



Unit 2 • Information and Communication Technology: staying safe online and new technologies

Name _____ Class _____ Roll no. _____ Date _____ Marks _____ / 37

1 Key words

[4]

Fill in the blanks with words from the box. Two words in the box are not needed. Each blank carries 0.5 mark.

blog cloud computing firewall hacking malware phishing robotics router
virtual reality worm

An online journal in which the newest post appears at the top is a _____. Tricking people into giving away their passwords or PINs with a message that seems to come from a bank or a friend is _____. Getting into a computer or a network without permission is _____. Programs made to harm a computer, such as viruses and spyware, are together called _____. A _____ blocks connections that shouldn't get into a computer or a network. The branch of science and engineering that designs, builds and uses robots is _____. A computer-made, three-dimensional world that you can look around and act in is _____. Using remote servers over the internet to store and process data is _____.

2 Match the columns

[3]

Match each word in Column A with its description in Column B. Write the letter in the box. One description in Column B is not needed. Each match carries 0.5 mark.

Column A

Column B

- | | | |
|------------------------------|--------------------------|--|
| 1. identity theft | ☐ | a. threatening or humiliating someone through social media or messages |
| 2. cyberbullying | ☐ | b. a computer-made world seen through a headset |
| 3. botnet | ☐ | c. asking for a code sent to your phone as well as the password |
| 4. two-factor authentication | ☐ | d. artificial intelligence made for one particular task |
| 5. narrow AI | ☐ | e. using someone's personal information to pretend to be them |
| 6. chatbot | ☐ | f. a network of computers secretly taken over by malware |
| | | g. a program that chats with you in ordinary language |



[5]

Choose the correct option for each of the following questions.

- i. Which type of cybercrime means threatening, humiliating or mentally torturing someone through electronic means such as social media? [1]
 - a. identity theft
 - b. cyberbullying
 - c. stealing trade secrets
 - d. hacking
- ii. Someone makes a fake account with your photo and name, and uses it to ask your friends for money. What is this? [1]
 - a. hacking
 - b. defamation
 - c. identity theft
 - d. cyber terrorism
- iii. Which technology uses machines to copy human intelligence and abilities? [1]
 - a. robotics
 - b. artificial intelligence
 - c. virtual reality
 - d. Google Plus
- iv. A phone app recognizes a plant from a photo of its leaf, but can't do anything else. What kind of AI is it? [1]
 - a. narrow (weak) AI
 - b. general (strong) AI
 - c. artificial superintelligence
 - d. not AI at all
- v. Which of these is an advantage of cloud computing? [1]
 - a. cloud migration
 - b. global scale
 - c. IT governance
 - d. unexpected costs

[3]

Write very short answers to the following questions.

- a. What is a harmful program that copies itself from one computer to another called? [1]
-
-
- b. Which act of Nepal, passed in 2063 BS, deals with cybercrime? [1]
-
-
- c. Why is a fake SMS from a “bank” asking for your PIN called phishing? [1]

[8]

Write short answers to the following questions.

- a. Write any two differences between a computer code of conduct and cyber law. [2]
-
-
-



b. What is cloud computing? Write any one service it provides. [2]

c. Give a reason: using a phone late at night can keep you awake. [2]

d. Give a reason: NASA's rover Perseverance can't be driven on Mars with a joystick from Earth. [2]

6 Long answers [8]

Write long answers to the following questions.

a. What is cybercrime? Write any three of its forms. [4]

b. Write any two dangers to internet security, and any two ways to avoid them. [4]



[4]

a. An ATM PIN has 4 digits, and each digit can be any of 0 to 9. How many different PINs are possible? If the card is blocked after 3 wrong tries, what fraction of all PINs could a thief try?

Answer: _____

- [2]

Answer:

[2]

An AI chatbot answers every question confidently. Should you trust everything it says?

(not marked)

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