



BCA/ITA : 103 (O)

2024

(1st Semester)

BACHELOR OF COMPUTER APPLICATIONS

Paper : ITA : 103 (Old Course)

(IT Tools and Application)

Full Marks : 70

Pass Marks : 45%

Time : 3 hours

(PART : B—DESCRIPTIVE)

(Marks : 45)

*The figures in the margin indicate full marks
for the questions*

1. (a) Give the concept of analog and digital. 2
- (b) What is TCP/IP? 2
- (c) Explain the application of Internet. 5

Or

- (a) What is peer-to-peer network? 1
- (b) Explain TCP/IP layers. Give the diagram flow. 2+1=3

- (c) What is communication? Explain the types of communication. 2+3=5

2. (a) Define Information Technology. What are the characteristics of information technology? 2+3=5

- (b) Elaborate the following : 4

- (i) BIOS
- (ii) CMOS
- (iii) Firmware
- (iv) SMPS

Or

- (a) Define RAM and ROM. 2

- (b) Explain the generation of computer. 4

- (c) Explain the following : 3

- (i) File allocation table
- (ii) Processor speed
- (iii) Peripherals

3. (a) Give the table of binary addition and subtraction. 3

- (b) What is arithmetic computer? 1

- (c) Convert the following using binary coded decimal : 2

- (i) 7701
- (ii) 33459

(d) Perform the following binary addition : 3

(i) $1011001 + 011010$

(ii) $1100111 + 1111001$

(iii) $1000111 + 1000011$

Or

(a) Define Boolean algebra. Give the laws of Boolean algebra. 3

(b) Perform the following subtraction using 2's complement arithmetics : 3

(i) $0.1001 - 0.0110$

(ii) $001111 - 001001$

(iii) $11011 - 10100$

(c) What are logic gates? Give the definition. 3

4. (a) What are computer hardware and software? 2

(b) What is operating system? Give the block diagram of UNIX file systems. 4

(c) Write about the application software and its application. 3

Or

(a) Define virus. Write the types of virus. 3

(b) What is computer language? Elaborate the types of computer language. 4

- (c) Explain the following : 2
- (i) DOS
 - (ii) UNIX
5. (a) What is instruction cycle? 2
- (b) Write on the following : 3
- (i) Server
 - (ii) Client
 - (iii) Booting
- (c) Define the functions of operating system. 4
- Or
- (a) Define encryption and decryption. 2
- (b) What is file system? Give the application of information technology. 4
- (c) What is a protocol? 1
- (d) Write about the following : 2
- (i) Domain
 - (ii) Subnet mask
 - (iii) Search engine

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(1st Semester)

BACHELOR OF COMPUTER APPLICATIONS

Paper : ITA : 103 (Old Course)

(IT Tools and Application)

(PART : A—OBJECTIVE)

(Marks : 25)

The figures in the margin indicate full marks for the questions

1. Put a Tick (✓) mark against the correct answer in the brackets provided : 1×10=10

(a) The computer, considered as a portable computer, is called

- (i) desktop ()
- (ii) mainframe ()
- (iii) notebook ()
- (iv) None of the above ()

(b) A printer is considered as a/an _____ device.

(i) input ()

(ii) output ()

(iii) storage ()

(iv) Both (i) and (ii) ()

(c) What is MP3?

(i) A sound format ()

(ii) A movie format ()

(iii) A portable device ()

(iv) A Word file ()

(d) What are the stages of processing?

(i) Input > Output > Processing ()

(ii) Output > Input > Processing ()

(iii) Input > Processing > Output ()

(iv) Processing > Input > Output ()

(e) Computers, combine both measuring and counting, are called

(i) analog ()

(ii) digital ()

(iii) hybrid ()

(iv) All of the above ()

(f) The basic operations performed by a computer are

(i) arithmetic operation ()

(ii) logical operation ()

(iii) storage and relative ()

(iv) All of the above ()

(g) Which two digits computer can understand?

(i) 9 and 10 ()

(ii) 1 and 11 ()

(iii) 0 and 1 ()

(iv) 1 and 100 ()

(h) With reference to storage of data in computer, what is byte?

(i) A byte is considered as a unit of memory life ()

(ii) It is with computer unit and or groups of binary orbits ()

(iii) It is 10 bits long ()

(iv) Both (i) and (ii) ()

(i) Computer monitor is also known as

(i) DVU ()

(ii) VDU ()

(iii) UVD ()

(iv) CCTV ()

(j) Arrange the sequence of computer memory in increasing order of their size.

(i) KB > GB > MB > TB ()

(ii) KB > TB > GB > MB ()

(iii) KB > MB > GB > TB ()

(iv) TB > KB > MB > GB ()

2. State whether the following statements are *True (T)* or *False (F)* by putting a Tick (✓) mark : 1×5=5

(a) It is sometimes good to insert metal object into your computer to remove dust or other materials.

(T / F)

(b) It is often good to switch your computer ON and OFF.

(T / F)

(c) Hardware is all the parts of the computer that you can see and touch.

(T / F)

(d) In Microsoft Word, you cannot delete an entire paragraph at once.

(T / F)

(e) It is possible to connect external device to a laptop.

(T / F)

3. Answer the following questions in short : $2 \times 5 = 10$

(a) What is startup? Write with suitable example.

(7)

(b) What is the role of control panel in Windows operating system?

(c) Define memory interlocking and virtual memory.

(d) Elaborate some file formats.

(e) What are ASCII code and EBCDIC code?
