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

Total No. of Questions: 07

BCA (2011 & Onwards)   (Sem. – 4)
MICROPROCESSORS & MICROCONTROLLERS
M Code: 10067
Subject Code: BSBC-402
Paper ID: [B0241]

Time: 3 Hrs.   Max. Marks: 60

INSTRUCTIONS 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 have to attempt any FOUR questions.

SECTION A

1.   Briefly answer the following:

a)   What is the difference between a microprocessor and a microcontroller?

b)   Name various pins of 8085.

c)   What are logical instructions?

d)   What is the use of timing diagrams?

e)   Differentiate between direct and indirect addressing modes.

f)   What are counters and timers?

g)   What is the difference between internal and external memories?

h)   What is an Interrupt? What is the use of interrupts?

i)   What are ROM based controllers?

j)   What is asynchronous serial communication?

SECTION B

2. What is a Microprocessor? What are the various applications of Microprocessors? Also give a brief history of microprocessors.

3. Explain the architecture of 8085 microprocessor in detail.

4. Explain the instruction cycle in detail.

5. Discuss and compare RISC and CISC processors.

6. What is a Microcontroller? What do you mean by microcontroller resources? Discuss resources in advanced and next generation microcontrollers.

7. Elaborate in detail the architecture of DMA controller 8257.