

Total No. of printed pages = 7

Et-504/PCS&T/5th Sem/Et/2017/N

PC SYSTEM AND TECHNOLOGY

Full Marks – 70

Time – Three hours

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

PART – A

1. **State true or false :** **1×7=7**
- (i) A 32-bit machine means a 32-bit address bus.
 - (ii) The chipset defines the architecture of a Motherboard.
 - (iii) Windows 3.11 is not an operating system.
 - (iv) The VBR of a disk drive contains the partition information.
 - (v) Among the different keyboard technologies rubber dome type is the most reliable one.

[Turn over

(vi) Accelerated Graphics Ports (AGP) are used for monitor interfacing.

(vii) Laser printers are a type of impact printer.

2. Fill up the gaps : $1 \times 8 = 8$

(i) LPT1 and LPT2 are _____ ports.

(ii) Cache memories are implemented by costlier _____ RAM.

(iii) On present day systems only _____ type of generic expansion slots are found.

(iv) A ZIF socket is used for installation of _____ on computer motherboards.

(v) In MS-DOS, the _____ command is used for disk drive formatting.

(vi) The BIOS-ROM that can be updated without removing it is called _____ BIOS.

(vii) A DVD can hold a maximum _____ of data.

(viii) The AT power supply connector on the motherboards has _____ pins.

3. Choose the correct answer : $1 \times 10 = 10$

(i) One Peta-Byte is equal to ?

(a) 2^{20} Byte

(b) 2^{30} Byte

(c) 2^{40} Byte

(d) 2^{50} Byte

(ii) A Scanner is a :

(a) Input device

(b) Output device

(c) Both Input and Output device

(d) None of these

(iii) Which of the following is not a motherboard expansion slot ?

(a) ISA

(b) ATX

(c) EISA

(d) VESA

(iv) An SCSI hard disk cable has the following number of pins

- (a) 25
- (b) 32
- (c) 40
- (d) 50

(v) Which is the only file system supported by MS-DOS ?

- (a) FAT-16
- (b) FAT-32
- (c) NTFS
- (d) HPFS

(vi) Which of the following file is not required for booting DOS/Win9X ?

- (a) IO.SYS
- (b) MSDOS.SYS
- (c) CONFIG.SYS
- (d) COMMAND.COM

(vii) A standard VGA display has _____ pixels in its native graphics mode.

- (a) 648 × 320
- (b) 640 × 480
- (c) 880 × 640
- (d) 840 × 680

(viii) The term COM port is referred to —

- (a) Serial Port
- (b) Parallel Port
- (c) Audio Ports
- (d) None of these

(ix) Which of the following factor does not affect computer processing speed ?

- (a) Clock Speed
- (b) Hard Disk Capacity
- (c) Processor Register Size
- (d) RAM Size

(x) Which of the following is not a feature of UPS ?

- (a) Backup Time
- (b) Transfer Time
- (c) Throughput
- (d) Surge Protection.

PART-B

Answer any *three* questions.

4. (a) Differentiate between the IBM personal computer family as PC, PC-XT and PC-AT with their features. 5
- (b) List the different parts and components found on a present day PC motherboard and explain their functions in brief. 10
5. (a) What is BIOS, POST and CMOS setup ? Explain. 9
- (b) Define I/O port Address, Memory Address, IRQ numbers and DMA channels of a PC System. 6
6. (a) Using neat diagrams explain the construction and working of a Hard Disk Drive. 10
- (b) Bring out a comparison between popular HDD interfacing. 5
7. (a) Explain the functions and voltage levels of a PC-SMPS. 7
- (b) Define Aspect Ratio, Pixels, Dot-Pitch, and Resolution of a computer monitor. 8.

8. (a) Explain the working of a Keyboard used in computers. 8
- (b) Mention and explain the general characteristics of printers. 7
9. Write short notes on any *two* : $2 \times 7\frac{1}{2} = 15$
- (a) RAM Technologies
- (b) USB and Firewire Ports
- (c) Windows Registry
- (d) Optical Storage Device
- (e) UPS.