

March 2012

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

Computer Organisation and Architecture

Time 3 Hours]

[Max. Marks 40

Note : Attempt all five question and attempt any two parts from each question.

1. (a) Draw and explain functional view of Computer.
(b) Explain Bus interconnection scheme.
(c) Define briefly functional groups of signal lines for PCI.
2. (a) Explain about principles of Cache memory.
(b) Explain with diagram synchronous DRAM.
(c) Briefly explain about RAID and Optical Memory.
3. (a) Describe addressing mode with its different types.
(b) Write short note on Instruction Pipelining.
(c) Describe CPU structure and function of the Pentium Processor.
4. (a) Explain briefly the purpose of control memory.
(b) Explain some applications of micro-programming.
(c) Write short notes on : (i) Micro Operations. (ii) Micro Instruction Sequencing.
5. (a) Describe programmed I/O with suitable example.
(b) Differentiate between Array processor and Parallel processor.
(c) Explain MESI Protocol.

□□□