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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

Contd.

- (c) SMPS means
- (i) System Management Powerpoint Software
 - (ii) Synchronous Mode Power Supply
 - (iii) Switched Mode Power Supply
 - (iv) Sequential Mode Power Supply
- (d) HDD stands for
- (i) High Definition Disk
 - (ii) High Density Disk
 - (iii) Hard Disk Drive
 - (iv) None of the above
- (e) USB means
- (i) Uneven System Bios
 - (ii) Unique System Bus
 - (iii) Uniform Serial Bus
 - (iv) Universal Serial Bus

2. Answer **any five** questions from the following : 2×5=10

- (a) What Algorithm ? Name its graphical implementation.
- (b) Differentiate between impact-printer and non-impact printer.
- (c) Why do we need to perform the 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 ?
- (f) Write *any two* functions performed by BIOS.

3. Answer **any five** of the following questions :
3×5=15

- (a) What is Pseudo code ? Write *one each* of its advantage and disadvantage.
- (b) Differentiate between Compiler and Interpreter. (Write *any three* points)
- (c) "NTFS has several improvements over FAT-32 file system"—Justify your answer.
- (d) What do you mean by Driver Installation in a PC ? Describe briefly.
- (e) Briefly explain the different types of RAM.
- (f) How is Co-axial cable different from Twisted-pair cable. (Write *any three* points)

4. Answer **any four** questions from the following :
5×4=20

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

- (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
- (d) 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 ?

5. Answer only **one** question from the following :
10×1=10

- (a) 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.