

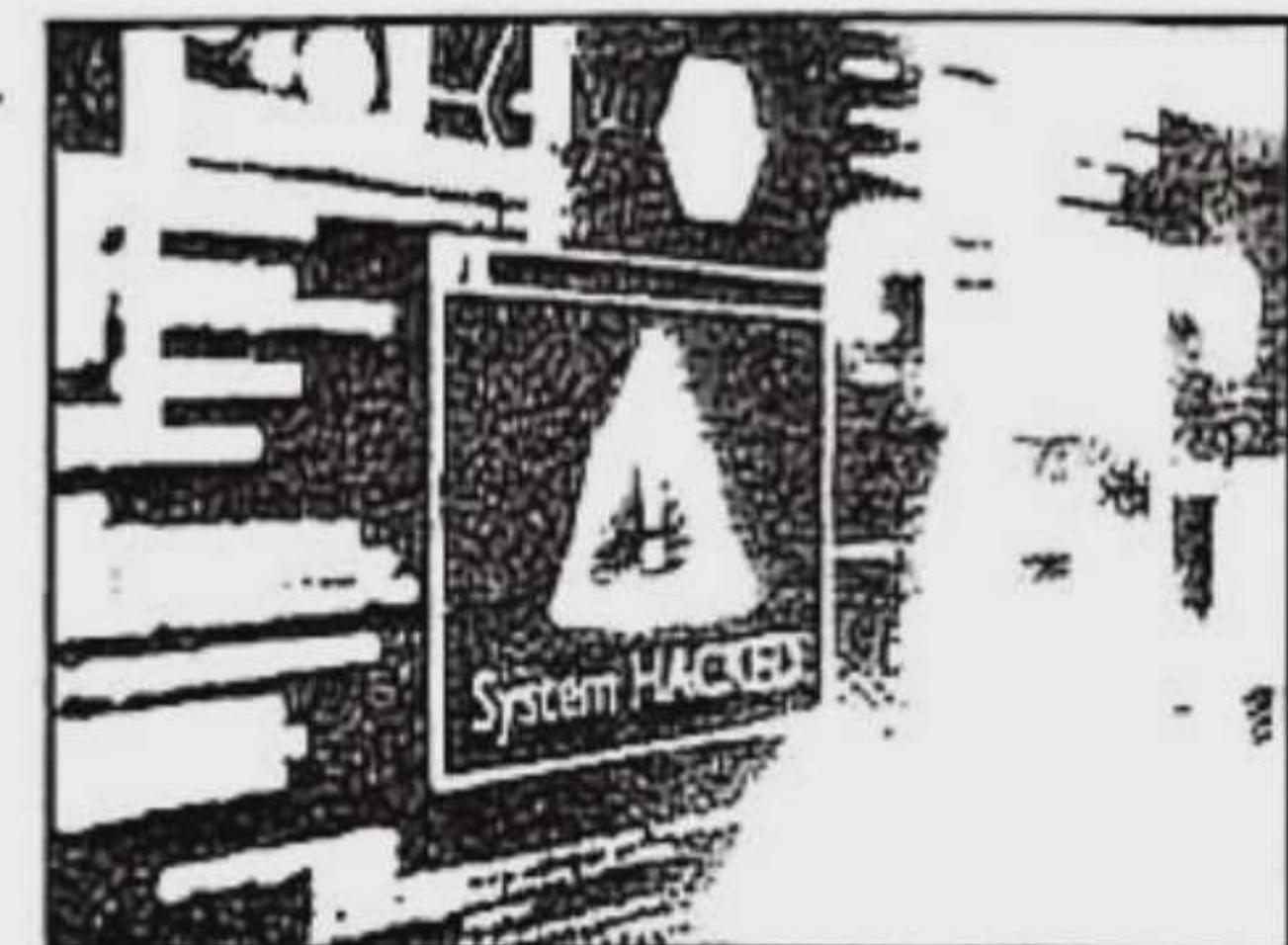
# Safe and Ethical Use of Information and Communication Technology

## Contents for Discussion

- The Idea of Security • Malicious software • Computer Virus • Online Identity and Its Safety • Cyber Crime • Eradication of Corruption • Right to Information and the Right to Information Act.

 **Learning Outcomes :** After studying this chapter, I will be able to—

- explain the importance of safe use of devices;
- explain the importance of the ethical use of information and communication technology;
- explain the importance of ICT to eradicate corruption;
- Learn the application of protecting documents by using password;
- Use the devices of ICT without any risk;
- explain the right to information.



## Practice

**Multiple Choice and General Q/A following  
100% accurate format for best prep.**

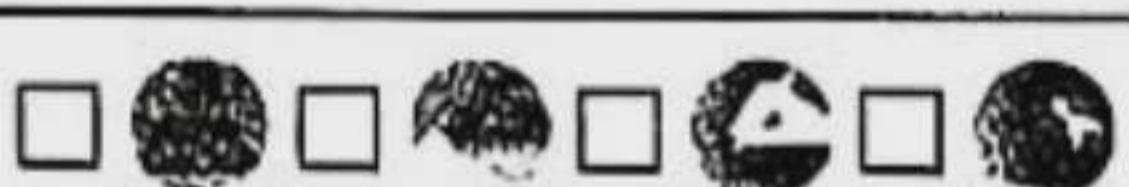
Dear learners, the Q/A of this chapter have been divided into Exercises, MCQs, Short answer questions and Exercise-based tasks in light of the learning outcomes. Practice the questions well to ensure the best preparation in the exam.



### Textual Q/A



### Let's learn the textbook Q/A



### MCQs with Answers

5. If any password is used except the appropriate one— *(Higher ability)*
- the others can easily get to know it;
  - secrecy may be violated;
  - it may be difficult to remember the password;
- Which one is correct?**
- C @ i & ii    B i & iii    C ii & iii    D i, ii & iii

### Short Q/A



**Question 6. What will you do if your computer is attacked by virus?**

**Ans.** A computer virus is a type of harmful software. If my computer is attacked by virus, I will take the following steps:

- Install an updated anti-virus program on the computer. Then, scan the entire computer to detect viruses and destroy the detected viruses using the anti-virus software.
- Check how the computer was infected by the virus. If it was through a pen drive, scan the pen drive with an anti-virus or format the pen drive. Find and eliminate the source of the virus spread.
- Use internet security anti-virus to prevent virus infection from the internet.

### MCQs with Answers

1. Which one is a malicious software? *(Knowledge)*
- A Microsoft Word    B Trojan Horse  
C Google Chrome    D Mozilla Firefox

2. The ethical hackers are— *(Comprehension)*
- A Black hat hacker    B White hat hacker  
C Blue hat hacker    D Gray hat hacker

3. For the sake of security we should—. *(Application)*
- use long password;
  - use complicated password;
  - change password regularly;

**Which one is correct?**

- D @ i & ii    B i & iii    C ii & iii    D i, ii & iii  
Read the writing below, and answer the question no. 4 & 5 :

**Some sample passwords are :**

- i. rakib                      ii. baBual Amin 1985  
iii. Shaymol                 iv. Piku 2014

4. Which password is the most useful according to what you have learnt? *(Knowledge)*
- B @ i    B ii    C iii    D iv

**Question 7.** Write five advantages of using passwords.

**Ans.** Five advantages of using passwords are given below:

1. The use of passwords protects against virus attacks.
2. Protects information from hackers.
3. There is no alternative to passwords to protect device software.
4. Passwords protect personal confidential information from falling into the hands of others.
5. Ensures safe and ethical use of information and communication technology.

**Question 8. Explain how information and communication technology can play a significant role in eliminating corruption.**

**Ans.** Information and communication technology can play a significant role in eliminating corruption. For example :

1. The entire process of storing and processing current information has been brought under information technology. Therefore, if any information is incorrect or there is irregularity in transactions, it is easily exposed to everyone.
2. The tender process used to be done in writing, but now, through e-tendering, financial transactions or tender theft incidents are decreasing. A special portal has been created in Bangladesh for e-tendering.

3.: Due to business through e-commerce, a direct relationship has been created between buyers and sellers. So that dishonest middlemen cannot take any advantage.

4. There is no chance of corruption due to the use of the OMR method in viewing exam results.
5. Now, due to the internet and media, people have the opportunity to express their opinions and unite against powerful people and their unfair decisions. This prevents anyone from easily engaging in corruption.

**Question 9. What activities are considered cybercrimes?**

**Ans.** Due to information technology and the internet, many new opportunities have been created in our lives, and similarly, a completely new type of crime called cybercrime has emerged. Some common cybercrimes at this moment are :

**Spam:** Spam is unnecessary, intentional, or objectionable emails created by machines.

**Fraud:** Communicating with ordinary people in various ways using false identities and false information and deceiving them in various ways.

**Publication of objectionable information:** Publishing false or objectionable information about a person on the internet.

**Displaying threats :** Harassing someone in various ways using the internet, email, or a social networking site.

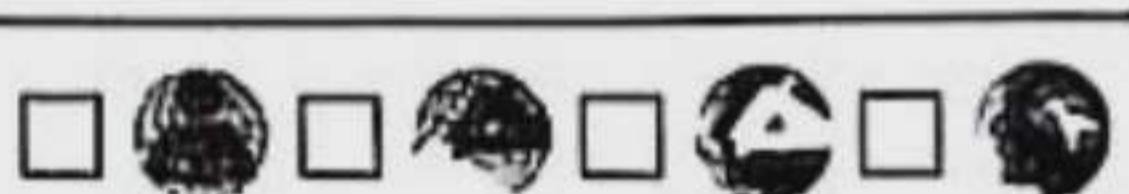
**Cyber warfare :** A group or even a country, for various reasons, unites and declares a kind of cyber war against another group, community, or country.



## Multiple Choice Q/A



## Designed as per topic



### The Idea of Security

► Textbook Page 37

1. Which of the following is used to differentiate between man and machine to ensure cyber security? (Knowledge) [BB '19]
  - Ⓐ Strong password
  - Ⓑ Anti-virus
  - Ⓒ Password manager
  - Ⓓ Captcha with number and letter
2. The system to differ man from machine is called —. (Knowledge) [DB '18]
  - Ⓐ capture
  - Ⓑ captcha
  - Ⓒ fibre
  - Ⓓ firewall
3. How many types of program are used in computer? (Knowledge) [JB '18]
  - Ⓐ 2
  - Ⓑ 3
  - Ⓒ 4
  - Ⓓ 5
4. What is called the system to differentiate man from machine? (Knowledge) [CB '18]
  - Ⓐ Captcha
  - Ⓑ Chaptcha
  - Ⓒ Chacha
  - Ⓓ Capteah

5. What is captcha basically? (Knowledge) [SB '18]

- Ⓐ Robot
- Ⓑ Password
- Ⓒ A security system
- Ⓓ A networking system

6. What is the asset of modern world? (Knowledge) [SB '18]

- Ⓐ Gold mines
- Ⓑ Software
- Ⓒ Data
- Ⓓ Information

7. How much dollar did Michael Calce damage by hacking the networks of the big organisations like Dell, Yahoo, Amazon, ebay and CNN? (Knowledge) [All Board '16]

- Ⓐ 50 crore
- Ⓑ 100 crore
- Ⓒ 150 crore
- Ⓓ 200 crore

8. What is called the system to make understandable separately between man and computer in internet? (Knowledge) [All Board '16]

- Ⓐ Capic
- Ⓑ Captive
- Ⓒ Captch
- Ⓓ Captcha

9. Which software impedes the functions of other software and steals or erases information? (Knowledge) [All Board '16]

- Ⓐ Marish warm
- Ⓑ Malware
- Ⓒ Maxware
- Ⓓ My squel

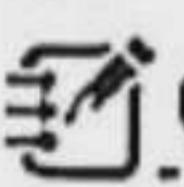
10. Which one plays the role of safety in every case of our life? (Knowledge)  
 @ information & communication technology  
 Ⓛ mobile phone  
 Ⓜ CCTV camera  
 Ⓝ internet  
**Malicious software** ▶ Textbook Page 39
11. Malware is— (Higher Ability) [DB '19]  
 i. computer virus  
 ii. computer worm  
 iii. Trojan horse  
**Which one is correct?**  
 Ⓛ Ⓛ i & ii Ⓛ i & iii Ⓛ ii & iii Ⓛ i, ii & iii
12. What kind of software is spread? (Knowledge) [DB '19]  
 Ⓛ Word processing Ⓛ Spread sheet  
 Ⓛ Database Ⓛ Graphics
13. In which operating system the number of malware is more? (Knowledge) [DB '19]  
 Ⓛ DOS Ⓛ Linux  
 Ⓛ Mac Ⓛ Windows
14. In activities of computer users the function of malware is— (Higher Ability) [JB '19]  
 i. create hinder  
 ii. provide security  
 iii. information hack  
**Which one is correct?**  
 Ⓛ Ⓛ i & ii Ⓛ i & iii Ⓛ ii & iii Ⓛ i, ii & iii
15. What is the name of the first internet worm of the world? (Knowledge) [SB '19]  
 Ⓛ Worm-32 Ⓛ Worm-33  
 Ⓛ Worm-34 Ⓛ Morris worm
16. What is the main reason of increasing Malware? (Knowledge) [SB '19]  
 Ⓛ DVD Ⓛ Pendrive  
 Ⓛ Internet Ⓛ Memory card
17. What type of software 'Mysql'? (Knowledge) [BB '19]  
 Ⓛ Office Ⓛ Browsing  
 Ⓛ Database Ⓛ Operating system
18. How many kinds are malware? (Knowledge) [DjB '19]  
 Ⓛ 2 Ⓛ 3  
 Ⓛ 4 Ⓛ 5
19. Which one is a malware? (Knowledge) [DB '18]  
 Ⓛ Trojan horse Ⓛ Avast  
 Ⓛ Panda Ⓛ Norton
20. How many kinds of malware are there? (Knowledge) [DB '18]  
 Ⓛ 2 Ⓛ 3  
 Ⓛ 4 Ⓛ 5
21. What is called the Malicious software in short? (Knowledge) [DB '18]  
 Ⓛ Virus Ⓛ Malware  
 Ⓛ Network Ⓛ Interface

22. First devastating nature of virus was shown in — year? (Knowledge) [RB '18]  
 Ⓛ 1980 Ⓛ 1982  
 Ⓛ 1984 Ⓛ 1986  
**Read the following stem and answer the questions No. 30 and 31 :**  
 Mr Masum works as an accountant in a private firm. For this he uses necessary software. After a few days he did not find necessary files in his computer. [CB '18]
23. Why Mr Masum could not find files in his computer? (Knowledge) [CB '18]  
 Ⓛ Infected by Malware  
 Ⓛ Computer not properly turn off  
 Ⓛ Restarted the computer  
 Ⓛ Did not use password in files
24. Mr Masum's necessary software is—. (Higher Ability) [CB '18]  
 i. MS Excel  
 ii. MS power point  
 iii. Open Office Calc  
**Which one is correct?**  
 Ⓛ Ⓛ i & ii Ⓛ i & iii Ⓛ ii & iii Ⓛ i, ii & iii
25. Which of the following is database software? (Knowledge) [CtgB '18]  
 Ⓛ Libra Ⓛ Safari  
 Ⓛ Oracle Ⓛ VisiCalc
26. At present, the malware of which operating system is larger in number than that of the other operating system? (Knowledge) [BB '18]  
 Ⓛ Linux Ⓛ Dos  
 Ⓛ Windows Ⓛ MAC
27. The most common of identified malware are—. (Higher Ability) [BB '18]  
 i. computer virus  
 ii. computer worm  
 iii. brain  
**Which one is correct?**  
 Ⓛ Ⓛ i & ii Ⓛ i & iii Ⓛ ii & iii Ⓛ i, ii & iii
28. How many type of Malware? (Knowledge) [RB; JB; SB; DjB; CtgB '17]  
 Ⓛ 5 Ⓛ 4 Ⓛ 3 Ⓛ 2
29. Main cause of increasing the malware—. (Higher Ability) [All Board '16]  
 i. use of DVD  
 ii. use of memory card  
 iii. use of pendrive  
**Which one is correct?**  
 Ⓛ Ⓛ i & ii Ⓛ i & iii Ⓛ ii & iii Ⓛ i, ii & iii
30. How many identified malwares are the most common? (Knowledge) [All Board '15]  
 Ⓛ 5 Ⓛ 4  
 Ⓛ 3 Ⓛ 2
31. In which operating system the number of malware is more? (Knowledge) [All Board '14]  
 Ⓛ Dos Ⓛ Unix  
 Ⓛ Linux Ⓛ Windows



- 32. Which one is the first Internet Worm in the world?** (Knowledge) [All Board '14]  
 @ Hook worm      ⑥ Lock worm  
 ② Morris      ⑦ Rootkits
- 33. What is the cause of the increase of Malware?** (Knowledge) [All Board '14]  
 ④ Use of Internet      ⑤ Use of Pendrive  
 ③ Use of Memory Card reader      ⑦ Use of DVD
- 34. Which one of the following is Database software?** (Knowledge) [Rajuk Uttara Model College, Dhaka]  
 ④ Open Office      ⑥ Libra Office  
 ② Kspread      ⑧ MySql
- Computer Virus** → Textbook Page 41
- 35. Which one is the popular anti-virus software?** (Knowledge) [DB '19]  
 ④ Vienna      ⑥ Panda  
 ② Nimda      ⑦ Pingpong
- 36. Characteristics of 'Nibashi' virus— (Higher Ability)** [CB '19]  
 i. permanent in memory  
 ii. affect the program  
 iii. inactive  
**Which one is correct?**  
 ④ ① i & ii      ⑤ i & iii      ⑥ ii & iii      ⑦ i, ii & iii
- 37. Based on nature of working how many types of virus are there?** (Knowledge) [SB '19]  
 ④ 2      ⑥ 3  
 ② 4      ⑦ 5
- 38. Which virus attacked computer hard disk on 26 April every year?** (Knowledge) [BB '19]  
 ④ Jerusalem      ⑥ CIH  
 ② Vienna      ⑦ Angelo
- 39. Anti-virus software's are— (Higher Ability)** [BB '19]  
 i. Norton  
 ii. Avast  
 iii. Trojan horse  
**Which one is correct?**  
 ④ ① i & ii      ⑤ i & iii      ⑥ ii & iii      ⑦ i, ii & iii
- 40. Which is the harmful software?** (Knowledge) [DjB '19]  
 ④ Microsoft word      ⑥ Trojan Horse  
 ② Mozilla Firefox      ⑦ Adobe Photoshop
- 41. What is the name of the most familiar virus?** (Knowledge) [RB '18]  
 ④ Malware      ⑥ Trojan horse  
 ② CIH      ⑦ Ping pong
- 42. In which year did scientist John Von Newman discuss about virus?** (Knowledge) [RB '18]  
 ④ 1845      ⑥ 1869  
 ② 1945      ⑦ 1949
- 43. In how many classes virus is divided based on the working method?** (Knowledge) [CB '18]  
 ④ 2      ⑥ 3  
 ② 4      ⑦ 5

- 44. The working process of a computer can be destroyed by—.** (Higher Ability) [CB '18]  
 i. Computer virus      ii. Anti virus  
 iii. Trojan horse  
**Which one is correct?**  
 ④ ① i      ⑤ i & ii      ⑥ i & iii      ⑦ i, ii & iii
- 45. The example of computer virus are—.** (Higher Ability) [CtgB '18]  
 i. CAH  
 ii. Brain  
 iii. ELK CLONER  
**Which one is correct?**  
 ④ ① i & ii      ⑤ i & iii      ⑥ ii & iii      ⑦ i, ii & iii
- 46. How many types of virus according to nature of working?** (Knowledge) [CtgB '18]  
 ④ 2      ⑥ 3  
 ② 4      ⑦ 5
- 47. How many types of viruses on the basis of the work?** (Knowledge) [SB '18]  
 ④ 2      ⑥ 3  
 ② 4      ⑦ 5
- 48. Which virus spreads through the floppy disk all over the world?** (Knowledge) [SB '18]  
 ④ Brain      ⑥ Morris worm  
 ② ELK CLONER      ⑦ Nimda
- 49. Which year Brain virus software is made in?** (Knowledge) [SB '18]  
 ④ 1980      ⑥ 1982  
 ② 1984      ⑦ 1986
- 50. Which one is the first Internet worm in the world?** (Knowledge) [SB '18]  
 ④ Rootkits      ⑥ Morris worm  
 ② Lock worm      ⑦ Hook worm
- 51. When the CIH virus activates every year?** (Knowledge) [SB '18]  
 ④ 16 April      ⑥ 26 April  
 ② 16 May      ⑦ 26 May
- 52. By which, in 1982 a virus called ELK Cloner started transferring data or programmes from one computer to another?** (Knowledge) [BB '18]  
 ④ CD      ⑥ Pen Drive  
 ② Floppy Disk      ⑦ Internet
- 53. Which one is harmful software?** (Knowledge) [DjB '18]  
 ④ Ms word      ⑥ Ms Excel  
 ② Trojan horse      ⑦ Google chrome
- 54. On which date of every year, CIH virus gets activated?** (Knowledge) [DjB '18]  
 ④ 6<sup>th</sup> April      ⑥ 16<sup>th</sup> April  
 ② 21<sup>th</sup> April      ⑦ 26<sup>th</sup> April
- 55. Which one is the medium of computer virus carrier?** (Knowledge) [DjB '18]  
 ④ Modern      ⑥ Network  
 ② Pendrive      ⑦ Cable

56. When published the devastating nature of virus at first? (Knowledge) [DB; CB; BB-'17]  
 ① In 1984      ④ In 1985  
 ② In 1986      ③ In 1987
57. Which scientist first called that virus is a programme? (Knowledge) [DB; CB; BB-'17]  
 ① Alfred Nobel      ④ Fedrick B Cohen  
 ② Avast      ③ Charles Babbage
58. What is the first Internet worm of the world? (Knowledge) [DB; CB; BB-'17]  
 ① Maurice worm      ④ Worm-32  
 ② Worm-33      ③ Worm-34
59. What is Daproxy? (Knowledge)  
 [RB; JB; SB; DjB; CtgB '17]  
 ① A computer Virus      ④ Space station  
 ② One kind of Disease      ③ One kind of machine
60. In which year virus has focused by computer scientist John Von Newman? (Knowledge) [RB; JB; SB; DjB; CtgB '17]  
 ① 1948      ④ 1949  
 ② 1950      ③ 1951
61. Who named the computer programme as virus at first? (Knowledge) [All Board '16]  
 ① Fredrick B Cohen      ④ Andraric B. Kohen  
 ② Fedric D. Kohen      ③ Andru D. Kohen
62. Which one is the harmful software? (Knowledge) [All Board '15]  
 ① Microsoft Word      ④ Avast  
 ② Trojan horse      ③ Norton
63. How many divisions are there for virus based on its nature of working? (Knowledge) [All Board '15]  
 ① 2      ④ 3  
 ② 4      ③ 5
64. When did computer scientist John Von Newton focus light on computer virus? (Knowledge) [All Board '15]  
 ① In 1940      ④ In 1949  
 ② In 1982      ③ In 1986
65. When did a virus called Elk cloner come out of its birthplace? (Knowledge) [All Board '15]  
 ① In 1949      ④ In 1980  
 ② In 1982      ③ In 2000
66. Which one is the harmful software? (Knowledge)  
 [All Board '14]  
 ① Trojan horse      ④ Avast  
 ② Norton      ③ Kasperski
67. What is Trojan horse? (Knowledge) [All Board '14]  
 ① Malware      ④ System software  
 ② Package software      ③ Design software
-  Online Identity and Its Safety ▶ Textbook Page 44
68. The worldwide popular email sites are— (Higher Ability) [DB '19]  
 i. yahoo mail service  
 ii. gmail service  
 iii. hotmail service  
 Which one is correct?  
 ① ① & ②      ④ ② & ③      ② ② & ③      ③ ①, ② & ③
69. Which one of the following is password manager? (Knowledge) [JB '19]  
 ① Last pass      ④ Adwàre  
 ② Norton      ③ Mountain
70. What is called CM4? (Knowledge) [CtgB '19]  
 ① Captcha      ④ Password  
 ② Vinus      ③ Text
71. For the safety of the password to be done— (Higher Ability) [CtgB '19]  
 i. to use capital and small letters, number and symbol  
 ii. to write the password anywhere  
 iii. to change the password often  
 Which one is correct?  
 ① ① & ②      ④ ① & ③      ② ② & ③      ③ ①, ② & ③
72. In Bangladesh how many years carries prison for hacking? (Knowledge) [BB '19]  
 ① 2 to 7 years      ④ 2 to 8 years  
 ② 3 to 7 years      ③ 3 to 8 years
73. Necessity for password safety— (Higher Ability) [DjB '19]  
 i. Letter and number  
 ii. special character (As. @)  
 iii. combination of small letter and capital letter  
 Which one is correct?  
 ① ① & ②      ④ ② & ③      ② ① & ③      ③ ①, ② & ③
74. According to the ICT Act, how many year's imprisonment is given for the offence of hacking? (Knowledge) [DB '18]  
 ① 2-3      ④ 3-5  
 ② 3-7      ③ 3-10
75. What is the name of those persons who perform hacking? (Knowledge) [RB '18]  
 ① Hacked      ④ Hack  
 ② Hacking      ③ Hacker
76. Ethical hackers are— (Knowledge) [JB '18]  
 ① black hat hacker      ④ white hat hacker  
 ② blue hat hacker      ③ gray hat hacker
77. What is the duration of imprisonment for hacking according to ICT-Act- 2006 (Revised in 2009) in Bangladesh? (Knowledge) [JB '18]  
 ① 3-7 years      ④ 2-5 years  
 ② 4-8 years      ③ 5-8 years
78. What is the name of software which is used to manage password? (Knowledge) [CB '18]  
 ① Avast      ④ Reaper  
 ② Keepass      ③ CIH
79. In 2000, a hacker hacked the networks of the organisations like—. (Knowledge) [BB '18]  
 ① yahoo, google del      ④ amazon, e-bay, del  
 ② CNN, HP, e-bay      ③ CNN, google, del



- Read the text below and answer the questions No. 149 and 150 :**

There is no internet connection of Habib's house. He uses internet for his task in a shop, near his house. One day he failed to log in his e-mail.

[BB '18]

- 80. What could Habib use for sending an e-mail?** (Knowledge)

- (a) Less pass      (b) Lost pass  
 (c) Lot pass      (d) Last pass

- 81. It was the duty of Mr Habib's —** (Higher Ability)

- i. use strong password  
 ii. using same password for a couple of days  
 iii. logout before leave the seat

**Which one is correct?**

- 82. What is password?** (Knowledge) [DjB '18]

- (a) Type of network      (b) Type of security system  
 (c) Email safety      (d) One type of folder

- Read the stem and answer the questions no. 152 & 153 :**

Several sample passwords are given below :

- (i) rajib; (ii) barshafik 1974;  
 (iii) partho; (iv) Arinku@2000

[DjB '18]

- 83. Which password is most effective based on stem?** (Knowledge)

- (a) 1      (b) 2  
 (c) 3      (d) 4

- 84. If effective password is not used then —.** (Higher Ability)

- i. one can know password easily  
 ii. hampers security system  
 iii. hard to remember the password

**Which one is correct?**

- 85. How many years of sentence carries the offence of hacking according to the Information and Communication Technology Act, 2006?** (Knowledge) [All Board '16]

- (a) From 3 to 7 years      (b) From 3 to 8 years  
 (c) From 3 to 9 years      (d) From 3 to 10 years

- 86. How many years of sentence are there for the offence of hacking according to the Information and Communication Technology Act 2006 (Amendment 2009)?** (Knowledge) [All Board '15]

- (a) 3 to 4      (b) 3 to 7  
 (c) 4 to 7      (d) 5 to 8

- 87. Which one of the following is related to Spam?** (Knowledge) [All Board '14]

- (a) Operating system      (b) E-mail  
 (c) Browser      (d) Search Engine

- 88. Which one is called the invisible security wall?** (Knowledge) [Rajuk Uttara Model College, Dhaka]

- (a) Stone wall      (b) Brick wall  
 (c) Fiber wall      (d) Fire wall

### Cyber Crime

► Textbook Page 45

- 89. Major part of Cyber Crime is—** (Knowledge) [CB '19]

- (a) Spread personal information  
 (b) Betray  
 (c) Show family pictures  
 (d) Spread news of crime

- 90. Rony gets a message of huge money in his mobile. What kind of crime is the message?** (Knowledge) [CtgB '19]

- (a) Cyber      (b) Black hat  
 (c) Ethical      (d) Virus

- 91. A major part of a cyber crime is—** (Knowledge) [SB '19]

- (a) Corruption      (b) Fraud  
 (b) Cyber battle      (d) Hacking

- 92. Objectives of hacking are—** (Higher Ability) [BR '19]

- i. earn money  
 ii. ensure security  
 iii. illegal activities

**Which one is correct?**

- 93. There is a big part of cyber crime is—.** (Knowledge) [RB; JB; SB; DjB; CtgB '17]

- (a) Corruption      (b) Hacking  
 (c) Cyber battle      (d) Deceiving

- 94. What will we do to protect from spam?** (Knowledge)

- (a) Special step should be taken  
 (b) Create new e-mail  
 (c) The e-mail should be closed  
 (d) Internet connection should be give up

### Eradication of Corruption

► Textbook Page 47

- 95. Which of the following option play effective role to eradication of corruption?** (Knowledge) [CtgB '18]

- (a) E-mail      (b) MMS  
 (c) SMS      (d) E-tender

- 96. How can eradicate corruption?**

- (Knowledge) [RB; JB; SB; DjB; CtgB '17]

- (a) By power      (b) By Wealth  
 (c) By ICT      (d) By Strength

- 97. To get any work by using money is called—is.** (Knowledge)

- (a) E-tender      (b) E-commerce  
 (c) Tender      (d) E-portal

- 98. What is the disadvantage of usual tender?** (Knowledge)

- (a) Here needs a lot of money  
 (b) Here there is a scope of corruption  
 (c) Here the work do not get

- b** (d) It is a one kind of cheat

- 99. What is the advantage of E-tender?** (Knowledge)

- (a) There is little scope for corruption  
 (b) Here every body gets work  
 (c) Here there is no scope of corruption

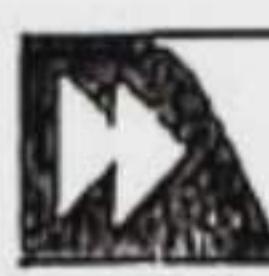
- a** (d) Here there is no pay for it

- 100. For which step is the corruption of tender system decreasing?** (Knowledge)

- (a) E-tender      (b) Tendering  
 (c) Electronic      (d) Networking

101. Which has solved many problems of business system? (Knowledge)  
 ⓐ E-tender ⓑ E-commerce  
 ⓒ ⓓ E-portal ⓔ E-mail
102. What is the system of buying and selling online? (Knowledge)  
 ⓐ E-service ⓑ E-commerce  
 ⓒ ⓓ E-purcha ⓔ E-mail
103. In which business system is there no need of store-house or show-room, for sell product? (Knowledge)  
 ⓐ In e-mail system ⓑ In internet system  
 ⓒ ⓓ In e-commerce system ⓔ In cub site
104. In which business system can the producer sell their product live? (Knowledge)  
 ⓐ E-procha ⓑ E-commerce  
 ⓒ ⓓ E-centre ⓔ E-governce
105. E-tender is—. (Higher Ability)  
 i. Electro tender system  
 ii. Electronic tender system  
 iii. Such a system through which the tender is performed by using internet  
 Which one of the following is correct?  
 ⓐ i & ii ⓑ ii & iii ⓒ ii & iii ⓔ i, ii & iii
- Read the following passage and answer the question numbers 208 and 209 :  
 Mr Shamol Chandra Das is a owner of an institute. His institute performs many tender work of government. For this he has to suffer much. Now he gets a modern system and for this he is free from many problems and waste of time.
106. What is the modern system? (Comprehensive)  
 ⓐ E-commerce ⓑ Tele-Medicine  
 ⓒ ⓓ E-service ⓔ E-tender
107. The benefit of Shamol Chandra—. (Higher Ability)  
 i. time wast is decrease  
 ii. little scope for corruption  
 iii. Information can hide there  
 Which one of the following is correct?  
 ⓐ ⓑ i & ii ⓒ ii & iii ⓓ i & iii ⓔ i, ii & iii
-  Right to Information and the Right to Information Act. → Textbook Page 49
108. According to the right to information Act, information means—. (Higher Ability) [RB '18]  
 i. book, logbook, design  
 ii. official memorandum, contract, statement  
 iii. photograph, sketch, film  
 Which one is correct?  
 ⓐ ⓑ i & ii ⓒ i & iii ⓓ ii & iii ⓔ i, ii & iii

109. From which year has the Right to Information Act of Bangladesh been Prevailing? (Knowledge) [CB '18]  
 ⓐ 2006 ⓑ 2009  
 ⓒ ⓓ 2010 ⓔ 2013
110. Which is the following starting year in force to the right to information act in Bangladesh? (Knowledge) [CtgB '18]  
 ⓐ 2006 ⓑ 2009  
 ⓒ ⓓ 2013 ⓔ 2016
111. Unit 2013, how many countries in the world have been recognized as legal rights to know national information? (Knowledge) [SB '18]  
 ⓐ 90 ⓑ 91  
 ⓒ ⓓ 92 ⓔ 93
112. How can all public information be conveyed to the public? (Knowledge) [SB '18]  
 i. internet  
 ii. website  
 iii. web portal  
 Which one is correct?  
 ⓐ ⓑ i & ii ⓒ i & iii ⓓ ii & iii ⓔ i, ii & iii
113. How long has the right to Information Act implemented in Bangladesh? (Knowledge) [RB; JB; SB; DjB; CtgB '17]  
 ⓐ 2005 ⓑ 2007  
 ⓒ ⓓ 2008 ⓔ 2009
114. In how many countries the right to know the national information has been acknowledged as legal right till 2013? (Knowledge) [All Board '15]  
 ⓐ 50 ⓑ 60  
 ⓒ ⓓ 80 ⓔ 93
115. Since when the Right to Information Act has been in force in Bangladesh? (Knowledge) [All Board '15]  
 ⓐ 1990 ⓑ 1995  
 ⓒ ⓓ 2000 ⓔ 2009
116. In the Right to Information Act, Information means—. (Higher Ability)  
 [Iqrunnesa Noon School and College, Dhaka]  
 i. Map  
 ii. Photograph  
 iii. Sketch  
 Which one is correct?  
 ⓐ ⓑ i & ii ⓒ i & iii ⓓ ii & iii ⓔ i, ii & iii



## Short Q/A



## Designed as per topic

## The Idea of Security

→ Textbook Page 37

Question 1. Why is information technology important in our daily life?

Ans. Information technology has made our lives easy, fast, and effective. It plays a vital role in our

daily lives, from personal life to state management. The world is now connected through networks, which has made communication and information flow easier. However, there are some security risks that need to be addressed.

**Question 2. What is a firewall? Explain.**

**Ans.** Every computer or network has its own security measures, and the owners want their sites not to be visited by those breaking the security wall. The invisible security wall is called the firewall. It acts like a security wall, filtering out harmful traffic and allowing only authorized data and applications to enter the network.

**Question 3. Why is a firewall important? Explain.**

**Ans.** Firewalls protect computers and networks from hacking, virus attacks, and other cyberattacks that occur through the Internet. It helps protect confidential information from being stolen, prevents system crashes, and protects against other damages. Simply put, a firewall is essential for the security of a computer system.

**Question 4. What is hacking? Explain.**

**Ans.** Hacking is the process of entering a computer system without permission. Hackers use various techniques to find vulnerabilities in computer systems and then exploit those vulnerabilities to gain access. They can steal confidential information, damage the system, or commit other crimes.

**Question 5. Why is a password important and how to keep it secure?**

**Ans.** A password is a means of verifying the user's identity, which allows authorized persons to access the network or account. It should not be easily guessed. A strong password should be used for security, which will include a combination of numbers, letters, and symbols, and passwords should be changed regularly.

**Question 6. Why is a password used in network connections?**

**Ans.** Passwords are used in network connections mainly as a security measure. It ensures that only authorized individuals can access the network's information and services. Passwords are secret codes that help users confirm their identity. It protects the network from illegal access, data theft, and other cyberattacks.

**Question 7. What is Captcha? Explain.**

**Ans.** Nowadays, even after entering the correct password, a person is not allowed to enter immediately. A special text has to be read and typed. A real person can easily understand it, but a machine or robot cannot. This method of distinguishing between humans and machines is called Captcha.

**Question 8. Why is Captcha used?**

**Ans.** Captcha (Completely Automated Public Turing test to tell Computers and Humans Apart) is an automatic test used to distinguish robots or

computers from humans. It is used in online forms, login pages, and other online services. The main purpose of using Captcha is to protect the system from spam, automated scripts, and other online attacks. Captcha shows a picture or word to a person and asks them to complete a simple task, which is very difficult for computers.

**Question 9. Discuss the benefits of using Captcha for security.**

**Ans.** The benefits of using Captcha for security are given below:

1. Special computers or special robots cannot break through security by using Captcha.
2. Captcha contains a special text that cannot be understood by machines or robots except humans. As a result, security is maintained.

**Question 10. What is meant by a data center?**

**Ans.** A data center refers to a physical location where a large number of computer systems, servers, and networking components are kept. These systems are used to store, process, and manage data. Data centers are usually run by large companies, Internet service providers, and government agencies.

**Question 11. What are the security risks of using the Internet?**

**Ans.** There are various security risks associated with using the Internet, such as hacking, phishing, malware attacks, and theft of personal information. In addition, confusion is spread through the dissemination of incorrect or false information. Therefore, it is important to verify the authenticity of information before accepting it from the Internet.

**Question 12. What are the ways to verify the correct information from the Internet?**

**Ans.** When receiving information from the Internet, information should be collected from reliable sources. It is safe to take information from government websites, recognized organizations, or trusted news media. It is also important to compare information from multiple sources and verify the opinions of experts on the relevant subject.

**► Malicious Software**

► Textbook Page 39

**Question 13. What is system software? Give an example.**

**Ans.** System software is software that establishes communication between computer hardware and application software. It manages the main operations of the computer, such as file management, memory management, input/output operations, and other system services. The Windows operating system is an example of system software.



**Question 14. Which are the well-known application software?**

**Ans.** Based on the working procedure, there are mainly two types of software. The first one is system software and the other one is application software. We use various application software regularly. For example, office management software (Microsoft Office or Open Office or Libra Office), database software (Oracle or Mysql), website browser (Mozilla Firefox or Google Chrome), etc.

**Question 15. What is malware? Give an example.**

**Ans.** Malware is harmful software that enters the computer system without the user's permission and causes damage. Computer viruses, worms, Trojan horses, rootkits, killgards, dialers, spyware, adware, etc. are included in malware. Viruses can spread on their own, worms can spread through networks, and Trojan horses enter the computer pretending to be useful software.

**Question 16. How does malware work?**

**Ans.** Malware creates opportunities in computer systems where software security systems are faulty. The programs that create malware using programming codes are harmful to computers. It is possible to create malware and make the software malfunction not only due to security flaws but also due to design errors. Among the operating systems currently in use in the world, Windows Operating System has more malware than other operating systems.

**Question 17. Explain the difference between worm and virus.**

**Ans.** Although both worms and viruses are malware, the main difference between them is their ability to spread. Viruses need another file or program to spread, such as an executable file. On the other hand, worms are capable of spreading on their own and can spread to other computers through the network.

**Question 18. How can viruses enter a computer?**

**Ans.** Viruses can enter a computer in various ways, such as:

1. Opening suspicious email attachments can allow viruses to enter the computer.
2. Viruses can come through files downloaded from pirated software, cracked games, or other untrusted websites.
3. Connecting an infected USB drive to the computer can spread the virus.
4. Viruses can also spread through the network.

**Question 19. What is a Trojan horse? Explain.**

**Ans.** A Trojan horse is a type of malware that disguises itself as useful software. When a user

installs this software, the Trojan horse enters the computer and can perform various harmful tasks, such as stealing personal information, installing other malware, or taking control of the computer.

**Question 20. What is meant by an executable file?**

**Ans.** An executable file is a file that can perform a task on a computer. It is usually a program or application. Executable files can contain hidden viruses, and when these files are run, the virus can spread to the computer.

**Question 21. What is Morris worm?**

**Ans.** Morris worm was one of the first worms that spread on the Internet in 1988. It attacked computers running on the Unix operating system. Due to the Morris worm, a large part of the Internet was down for several hours.

**Computer Virus**

► Textbook Page 41

**Question 22. What is a computer virus?**

**Ans.** A computer virus is a type of malware that attaches itself to an executable file. When that program (executable file) is run, the virus automatically infects other executable files. It creates copies of itself and infects other files or programs. Viruses usually spread through email attachments, files downloaded from the Internet, or USB drives.

**Question 23. What are the symptoms of a computer virus attack? Describe.**

**Ans.** A computer virus is a type of harmful program. When a virus attacks a computer, some symptoms can be observed, such as:

- i. Computer speed slowing down.
- ii. Computer hanging.
- iii. Frequent rebooting.
- iv. Changes in the actual appearance of computer files.
- v. Sometimes displaying unexpected messages.

**Question 24. How did the history of computer viruses begin?**

**Ans.** The concept of a computer virus was first introduced by John von Neumann in 1949. Later, in 1982, the Elk Cloner virus spread worldwide through floppy disks. In 1986, the Brain virus was identified as the first harmful virus. Since then, many dangerous viruses have been created at different times, causing various damages worldwide.

**Question 25. Write the names of some notable harmful computer viruses.**

**Ans.** Some notable harmful viruses worldwide are Brain, Vienna, Jerusalem, Pingpong, Michael Angelo, Dark Avenger, CIH (Chernobyl), Anna Kurnikova, Code Red Worm, Nimda, and Daprosy worm. These viruses have caused severe damage to computers and network systems at various times.



**Question 26. Explain how viruses work.**

**Ans.** Viruses cause various damages to computer systems. Sometimes the damage is visible, and sometimes it takes a long time to understand the damage. To reproduce, the virus program must run its code. Since no one will knowingly run this harmful code, the virus inserts its code behind the executable files of the programs that users regularly use. When a user runs that executable file, the virus program also becomes active.

**Question 27. Describe the types of viruses.**

**Ans.** Based on the type of work, viruses can be divided into two categories:

1. Non-resident virus: The characteristic of a non-resident virus is that after the virus becomes active, it searches for other programs that can be infected. Then it infects them and finally becomes inactive by giving control back to the main program.
2. Resident virus: The characteristic of a resident virus is that after the virus becomes active, it permanently resides in memory. Whenever another program is run, it infects that program.

**Question 28. Write the difference between resident and non-resident viruses.**

**Ans.** After a non-resident virus becomes active, it searches for other programs that can be infected. Then it infects them and finally becomes inactive by giving control back to the main program. On the other hand, the resident virus permanently resides in memory after becoming active. Whenever another program is run, it infects that program.

**Question 29. What are the ways to get rid of malware?**

**Ans.** To get rid of malware, you need to use anti-virus or anti-malware software. This software can detect and delete viruses. However, it is important to update anti-virus software regularly because new viruses are being created regularly. It is also important to avoid clicking on suspicious links and downloading files.

**Question 30. How does antivirus detect viruses?**

**Ans.** Almost all antivirus software available in the market is effective against other malware. All virus programs have some specific patterns. Antivirus software stores a list of these patterns. This list is usually prepared after research. When antivirus software is allowed to work, it looks for special designs in different files of the computer system and compares them with its own list. If it matches, it identifies it as a virus.

**Question 31. What is antivirus? Give an example.**

**Ans.** Antivirus is software that protects computers from viruses, worms, Trojan horses, and other types of malware. It scans the computer, identifies malware, and deletes them. Popular antivirus software includes Norton, Avast, Panda, Kaspersky, Microsoft Security Essential, etc.

**► Online Identity and Its Safety ► Textbook Page 44****Question 32. What is online identity and why is it important?**

**Ans.** Online identity is the unique identity of a person on the Internet, which is expressed through social media, blogs, or websites. A person's online identity can be formed by either their email address or their profile name on social media, or a combination of both. It is important to keep online identity secure to maintain personal safety and protect against cybercrime.

**Question 33. Explain the precautionary measures for safety on social networking sites.**

**Ans.** It is important to take some precautionary measures to stay safe on social networking sites. For example, using strong and unique passwords, configuring privacy settings correctly, not accepting messages or friend requests from unknown people, not sharing personal information on social networking sites, etc.

**Question 34. What kind of strategies should be followed in password management for online security?**

**Ans.** Various strategies can be followed for password management in online security, such as using long and complex passwords, using password managers (e.g., LastPass, KeePass), changing passwords regularly, and setting different passwords for different sites. It is also important to log out of sites after finishing work.

**Question 35. How to create a strong password?**

**Ans.** To create a strong password, several important things need to be kept in mind. For example, using a password of at least 12 characters, using a mixture of uppercase and lowercase letters, numbers, and special symbols, not using any words or personal information that can be easily guessed, and using a different password for each account.

**Question 36. What precautions should users take to ensure online security?**

**Ans.** Users should take the following precautions for online security:

1. Use strong passwords.
2. Keep different passwords for different websites.
3. Do not click on suspicious links.
4. Do not download unknown software.
5. If you log in at a cyber cafe or public computer, log out after use.



**Question 37. Why is hacking done?**

**Ans.** Hacking is done for various reasons, such as malicious intent, financial gain, testing security vulnerabilities, protesting, or causing personal or institutional damage. Although some hackers work to improve the security of the system, most black hat hackers engage in fraud, information theft, and destructive activities.

**Question 38. Who is a hacker and what are their types?**

**Ans.** Those who enter computer systems or networks without permission are called hackers. There are mainly three types of hackers: white hat, black hat, and gray hat. White hat hackers work to increase security, black hat hackers enter the system for malicious purposes, and gray hat hackers sometimes work for good and sometimes for bad purposes.

**Question 39. Write the difference between hacking and hacker.**

**Ans.** The difference between hacking and hacker is as follows:

Hacking	Hacker
1. Hacking means entering a user's computer system or network without permission.	1. Those who do hacking are called computer hackers or hackers.
2. The purpose of hacking can be either honest or dishonest.	2. Hackers can be of three types: white hat hackers, black hat hackers, and gray hat hackers.
3. It is a method or process.	3. It refers to a person or group.

**Question 40. Why are white hat hackers called ethical hackers?**

**Ans.** White hat hackers are called ethical hackers because they find vulnerabilities in computer systems and inform the relevant organization or person so that they can fix them and increase security. They do not do this with the intention of causing any harm but rather help to make the system more secure.

**Question 41. Who are gray hat hackers? Explain.**

**Ans.** Gray hat hackers are those who occupy a middle ground between white hat hackers and black hat hackers, find network vulnerabilities, inform the network administrator, and fix those vulnerabilities in exchange for money.

**Question 42. Write the difference between white hat hackers and black hat hackers.**

**Ans.** White hat hackers work to increase the security of computer systems, while black hat hackers enter computer systems to steal information or cause damage. White hat hackers work legally, while black hat hackers violate the law.

**Question 43. Why is hacking considered a crime?**

**Ans.** A hacker can enter another person's computer system, network, or website for various reasons. This includes malicious intent, making money, harming or humiliating a person or organization through hacking, disrupting security, etc. Cybercrime is committed through hacking. Hackers can view other people's emails, enter web servers without permission, or steal files from the network. For all these reasons, hacking is considered a crime.

**Question 44. What is hacking considered in Bangladesh?**

**Ans.** In Bangladesh, hacking is considered a crime according to the Information and Communication Technology Act 2006 (amended 2009). This law provides for imprisonment from 3 to 7 years. Entering someone's computer or network without permission is legally punishable and a crime.

**Cybercrime**

► Textbook Page 45

**Question 45. What was the Bangladesh Bank Cyber Heist?**

**Ans.** The 2016 Bangladesh Bank Cyber Heist was a large-scale cyber theft incident where hackers used the SWIFT network to attempt to steal approximately 1 billion USD from the Bangladesh Bank's account at the Federal Reserve Bank of New York in the United States. Of this, 101 million dollars was transferred, some of which was later recovered.

**Question 46. What is meant by cybercrime?**

**Ans.** Cybercrime is any crime committed using a computer or the Internet. This includes hacking, phishing, identity theft, malware, DoS attacks, etc. These crimes can lead to theft of personal information, financial loss, and other negative consequences.

**Question 47. What kind of damage can be caused by cybercrime?**

**Ans.** Cybercrime can lead to theft of personal information, financial loss, social unrest, political instability, and disruption of national security. For example, inciting religious violence, hacking bank accounts, credit card fraud, and cyber warfare can disrupt a country's security.



**Question 48.** How is the opportunity to be attacked by cybercrime created? Explain.

**Ans.** The opportunity to be attacked by cybercrime is explained below:

1. By sending unnecessary, purposeful, or objectionable emails.
2. By communicating with ordinary people in various ways with false identities and false information.
3. By publishing wrong or objectionable information about a person on the Internet.
4. By threatening on the Internet, email, or any social networking site.

**Question 49.** What are some common tactics of online fraud?

**Ans.** Some common tactics of online fraud are announcing fake lottery wins, phishing emails, fake job offers, messages asking for credit card or bank information, and spreading misinformation on social media to mislead people. It is important to be aware of such scams.

**Question 50.** What is meant by spam?

**Ans.** Spam is unnecessary, purposeful, or objectionable emails created by machines, which are constantly sent to users. These emails are usually sent for advertising, scamming, or spreading viruses. Spam wastes users' time and hinders their Internet usage.

**Question 51.** How is disclosing objectionable information a part of cybercrime?

**Ans.** Disclosing objectionable information creates personal or group hatred. It can be for political, religious, or personal reasons. The disclosure of objectionable information includes disclosing information that is obscene, harmful, false, misleading, threatening, or insulting. Disclosing this information is a part of cybercrime.

**Question 52.** What is cyber battle and how does it occur?

**Ans.** Cyber battle is an organized group or country conducting a cyber-attack against another group or country. It can be for political, economic, or ideological reasons. Through this, government websites can be hacked, important information can be stolen, or digital infrastructure can be destroyed.

**Question 53.** What measures can be taken to prevent cyber crime?

**Ans.** To prevent cyber crime, it is important to develop a strong cyber security system, enforce cyber laws, increase public awareness, and take measures to protect personal and institutional information. Additionally, it is necessary to stay away from suspicious emails and links and to regularly update security.

**Question 54.** "Cyber crime is a punishable offense" Explain.

**Ans.** Criminals are discovering new types of cyber crime. Some common cyber crimes are spam, fraud, objectionable publications, threats, and cyber warfare. This type of crime is definitely a punishable offense. Because people are communicated with in various ways using false identities and information, and attempts are made to deceive them in many ways. Which is a criminal act in the eyes of the law.

► **Eradication of Corruption** ► Textbook Page 47

**Question 55.** Explain the importance of information and communication technology in eradicating corruption.

**Ans.** It has become easy to get necessary information through information and communication technology. If corruption is committed somewhere, it is exposed to everyone. By bringing information technology into the entire process of storing and processing information of an organization, if financial transactions are done through corruption, it comes to the organization's main repository and due to transparency, it is revealed. Therefore, the importance of information and communication technology in eradicating corruption is immense.

**Question 56.** E-tendering prevents corruption - explain.

**Ans.** E-tendering is a transparent and accountable process where tender submission, evaluation and selection are done entirely online. This increases transparency, keeps information confidential and reduces bias. As a result, corrupt activities like accepting tenders through intimidation or threats are reduced.

**Question 57.** What is the problem of selling goods through brokers and how is information technology solving it?

**Ans.** Brokers buy goods from producers at low prices and sell them at high prices, resulting in losses for both buyers and producers. Information technology and the Internet have created opportunities for direct sales of products, where producers can sell their products directly to buyers on online platforms.

**Question 58.** How is information technology exposing state and global corruption?

**Ans.** Information technology is being used by various organizations and individuals to expose state and global corruption. The leak of various secret documents through the Internet is allowing the common people to know about the misdeeds of the state. Although this is a matter of legal debate, it is raising awareness against corruption worldwide.

**Question 59. How do corrupt people try to prevent information technology?**

**Ans.** Corrupt people adopt various methods to keep information secret and cover up their misdeeds, such as deleting documents, creating false information or using loopholes in security systems. However, due to the advancement of information technology, their activities are more easily exposed than before and come to the attention of the public.

**Question 60. What should be the role of the common man in preventing corruption?**

**Ans.** Common people should be aware to prevent corruption and use information technology to protest against corruption. Social media, mass media and various digital platforms can be used to ensure transparency and accountability online. Apart from this, it is also important to support government initiatives and law enforcement.

**► Right to Information and the Right to Information Act**

► Textbook Page 49

**Question 61. What is the right to information and why is it important?**

**Ans.** Freedom of information is the right of the public to know important state and institutional information. It helps to ensure democracy, transparency and accountability. Through this, the public can be aware of government activities and play a role in preventing corruption. The right to information is a prerequisite for individual freedom and expression.

**Question 62. In how many countries of the world is the Right to Information Act in force?**

**Ans.** As of 2013, the Right to Information Act is in force in 93 countries. In these countries, the public enjoys the legal right to access information about government activities. The implementation of this law makes state activities more transparent and ensures public participation.

**Question 63. Write briefly about the Right to Information Act.**

**Ans.** The Right to Information Act is being enacted and implemented in various countries of the world to ensure the free flow of information and the right to information of the people. The Right to Information Act has been in force in Bangladesh since 2009. This law not only ensures the right to information but also directs organizations to preserve information so that the public's right to information is ensured. As a result, it has become easier for the public to get information on any topic.

**Question 64. Why is the Right to Information Act necessary?**

**Ans.** The Right to Information Act ensures the public's right to information. It increases transparency of government information, prevents corruption, empowers people and helps in establishing good governance. Through this law, the public can monitor the activities of the government and ensure accountability. In other words, the Right to Information Act is necessary to increase transparency and accountability of government and non-government activities.

**Question 65. When did the Right to Information Act come into effect in Bangladesh and how does it work?**

**Ans.** The Right to Information Act came into effect in Bangladesh in 2009. Under this law, government and non-government organizations are obliged to provide information as per the demand of the public. If any person is denied access to information, he can file a complaint with the Information Commission. The Commission ensures the proper implementation of the law.

**Question 66. Explain the role of the Right to Information Act in suppressing corruption.**

**Ans.** According to the Right to Information Act, information related to state activities and important for the people must be disclosed to everyone. According to this law, all information related to any corruption must be disclosed correctly. As a result, people will be able to know who is involved in corruption and who is involved. As a result, it will be possible to bring them under the law and try them quickly. When the implementation of this law starts in every department of the administration, then naturally the corrupt people will be forced to stop corruption due to fear of this law. In other words, corruption can be largely eradicated through proper implementation of the Right to Information Act.

**Question 67. What is the role of the Information Commission in overseeing the implementation of the Right to Information Act?**

**Ans.** The Information Commission is the agency responsible for ensuring the effectiveness of the Right to Information Act. It maintains transparency of government and non-government organizations, assists in obtaining information and receives complaints if anyone is obstructed from obtaining information. The official website of the Information Commission in Bangladesh is- <http://www.infocom.gov.bd>

**Question 68. What action is taken if the Right to Information Act is violated?**

**Ans.** If the Right to Information Act is violated, the concerned person or organization is punished according to the law. If someone is denied the right to information, he can file a complaint with the Information Commission. The commission investigates and takes necessary action and may impose fines or sanctions if necessary.




**Along with textual reference**


### **Solutions to Activities of Exercise**

**Activity 01** Imaging what kind of catastrophe will befall on earth if network fails. Describe the situation.

► Textbook Page 38

**Type of activity :** Individual activity

**Purpose of activity :** To be able to get an idea about a world without networks.

**Solution :** The whole world has come to the palm of our hands due to the network. Everyone is now connected to everyone because of the network, no one is separate now. As the day progresses, the dependence on the network is increasing. Nothing can be imagined without a network these days. So if one day the entire world's network is down, the world will face terrible disasters.

**Description :** Here are some of the disasters that can happen to the world if the entire world's network suddenly goes down one day-

1. The biggest use of the network is in the field of communication. If there is no network, communication between people, between one country and another will be disrupted. Which is enough to create disaster.
2. People are now able to keep in touch with each other through the telephone network. So the lack of it will disrupt communication between people.
3. All types of institutions, big or small, do most of their work using networks. If the network of these institutions is down, the entire institution will be threatened.
4. The whole world's network being down means no one will have any news of anyone. People will not know what is happening in the world. Corrupt people will then take advantage of it.
5. Nowadays networks are also being used in the battlefield. So, if the network is down in these areas, it will become difficult to protect one's country from the enemy.
6. The network stores information using information. If the world's network is down, the whole world will become informationless.

As the day progresses, people are becoming more and more dependent on information technology and networks. The use of network is everywhere now in education, in the economic system of the country, in entertainment, in the development of technology, in the security system, in running the state. So only disaster will come to the world without network. Therefore, we all need to be aware to keep the network running.

**Activity 02** Discuss in group why malware should not be created.

► Textbook Page 40

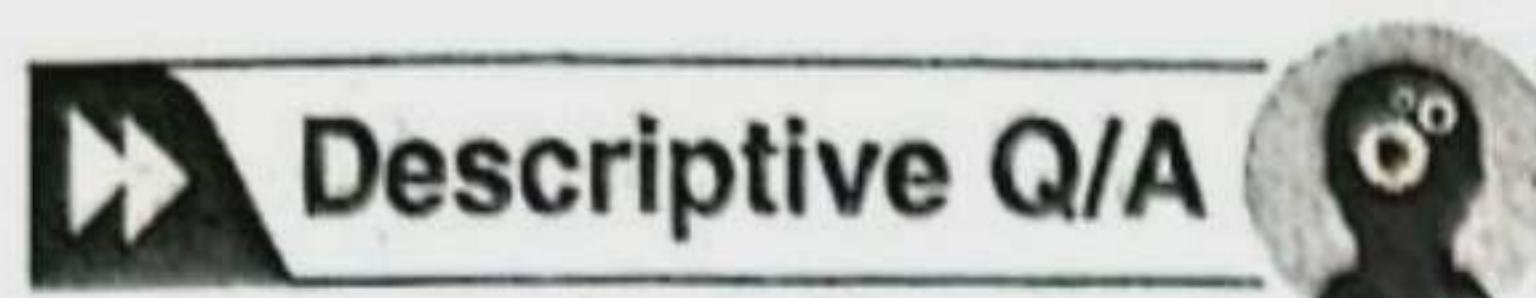
**Type of activity :** Group activity

**Purpose of activity :** To know the reasons for not creating malware.

**Solution :** Suppose, a team has been formed whose job is to highlight the harmful aspects of malware. The discussions against malware are described below :

1. When malware enters the computer, it causes various damage to the computer. As a result, no work of the computer can be done properly. It slows down the computer. The computer hangs, the computer reboots frequently.
2. Malware damages both application software and operating system software. It creates obstacles in their work.
3. Some malware or harmful software steals information stored on the computer.
4. Malware usually attacks the files that users use the most. Then the user faces obstacles in using those files and the data of his files is also lost.
5. Many software enters the user's affected computer through the Internet and disables the entire system.
6. Some malware takes advantage of the user's simple trust. Hiding behind good software, it silently damages the computer.
7. There is some software that corrupts or deletes the system files of any software. Then when running that software, the software does not find its source file.

Despite thousands of attempts by users, newly created malware or harmful software continues to damage computer systems and networks. So the creation of such software should be banned by law. The creation of such software should be stopped.



## Let's learn for School-based Assessment



**Question 1. What do you mean by hacking? Identify all crimes which are considered as hacking.**

[Jashore Board '19; '18]

**Ans.** Hacking means getting into any computer system or network without the permission of the concerned authority or the users. Those who do this are called hackers.

A hacker hacks other's computers for numerous reason. So earn illegally, harm a person, humiliate an organization or disrupting the peace and security are some of the reasons for hacking.

These activities are heinous and considered as crimes in many countries. In Bangladesh, hacking is a crime too.

**Question 2. What is computer virus? What are systems to keep password secured? — Explain.**

[Cumilla Board '19]

**Ans.** Computer virus is a one kind of malicious software or malware that can be multiple and transmitted from one computer to another.

There are two kind of virus :

- (i) Nonresident : After attack any computer software this virus remain in inactive.
- (ii) Resident : Some virus after being active take a permanent shelter in the memory. When the user runs any program, it infects that one.

**Secrecy of password :**

- i. Use long password instead of short one. Favorite sentence can be used if necessary;
- ii. Both the capital and small letters can be used instead of using either capital or small letters;
- iii. Use strong password. Create password with word, sentence, number and symbol;
- iv. There is a scope to verify the strength of password online. Verify the strength of password by using the scope and if it becomes weak, strengthen it;

- v. If you use any system run by many people (as Cyber cafe, Union Information and Service Centre), log out before leaving the place;
- vi. Use password manager, such as, lastpass, keepass, etc. as many users use;
- vii. Develop the practice of changing password.

**Question 3. What do you mean by cyber crime?**

**Write a short note about Information and Communication Act in Bangladesh.** [Sylhet Board '19]

**Or, What is right of information act? Write down in detail.** [Sylhet Board '18]

**Ans.** The right of the people to know information related to government and non-government establishments is called the right to information. In Bangladesh, the right to information act has been activated in 2009. In this act, people are supposed to get informations of the structure, book, design, map, statement, project proposal, audio, video, objects of any establishment etc. All the organizations in the world are bound to reveal their informations. If any person violates the act, he is sure to be punished. A commission is formed to monitor the act to be implemented properly. Usually, persons, organizations don't violate this act. As a result, we can get informations being anywhere.

**Question 4. What is Malware? Write about different types of Malware.** [Dinajpur Board '18]

**Ans.** The programming codes that can interrupt the smooth function of software, destroy the software interface on hardware, or damage the computer. And this harmful programs are called 'malicious software' in brief malware.

Malware is mainly of three types. They are described below :

- (a) **Computer virus** : It attaching itself with an executable file attacks other executable running files automatically.
- (b) **Computer worm** : It being active automatically spreads out from network to network and attacks the computers.
- (c) **Trojan horse** : It hiding itself under the guise of useful software damages the running computers.



## Super Suggestions



Super Suggestions with 100% preparatory questions selected by the Master Trainer Panel

Dear learners, important multiple choice and short questions of this chapter selected by Master Trainer Panel for Half-Yearly and Annual Exams are presented below. Learn the answers to the mentioned questions well to ensure 100% preparation.

Question Pattern	7★	5★
● MCQs with Answers	Learn each MCQs in this chapter thoroughly.	
● Short Q/A	1, 4, 11, 16, 21, 24, 29, 32, 38, 44, 49, 54, 58, 61, 65	3, 7, 13, 19, 26, 30, 35, 41, 46, 55, 60, 67

**Exclusive Tips** ➔ Master the solutions to all the activities in this chapter along with exercise and other Q/A to develop the creative thinking and assess your talent.



## Assessment & Evaluation



A question bank presented in the form  
of a class test to assess the preparation

### Class Test

### Information & Communication Technology

Marks : 25

#### Class : Eight

##### Multiple Choice Questions (Each question carries 1 mark)

$1 \times 15 = 15$

[N.B. : Answer all the questions. Each question carries one mark. Block fully, with a ball-point pen, the circle of the letter that stands for the correct/best answer in the "Answer Sheet" for Multiple Choice Question Type Examination.]

- |   |   |  |  |
|---|---|--|--|
| 1. The system to differ man from machine is called —.                                       | ④ capture      ⑤ captcha                                    | 8. In how many classes virus is divided based on the working method?           | ② 2      ④ 3   |
| ③ fibre      ⑥ firewall   | ③ 4      ⑤ 5  | 9. Which virus spreads through the floppy disk all over the world?             | ④ Brain      ⑤ Morris worm                             |
| 2. What is called the system to differentiate man from machine?                             | ① Captcha      ② Chaptcha                                   | ③ ELK CLONER      ⑥ Nimda.   | 10. Which one is the first Internet worm in the world? |
| ② Chacha      ④ Capteah   | ③ Capteah      ⑤ Chaptcha                                   | ④ Rootkits      ⑤ Morris worm  | ① Rootkits      ⑥ Hook worm                            |
| 3. Which software impedes the functions of other software and steals or erases information? | ② Marish warm      ④ Malware                                | 11. Which one is harmful software?   | ② Ms word      ⑤ Ms Excel                              |
| ③ Maxware      ⑥ My squeal  | ③ My squeal      ⑤ Marish warm                              | ③ Trojan horse      ⑥ Google chrome  | 12. Which one is the medium of computer virus carrier? |
| 4. Malware is—  | i. computer virus<br>ii. computer worm<br>iii. Trojan horse | ④ Lock worm      ⑤ Network   | ① Modern      ⑥ Cable                                  |
| Which one is correct?   | ② i & ii      ④ i & iii      ⑤ ii & iii      ⑥ i, ii & iii  | 13. Which scientist first called that virus is a programme?                    | ② Alfred Nobel      ⑤ Fedrick B Cohen                  |
| 5. What type of software 'Mysql'?   | ① Office      ④ Browsing                                    | ③ Avast      ⑥ Charles Babbage   | ③ Avast      ⑤ Charles Babbage                         |
| ② Database      ⑥ Operating system  | ③ Operating system      ⑥ Database                          | 14. When did computer scientist John Von Newton focus light on computer virus? | ① In 1940      ④ In 1949                               |
| 6. Which one is the popular anti-virus software?  | ② Vienna      ④ Panda                                       | ② In 1982      ⑤ In 1986   | ③ In 1982      ⑥ In 1986                               |
| ③ Nimda      ⑤ Pingpong   | ③ Pingpong      ⑤ Vienna                                    | 15. A major part of a cyber crime is—  | ④ Corruption      ⑤ Fraud                              |
| 7. Which virus attacked computer hard disk on 26 April every year?                          | ① CIH      ④ Angelo   | ③ Cyber battle      ⑥ Hacking  | ③ Cyber battle      ⑥ Hacking                          |
| ② Jerusalem      ⑤ Vienna   | ② Angelo      ⑤ CIH   |  |  |

##### Short-Answer Question (Each question carries 2 marks)

Answer any 5 of the following questions :

$2 \times 5 = 10$

- |   |  |
|---|--|
| 1. Why is information technology important in our daily life?             | 6. What are the symptoms of a computer virus attack? Describe.               |
| 2. Why is a password important and how to keep it secure?                 | 7. Write the difference between resident and non-resident viruses.           |
| 3. What are the ways to verify the correct information from the Internet? | 8. Explain the precautionary measures for safety on social networking sites. |
| 4. What is malware? Give an example.                                      |  |
| 5. What is meant by an executable file?                                   |  |

### Answer Sheet ► Multiple Choice Questions

1	④	2	①	3	④	4	④	5	③	6	④	7	④	8	①
9	③	10	④	11	③	12	③	13	④	14	④	15	④		

### Answering Reference ► Short-Answer Questions

- 1 ► See this Chapter, Ques. 01 | 3 ► See this Chapter, Ques. 12 | 5 ► See this Chapter, Ques. 20 | 7 ► See this Chapter, Ques. 28  
 2 ► See this Chapter, Ques. 05 | 4 ► See this Chapter, Ques. 15 | 6 ► See this Chapter, Ques. 23 | 8 ► See this Chapter, Ques. 33