

**Bachelor of Computer Application (BCA) Examination**  
**V Semester**

**Computer Organisation and Architecture**

Time 3 Hours]

[Max. Marks 40

**Note : Attempt any two parts from each question. Each part of a question carries 4 marks. Each question carries equal marks.**

1. (a) Write various characteristics of third generation computers.  
(b) What are the various basic functions of a computer ? Explain them in brief.  
(c) Write short note on PCT.
2. (a) What do you mean by RAID ? Explain RAID level 0 and level 1.  
(b) Write short note on DRAM.  
(c) Explain read and write mechanism in Magnetic Disk.
3. (a) Write various advantages and disadvantages of GPR (General Purpose Register) based processor organization.  
(b) What do you mean by Addressing Modes ? Write any four addressing modes with example.  
(c) What do you mean by Instruction Pipelining ? How it improves system performance ? Explain with an example.
4. (a) What are the various advantages of Microprogrammed implementation over Hardwired implementation.  
(b) How a microprogrammed control unit works ? Explain.  
(c) Write short note on Microinstruction Sequencing.
5. (a) Write comparison between Interrupt Driven I/O and Programmed I/O.  
(b) Make the block diagram of any I/O Module and explain its various components.  
(c) Write short note on Parallel Processors.

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