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

Total No. of Questions : 09

B.Tech.(CSE)/(Electronics & Computer Engg.)/ (IT) (2011 Onwards)

(Sem.–4)

MICROPROCESSOR & ASSEMBLY LANGUAGE PROGRAMMING

Subject Code : BTCS-404

Paper ID : [A1186]

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

SECTION-A

l. **Write short notes on :**

a. Define Interpreter.

b. A microprocessor is having 10 data buses. How much memory can it access?

c. List different types of memories in 8085 microprocessor. Also define them.

d. Explain the status register of 8085 microprocessor.

e. Write a programme to subtract 97H and 65H.

f. Define operand.

g. Name the various logical operators present in 8085 microprocessor.

h. State the main advantage of 8086 over 8085 microprocessor.

i. Give the input combinations required to operate a stepper motor.

j. Define asynchronous buses in 8085 microprocessor.

SECTION-B

2. Explain the various types of microprocessors based on architecture.

3. Draw the architecture of 8086 microprocessor.

4. What do you understand by Subroutine? Also explain nesting.

5. Explain in detail the various types of registers present in 8085 microprocessor.

6. Write the instructions to load 65H in register C and 92H in accumulator A. Display the number 65H at port 0 and 92H at port 1.

SECTION-C

7. Draw and explain the timing diagram for execution of IN and OUT instruction in 8085 microprocessor.

8. Explain the architecture and pin diagram of 8085 microprocessor.

9. What is 8255 programmable peripheral interface? Show the interfacing of following :

   a. Seven Segment LED

   b. Keyboard