have replaced... .
2. ...is now a trending and booming mode of income for some!
3. The least we can do it to educate ourselves and others... .
4. Did you know that ... higher than other traditional crimes?
5. The term 'cybercrime' is usually associated with... .
6. ...who use their knowledge with the wrong intentions.
7. This kind of ethical hacking enables the hacker,, to assess the loopholes and vulnerabilities in a
8. They often pretend to or internet provider.
9. Computer viruses can be easily disseminated
10. A malware is a software created with the intent

7. Match the phrases with their definitions:

1. Logic Bombs	a) the crime of moving money that has been obtained illegally through banks and other businesses to make it seem as if the money has been obtained legally
2. Cyber Stalking	b) it is the act of stealing information stored on corporate databases, devices, and servers
3. Identity Theft	c) it is a form of net abuse that sends large volumes of email to an address to overflow the mailbox, overwhelm the server where the email address is hosted
4. Cyber Bullying	d) the use of the Internet or other electronic means to harass an individual, group, or organization
5. Online Abuse	e) a piece of code intentionally inserted into a software system that will set off a malicious function when specified conditions are met
6. Cyber Defamation	f) a type of cybercrime in which data is altered as it is entered into a computer system, most often by a data entry clerk or a computer virus
7. Data Diddling	g) any type of harassment that happens on the internet, by means of computers, tablets, mobile phones and other internet-enabled devices

8. Data Theft	h) illegal copying of software, often using the Internet
9. Email Bombing	i) the activity of using the internet to harm or frighten another person, especially by sending them unpleasant messages
10. Electronic Money Laundering	j) the crime of using someone's personal information in order to pretend to be them and to get money or goods in their name
11. Software Piracy	k) it is not a specific criminal offense, misdemeanor or tort, but rather slander conducted via digital media, usually through the Internet

8. Unscramble the word combinations in italics to complete the sentences. All of them refer to cybecrime types given in ex. 7 on the left.

1. Statistics show that millions of people are victims of *tyediint thfte* each year.

2. In the past ten years, *beryc bigunlyl* has become increasingly common among students.

3. Cyberbullying can take various forms, including threats, harassment, cyber-stalking, and *cebyr iaaemdontf*.

4. In 2011, actress Patricia Arquette quit Facebook after alleged *rybce gnkalsti*.

5. Examples of *daat ddgidlni* are counterfeiting documents and exchanging valid computer tapes.

6. *aEmli bmongbi* is, a very common problem related to Spam that could affect our security.

7. A *ioclg mbsbo* explodes either at a set time or when a specific condition is met.

8. Children may feel that *nenoil beasu* intrudes into their life without relief as technology is always "open".

9. There have also been concerns expressed regarding *ncteirlcoe oeynm unnilegdar* and related issues such as tax evasion.

10. VMProtect is a new generation of *ofrsawet cpiray* protection.

11. Users of these services also need to be aware of *tada thetf* or viruses.

9. Give the English equivalents of the following words and word combinations:

Заседание совета директоров, быстро развивающийся способ получения дохода, профилактические меры, торговля похищенными данными, охватывать, поставить на колени, плохие намерения, уязвимость сети, заслуживающая доверия организация, распространять, съемное устройство, причинить ущерб.

10. Make your own sentences with the words and phrases:

An unavoidable part of our lives, to be wary of smth., per month, illegal activity, to be associated with, target, permission.

11. Explain the meaning of the following words and phrases in English:

Routine, gatherings, preventive, statistics, knowledge, enable.

12. Translate into English:

1. Киберпреступность – это любая преступная деятельность, в которой используется компьютер, сетевое устройство или сеть.

2. Многие киберпреступления совершаются с целью получения денег.

3. Некоторые из них совершаются, чтобы вывести из строя компьютерную систему.

4. Для этого достаточно заразить компьютеры ошибками или вредоносными программами.

5. Киберпреступлением может являться распространение незаконной информации, изображений и других материалов.

6. Некоторые киберпреступники действуют скоординированно.

7. Киберпреступники могут использовать личную информацию отдельного лица или корпоративные данные для кражи и перепродажи.

8. В связи с тем, что интернет является неотъемлемой частью нашей жизни, в будущем ожидается рост подобных преступлений.

9. Антивирусное ПО обеспечивает максимальную степень безопасности.

10. Антивирусные программы позволяют проверять, выявлять и устранять опасности до причинения вреда.

TEXT 2. CYBERCRIME PREVENTION TIPS THAT YOU MUST KEEP HANDY

Vocabulary

overview ['əʊvəʃu:] n – обзор

handy tips ['hændɪ tips] – полезные советы

firewall ['faɪəwɔ:l] n – брандмауэр, межсетевой экран

secure [sɪ'kjʊə] adj. – безопасный, надежный

malicious [mə'liʃəs] adj. – злонамеренный, вредоносный

encryption [ɪn'krɪpʃn] n – шифрование, кодирование

sensitive data – конфиденциальные данные

back up, v – копировать

account settings [ə'kaʊnt 'setɪŋz] – настройки аккаунта

cautious ['kɔːʃəs] adj. – осторожный

redundant [rɪ'dʌndənt] adj. – избыточный, излишний

gateway ['geɪtweɪ] n – ворота, доступ

cyber conmen – кибер-мошенники

preliminary [prɪ'limɪnəri] adj. – предварительный, подготовительный

disapprove [dɪsə'pruːv] v – не одобрять, осуждать

provision [prə'vɪʒən] n – зд. положение, условие

treaty ['triːti] n – договор, соглашение

police squad [pə'liːs skwɒd] – наряд полиции

intercept data ['ɪntəsept 'deɪtə] – перехватить данные

felony ['feləni] n – уголовное преступление

bring steady justice – обеспечить устойчивое правосудие

forensic [fə'rensɪk] adj. – судебный, криминалистический

vigilant ['vɪdʒɪlənt] adj. – бдительный

alert [ə'leɪt] adj. – начеку, внимательный, аварийный

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НИТО

sophisticated [sə'fɪstɪkeɪtɪd] adj. – изощренный, сложный

nasty ['nɑːsti] adj. – отвратительный, опасный

state-of-the-art – зд. последнее слово техники, современный

assist [ə'sɪst] v – помогать, содействовать

law enforcement agencies [lɔː m'fɔːsmənt 'eɪdʒənsɪz] – правоохрани-
тельные структуры, органы правопорядка

investigation [ɪnvestɪ'geɪʃn] n – расследование, следствие

incident response ['ɪnsɪdənt rɪs'pɒns] – реагирование на инциденты

1. Before you read:

1. What do you think of cybercrime? Is it a real threat to our society?
2. What advice would you give to be protected from this criminal activity?
3. What measures can we take to bring justice?
4. In what way should these criminals be punished?

2. Read the text:

CYBERCRIME PREVENTION TIPS THAT YOU MUST KEEP HANDY

The above sections gave you an overview of the different types of cybercrimes. The following section shall give you some handy tips for cybercrime prevention.

Use Strong Passwords

Avoid having the same password for different accounts. Always use strong passwords that have a combination of alphabets, numbers and special characters. Avoid writing them down or storing them in a place where they can be easily discovered. It is a good practice to keep changing your password on a regular basis.

Secure Your Computer, Laptops, and Smartphones

Activate the firewall on your computing devices as it offers the first level of cyber defense against malicious attacks. Install an authentic anti-virus and anti-malware software on your computer and smartphone. Also, keep updating it at regular intervals. Install anti-spyware software and regularly update it to protect your computer from malicious spyware.

Protect Sensitive Data

Use encryption for the sensitive files on your computer, laptop or mobile that contain financial or personal details. Ensure that you back up your important files and data at regular intervals and store them in a different location.

Secure Your Social Media Accounts

Can't do without your social media accounts? No worries! But, make sure that all your social media profiles are set to private. Do not keep your mobile or email ID visible to the public. Be cautious of what information/photos you publish online.

Regular System Updates

Do not ignore system updates. Make it a habit to keep your operating system and applications up-to-date. Do turn off auto updates to avoid potential cyber attacks on redundant software/applications.

Secure Your WiFi Network

Remember that an open Wireless network is also a possible gateway for hackers and cyber conmen. It is also possible to launch malware and virus attacks through domestic WiFi networks if they aren't secured

properly. Additionally, you must exercise extra caution when connected to a public hotspot or WiFi. Avoid engaging in financial transactions or exchanging confidential data in such cases.

How Nations Worldwide Are Keeping Cybercrimes at Bay?

In 1996, representatives from Japan, Canada, and the United States came together to draft a preliminary international treaty covering cybercrimes. Some civil groups disapproved of the provisions in the treaty that permitted internet service providers to record consumer transactions. However, the treaty was a success and resulted in the International Convention on Cybercrime in Budapest in 2001.

The International Convention of Cybercrime

Thirty countries, including South Africa, Japan, Canada, and the US signed the Convention. For the first time, it authorized a global cyber police squad to investigate cybercrime cases. They were thus authorized to monitor network communications and record intercepted data across the globe.

Eventually, 2002 witnessed the proposal of protocols covering racist cybercrimes and cyber-terrorism. The United States classifies the unauthorized use of a computer, data theft, and digital fraud as acts of felony. Similarly, several laws have come into action in India too, for bringing steady justice to victims of cybercrimes.

Incognito Forensic Foundation – For the Prevention & Investigation of Cybercrime

Guess you will be more vigilant and alert on online platforms now that you have the list of cybercrimes handy. However, cybercrimes are growing nastier and more sophisticated by the day. Incognito Forensic Foundation (IFF Lab) is a private digital and cyber forensics lab in Bangalore. It houses a state-of-the-art laboratory and assists law enforcement agencies with the investigation of various types of cybercrimes. IFF Lab also assists various public and private organization in cybercrime prevention and incident response.

DEVELOPING ACADEMIC VOCABULARY

3. The following words are all from the text above. Find them in the text:

avoid disapprove enforcement treaty sophisticated

4. For each word, read the sentence it occurs in and answer the questions:

- a) Is the word positive, negative or neutral?
- b) Is it a noun, adjective, adverb or verb?
- c) Can you think of a word with a similar meaning (synonym) and one with an opposite meaning (antonym)?

READING COMPREHENTION

5. Answer the questions:

1. How should you use your passwords to be protected from cybercrime?
2. Is it possible to guarantee security to computer or gadget?
3. How can you hide your sensitive data?
4. How can you protect your social media accounts?
5. Why should you keep your operating system and applications up-to-date?
6. What should you avoid when you are connected to a public hotspot or WiFi?
7. What kind of international treaty were representatives from Japan, Canada, and the United States going to draft in 1996?
8. Was it a success? What did it result in?
9. How many countries signed the International Convention of Cybercrime?
10. What was the attitude of the USA and India to cybercrimes at the beginning of the 21st century?
11. How did these countries react to data theft and digital fraud?
12. What does Incognito Forensic Foundation (IFF Lab) stand for?

6. Complete the sentences:

1. It is a good practice to keep...
2. Install anti-spyware software and regularly update it
3. ... your computer, laptop or mobile that contain financial or personal details.
4. But, make sure that are set to private.
5. potential cyber attacks on redundant software/applications.
6. Additionally, ... connected to a public hotspot or WiFi.
7. In 1996, to draft a preliminary international treaty covering cybercrimes.

8. Thirty countries, including South Africa, the Convention.
9. The United States classifies the unauthorized use of a computer,
10. Incognito Forensic Foundation (IFF Lab) is

7. Translate the words and word combinations into Russian:

Handy tips , felony, defense, malicious attacks, encryption, account settings, redundant, to secure properly, engaging in financial transactions, a preliminary treaty, intercepted data, law enforcement agencies, incident response.

8. Give the English equivalents of the following words and word combinations:

Предотвратить киберпреступление, защитить от вредоносных программ-шпионов, предоставить на всеобщее обозрение, обмениваться конфиденциальными данными, не одобрить положения договора, уполномочить, несанкционированное использование, цифровое мошенничество, отвратительные и изощренные, быть более бдительным, расследование киберпреступлений.

9. Make your own sentences with the words and phrases:

Malicious, disapprove, sensitive data, preliminary, felony, sophisticated.

10. Explain the meaning of the following words and phrases in English:

To avoid, to discover, defense, to make sure, cautious, secure, to engage, to permit.

11. Translate into English:

1. В современном цифровом мире люди обменивают удобство на конфиденциальность.

2. Это означает, что они все больше и больше делятся информацией о себе.

3. Благодаря этому киберпреступники и хакеры без особых усилий зарабатывают сотни миллионов долларов каждый год.

4. Фишинговые электронные письма имитируют сообщения от компании, которой вы доверяете.

5. Фишинговые сообщения обманом заставляют людей отказаться от личной информации или перейти по вредоносной ссылке.

6. Вредоносная ссылка загружает вредоносное ПО.
7. Каждый день совершаются тысячи фишинговых атак.
8. Знание, как обеспечить безопасность и обучение фишингу, помогут вашей компании защититься от фишинговых атак.
9. У вредоносного ПО может быть несколько целей: власть, влияние, деньги, информация.
10. Результат вредоносного ПО – это всегда трудоемкие, часто дорогостоящие усилия по восстановлению.
11. Устанавливайте и постоянно обновляйте высококачественную антивирусную программу.
12. Поддельные веб-сайты обычно распространяются с помощью электронного письма со ссылкой на незаконный веб-сайт.
13. Игнорируйте и удаляйте ссылки на незаконные веб-сайты.

LISTENING

12. a) Watch the video “Fighting Cybercrime”: A New Era of Collaboration https://youtu.be/18_ntwqnA9w. Find out the answers to the following questions:

1. Why should such organizations like Microsoft, government officials, law enforcement, and other companies come together?
2. What was one of the biggest vulnerabilities these organizations had before?
3. In what way is it possible to get the things off the ground when it comes to cybercrime?
4. What company is at the core to solve cybercrime problems?
5. What does success mean?

b) Watch the video again and complete the abstract with missing words and phrases:

The biggest thing about cybercriminals is they are moving very very fast, they are getting more and moremore savvy, moreand if they are gonna get better at what they do it's going to take organizations like Microsoft,, law enforcement, and other companies to in new ways to understand what the are doing,them, prosecute them and really hold them accountable in some new ways. For me it is eye opening story so I think that for me it's a new way of thein the context of the cybercrime discussion focusing on digital forensic

..... One of the biggest vulnerabilities we had before was we weren't talking to each other.wasn't talking among itself and we weren't talking to private industry. And that's why it is so good that we have a good, good outreach, because law enforcement cannot do this ourselves we need to have everybody important.

SPEAKING

13. Discuss the questions about the role of the Internet in our life:

1. How often do you use the Internet and what for?
2. What's the first thing you do when you go online?
3. What type of information do you usually search for?
4. How about music? Do you use the Internet to listen to music?
5. Do you read books or magazines online?
6. How many times a day do you use the Internet?
7. Can you tell me what your favourite website is?
8. Do you use social networks or chats? If yes, then what for?
9. Do you use online dictionaries?
10. Could you live a day without the Internet?
11. How many gadgets do you use in everyday life?
12. What is the most usable gadget for you?
13. Do gadgets take a lot of your time?

14. Speak about advantages and disadvantages of computers and the Internet.

15. Discuss the questions on the topic "Technology in our Life":

1. What do you think when you hear the word "Technology"?
2. You are stranded on a desert island. What would you wish you had with you?
3. How has technology changed the workplace?
4. Has technology had any impact on education? In what way?
5. How has technology changed on medical care?
6. How has technology revolutionized transport?
7. Has technology ever let you down? (=disappointed you by not working properly). What happened?
8. Does technology (or the use thereof) ever get on your nerves?

9. How has technology improved our daily lives? Give examples and explain the advantages of technological advances.

10. Is technological advance always for the better? Can you think of any disadvantages of technology?

11. 'Any sufficiently advanced technology is indistinguishable from magic.' Do you agree? Give some examples.

12. What could never be replaced by technology? Explain why not?

13. 'Modern technology owes ecology an apology.' What does this mean? Do you agree?

APPENDIX

Inventions around us

1. Write the number next to the picture

