

**December 2009**

Bachelor of Computer Applications (B.C.A.) examination  
**V Semester (Autonomous)**

## **Computer Organisation and Architecture**

Time : 3 Hours]

[Max. Marks : 40

**Note: Attempt all questions. All questions carry equal marks.**

1. (a) Explain Generations of Computers. also write their features.  
(b) Write details about evolution of Pentium and Power PC.

**OR**

- (a) What are the basic components of Computer? Briefly explain their functions.
- (b) Write short notes on any two of the following :  
(i) Bus Interconnection, (ii) PCI (iii) Future Bust.
2. (a) Explain different types of Memory System.  
(b) Why Cache Memory is used in Computers? What do you mean by DRAM?

**OR**

- (a) Write short notes on any two of the following :  
(i) Optical Memory, (ii) Magnetic Tape, (iii) Static RAM.
- (b) Explain RAID. Differentiate between RAID Level 2 and RAID Level 4.
3. (a) What is the relationship between the IRA character code and the Packed decimal representation?  
(b) What do you mean by Addressing Mode? Explain Indirect addressing modes with examples.

**OR**

- (a) Draw the functional block diagram of Control Unit. Explain.
- (b) What is the difference between an Arithmetic Shift and Logical Shift? Explain.
4. (a) What do you understand by Micro-programmed Control Unit? Explain its main function.  
(b) What is the relationship between Instructions and Micro-operations?

**OR**

- (a) Explain the functions of Control Unit.
- (b) Explain Optical Memory. Differentiate it with Magnetic Tap.
5. Write Short notes on any four of the following :  
(a) Firewire Serial Bus. (b) Instruction Format.  
(c) System Bus. (d) Programmed I/O.  
(e) External Interface (f) Virtual Memory.

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