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**Question Paper Code : 51258**

B.E./B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2014.

Seventh Semester

Electronics and Communication Engineering

080290063 – COMPUTER HARDWARE AND INTERFACING

(Regulation 2008)

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. What is the difference between extended memory and expanded memory?
2. What is pipelining?
3. Write two significant factors of mechanical switches and membrane switches in a keyboard.
4. What is the use of CRTIC in a video adapter board?
5. What is landing zone in a hard disk?
6. Write two advantages of increased coercivity in magnetic storage devices.
7. What are device drivers?
8. List two types of chipsets. Write one significance of each.
9. Write the limitation overcome by EISA busses compared to ISA bus architecture.
10. What is bus mastering?

PART B — (5 × 16 = 80 marks)

11. (a) (i) Explain the three architecture used in memory technique. (8)  
(ii) Compare SIMM and DIMM. (8)
- Or
- (b) (i) Write about P-Rating system, branch prediction used in CPU. (8)  
(ii) Explain the requirements for over clocking of CPU. (8)

12. (a) (i) Draw keyboard interface connector and name the pins. Write the significance of keyboard controller. (8)
- (ii) Explain the interfaces of serial mice, bus mice and ps/2 mice, with the pin out diagram of each mouse port. (8)

Or

- (b) (i) With block diagram, explain accelerated graphics port implementation. (8)
- (ii) Explain printer interfacing, with necessary block diagram. (8)
13. (a) (i) With diagram of a standard floppy drive interface, explain about its physical interfacing. (8)
- (ii) With required diagram, explain the data organization on a hard drive. (8)

Or

- (b) (i) Explain the cross section of a CD and reading of data from typical compact disc. Include required diagrams. (8)
- (ii) Explain with diagram, the principles of magnetic recording. (8)
14. (a) Explain in detail, the different steps involved in the boot process. (16)

Or

- (b) What is BIOS? Explain the core features of modern BIOS. (16)
15. (a) With required diagram, write about the significant features of 8-bit ISA slots and 16-bit ISA slots. (16)

Or

- (b) (i) Write about PnP devices, PnP BIOS and PnP compliant OS in a plug and play system. (10)
- (ii) Draw the block diagram of generic CPU showing the three types of buses. Write the significance of each bus. (6)