

August 2021

COMPUTER HARDWARE & NETWORKING (FOR EIE)*Time Allowed: 1 Hour**Full Marks: 35***Answer to Question No. 1 is compulsory and Answer any two questions from the rest.**

1. Choose the correct answer from the given alternatives (any ten): 2x10
- i) Which of the following is NOT a type of motherboard expansion slot? – (a) ISA (b) PCI (c) AGP (d) ATX.
 - ii) Where can you find the BIOS version ID? – (a) System properties (b) BIOS setup screens (c) Motherboard manual (d) On the back of the computer.
 - iii) Which of the following is a volatile memory? – (a) RAM (b) ROM (c) CDROM (d) Hard disk.
 - iv) What type of connector is used to plug a telephone line into a modem? – (a) COM1 (b) RJ-11 (c) RJ-45 (d) RJ-10.
 - v) The output quality of a printer is measured by – (a) Dot per inch (b) Dot per sq. inch (c) Dots printed per unit time (d) All of above.
 - vi) CD-ROM stands for – (a) Compactable Read Only Memory (b) Compact Data Read Only Memory (c) Compactable Disk Read Only Memory (d) Compact Disk Read Only Memory.
 - vii) What is the memory contained inside the CPU called? – (a) RAM (b) ROM (c) CACHE (d) VIRTUAL.
 - viii) Which of the following gives a list of memory in increasing order (slow to fast) of speed access? – (a) RAM, Hard Disk, L1 Cache, L2 Cache (b) L1 Cache, RAM, Hard Disk, L2 Cache (c) Hard Disk, RAM, L2 Cache, L1 Cache (d) L1 Cache, L2 Cache, RAM, Hard Disk.
 - ix) What is the main difference between AT and ATX motherboards? – (a) BNC connector (b) Soft power switch (c) Parallel connectors (d) Serial connectors.
 - x) You get a CMOS checksum error during bootup. What is most likely the cause? – (a) power supply is bad (b) BIOS needs updating (c) CMOS battery is nearing end of life (d) hard drive types are incorrectly defined.
 - xi) The BIOS stands for Basic Input Output System. It is found in the _____ of the computer and is the first piece of software that is run by the computer – (a) RAM (b) ROM (c) CMOS (d) MBR.
 - xii) In cryptography, what is cipher? – (a) algorithm for performing encryption and decryption (b) encrypted message (c) both (a) and (b) (d) none of the mentioned.
 - xiii) Data communication system within a building or campus is – (a) LAN (b) MAN (c) WAN (d) None of the mentioned.
2. Draw the functional diagram of PC and discuss its components. 3+4.5
3. Discuss the difference between CISC & RISC processor. 7.5
4. Describe the architecture with example. 7.5

5. Discuss different types of secondary memory. 7.5
 6. Write down the key features of the followings (any three): 2½x3
(a) Pentium 4 processor, (b) Pentium Celeron processor, (c) CYRIX series processor, (d) AMD series processor
 7. Draw a block diagram of SMPS and briefly explain the same. 3+4.5
 8. Write short note on – (i) Static RAM, (ii) Dynamic RAM. 3.5+4
 9. Explain RGB coloring used for display. 7.5
 10. Discuss the principle of operation of MODEM. 7.5
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