

January 2015

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

Computer Organization 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) Define the following :
(i) Bus (ii) PCI.
(b) Explain the different components of Computer system by drawing its block diagram.
(c) Explain the designing of computer for good performance with some recent examples.
2. (a) Explain the different types of secondary storage devices with examples.
(b) Compare briefly the following :
(i) SRAM and DRAM (ii) Register and Primary Memory.
(c) What is meant by optical memory ? Briefly explain.
3. (a) What is meant by operand and operation ? Briefly explain.
(b) Explain the following terms :
(i) Instruction Cycle (ii) The Power PC Processor.
(c) Discuss about instruction pipelining and its advancement over the recent years.
4. (a) What is meant by hardwired implementation? Explain with some examples.
(b) Explain some application of micro programmed application.
(c) Write short notes on :
(i) Microinstruction Sequencing
(ii) Micro Programmed Control.
5. (a) Differentiate between the following :
(i) Parallel Processor and Array Processor,
(ii) Programmed IO and Interrupt Driven IO.
(b) What is meant by direct memory access ? Explain.
(c) Describe IO channels and processors briefly.