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

Total No. of Questions : 09

B.Tech. (ECE)   (Sem.–5)
MICROPROCESSOR/MICROPROCESSOR AND ITS APPLICATION
Subject Code : EC-307
M.Code : 57522

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 FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.**
3. **SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.**

SECTION-A

1. **Write briefly :**

   a. Differentiate microprocessor and microcontroller.

   b. What are the functions of an accumulator?

   c. What is an operand? Explain with an example.

   d. What is meant by Wait State?

   e. Explain priority interrupts of 8085.

   f. What is T-state? Explain with an example.

   g. What is the use of ALE?

   h. Explain the function of HOLD, READY signals with example.

   i. What is the difference between the shifts and rotate instructions?

   j. What is the function of PUSH and POP instruction?

SECTION-B

2. What is the use of addressing modes? Explain the possible addressing modes in 8085.

3. Draw and explain the timing diagram of memory write cycle with example.

4. Explain any three modes of operations used in 8253.

5. What is the function of control word register in 8255? Explain with an example.

6. What are the features of 8259 Programmable Interrupt Controller?

SECTION-C

7. Describe the functional units and their functions present in BIU and EU of 8086.

8. Explain the output modes used in programmable keyboard/display controller (8279) with its functional diagram?

9. Explain the process of the Direct Memory Access (DMA) and the functions of various elements of the 8257.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.