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

Total No. of Questions : 09

B.Tech (ECE) (Sem.–6)

MICRO CONTROLLER AND EMBEDDED SYSTEMS

Subject Code : EC-306

M.Code : 57537

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. How many I/O ports are used in microcontroller 8051?

b. What are the instructions used to access external RAM in 8051?

c. How many bit addressable locations are placed in internal RAM of 8051?

d. State the function of Ml and M0 bits in TMOD register.

e. How will you double the baud rate in 8051?

f. Define sensor and its use in real world applications.

g. What is interfacing?

h. Explain about the serial port programming in 8051.

i. What are the flag bits used in 8051?

j. Explain CPSR register of Arm 7 processor.

SECTION-B

2. Write about the timers and their functions used in 8051.

3. Explain the interfacing of LCD with 8051 using neat diagram.

4. Draw the interfacing diagram of RS232 with 8051 and explain its operation.

5. Explain addressing modes of ARM 7 processor.

6. What is embedded system? Discuss various component of embedded system.

SECTION-C

7. Draw and explain the interfacing diagram of ADC with 8051.

8. Explain how Exceptions and Interrupts are handled in ARM 7?

9. Write an assembly language program for 8051 microcontroller to arrange block of ten numbers in ascending order.

NOTE : Disclosure of identity by writing mobile number or making passing request on any page of Answer sheet will lead to UMC case against the Student.