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

Total No. of Questions : 18

B.Tech. (Electronics & Communication Engineering) (2018 Batch) (Sem.–4)
MICROPROCESSORS AND MICROCONTROLLERS
Subject Code : BTEC-402-18
M.Code : 77566

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

Write briefly :

1. What is the need of interrupts in microprocessor?

2. How microcontroller is different from microprocessor?

3. Differentiate RISC and CISC architectures.

4. Give memory organization of 8051 microcontrollers.

5. Give logical instructions with examples.

6. Give significance of program counter.

7. What is bit addressability?

8. For a time delay of 25ms, what value do you need to load into the timer registers? (Assume XTAL = 11.0592 MHz)

9. Discuss the different flags of 8085 microprocessor.

10. Discuss the steps of SUBB instruction with the help of example.

SECTION-B

11. Write a program to generate 2 KHz square wave on pin P1.0 of 8051 by using timer 1 in mode 1. Assume XTAL = 20 MHz.

12. Discuss RAM organization for 8051.

13. Describe PSW and TMOD registers of 8051 microcontrollers.

14. What is addressing mode? Explain the different addressing modes with suitable examples for 8085 microprocessor.

15. Draw and explain the 8085 architecture.

SECTION-C

16. Draw and explain the interfacing of LCD with microcontroller.

17. Discuss various sources of interrupt in 8051. Also discuss various SFR's associated with interrupts.

18. Draw and explain pin configuration of 8085 microprocessor.

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.