44 (1) BCA-HC-1026/G

2021

(Held in 2022)

COMPUTER FUNDAMENTALS AND ICT HARDWARE

Paper: BCA-HC-1026

Full Marks: 60

Time: Three hours

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

1.

Answer the following with the given correct options: 1×5=5

- (a) Laser printer is a type of
 - (i) impact printer
 - (ii) non-impact printer
 - (iii) Both of the above
 - (iv) None of the above
- (b) DVD stands for
 - (i) Digital Video Disk
 - (ii) Digital Versatile Disk
 - (iii) Direct Versatile Disk
 - (iv) Dual Versatile Disk

- SMPS means (c)
 - System Management Powerpoint (i) Software
 - Synchronous Mode Power Supply (ii)
 - Switched Mode Power Supply (in)
 - Sequential Mode Power Supply (iv)
- HDD stands for (d)
 - High Definition Disk (i)
 - High Density Disk (ii)
 - Hard Disk Drive (iii)
 - None of the above (iv)
- USB means (e)
 - Uneven System Bios (i)
 - Unique System Bus (ii)
 - (iii) Uniform Serial Bus
 - (iv) Universal Serial Bus
- Answer any five questions from the $2 \times 5 = 10$ following:
 - What Algorithm? Name its graphical implementation.
 - Differentiate between impact-printer and non-impact printer.
 - Why do we need to perform the (c) defragmentation of the Hard disk?

(d) Write any two differences between CD and DVD.

(e) What is virtual memory and what is the main benefit of using it?

Write any two functions performed by BIOS.

3. Answer **any five** of the following questions: $3 \times 5 = 15$

(Ja) What is Pseudo code? Write one each of its advantage and disadvantage.

(b) Differentiate between Complier and Interpreter. (Write any three points)

(c) "NTFS has several improvements over FAT-32 file system"—Justify your answer.

What do you mean by Driver Installation in a PC? Describe briefly.

Briefly explain the different types of RAM.

How is Co-axial cable different from Twisted-pair cable. (Write any three points)

4. Answer **any four** questions from the following: $5\times4=20$

What are the technological and architectural differences between 1st, 2nd, 3rd and 4th generation of computers?

Contd.

- (b) Draw the block diagram of a Digital Computers and briefly describe all its major components.
- (c) Briefly describe the following two Hard disk tools:
- (i) Disk clean-up
 - (ii) Scanning for virus
- What is cache memory? Briefly explain its operation of working with the help of a block diagram.
 - (e) How many bytes does each class of IP address use to represent Network IDs and Host IDs?
- Answer only **one** question from the following: 10×1=10
 - Explain the classification of computer according to their functionality with example of each.
 - (b) Explain the theory of operation (working principle) of CDROM drive with a neat block diagram.
 - (c) Write short notes with diagram: (any two) 5×2=10
 - (i) SMPS
 - (ii) Network Interface Card
 - (iii) Network Cabling and its types.