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

Total No. of Questions : 07

BCA (2011 & Onwards) (Sem.–4)
MICROPROCESSORS & MICROCONTROLLERS
Subject Code : BSBC-402
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 a student has to attempt any FOUR questions.**

SECTION-A

1. **Write briefly :**

   a) What is the difference between microcontroller and microprocessor?

   b) What are various Data Transfer Instructions available in 8085?

   c) Why 8085 processor is called an 8 bit processor?

   d) What is the role of hardware controller?

   e) What are various Arithmetic Instructions available in 8085?

   f) What is Interrupt? Explain non mask-able interrupt.

   g) Write an example of Branch Instructions.

   h) What does microprocessor speed depend on?

   i) Draw the Timing Diagrams of Memory Read/Write Operations.

   j) What do you mean by bus?

SECTION-B

2. What are various advantages of architecture of 8085?

3. What is the relation between virtual memory, cache memory and RAM?

4. Explain Instruction Cycle with the help of diagram.

5. What will be features of next Generation Microcontroller?

6. Explain the working of Programmable Interrupt Controller 8259.

7. What is DMA Controller? Explain its importance.