Roll No. ☐☐☐☐☐☐☐☐☐☐☐ Total No. of Pages : 02

Total No. of Questions : 07

BCA (Sem.–4th)

MICROPROCESSORS & MICROCONTROLLERS

Subject Code : BSBC-402 (2011Batch)

Paper ID : [B0241]

Time : 3 Hrs.   Max. Marks : 60

INSTRUCTION TO CANDIDATES :

1. **SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.**
2. **SECTION-B contains SIX questions carrying TEN marks each and students has to attempt any FOUR questions.**

SECTION-A

a. What is an Interrupt Cycle? Explain.

b. What are various pins of 8085 microprocessor?

c. List four applications of microprocessor.

d. What are logical instructions? Explain their use with example.

e. What is an instruction set? Elaborate.

f. What is an Instruction Cycle?

g. Give Difference between Asynchronous and Synchronous serial communication mode.

h. What are Counters and Timers?

i. What is the use of internal and external Memories?

j. Give key features of a DMA controller.

SECTION-B

2. What are various applications of Microprocessors? Also introduce various aspect of 8085 microprocessor.

3. Discuss the architecture of 8085 microprocessor in detail.

4. Explain in detail the complete instruction cycle. Also briefly explain the instruction set.

5. Discuss RISC and CISC designs in detail, also differentiate between these designs.

6. What are various Microcontroller resources? Also discuss resources in advanced and next generation Microcontroller.

7. Explain Synchronous and Asynchronous Serial communication in detail.