B.TECH. SEM -VI BIO MEDICAL 2014 COURSE (CBCS) : SUMMER - 2018

SUBJECT : MICROPROCESSORS & MICROCONTROLLERS

Day : **Friday** | Time : **02.30 PM TO 05.30 PM**

Date : **01/06/2018** | **S-2018-2452** | Max. Marks : 60

N.B.:

1) All questions are **COMPULSORY**.
2) Figures to the right indicate **FULL** marks.
3) Assume suitable data if necessary.

Q.1 Draw and describe the internal architecture of 8085 microprocessor in detail. **[10]**

OR

Differentiate the following: **[10]**

a) Microprocessor and microcontroller

b) RISC and CISC microcontroller

Q.2 Discuss the addressing modes of 8051 microcontroller with the help of example. **[10]**

OR

a) Describe the internal RAM structure of 8051 microcontroller. **[06]**

b) Draw and describe the flag register of 8051. **[04]**

Q.3 Describe the following instructions of 8051 microcontroller with an example. **[10]**

a) DA **b)** XOR **c)** CPL A **d)** SUBB **e)** ADD C

OR

Describe the concept of Looping and Loop inside a Loop in 8051. **[10]**

Q.4 Describe the special function registers of 8051 related to serial communication. **[10]**

OR

Draw and discuss the interfacing of 8051 with LCD with the help of neat diagram. **[10]**

Q.5 Discuss the following PIC18F registers: **[10]**

a) WREG register **c)** PIC status register

b) PIC FILE register **d)** Program counter

OR

Describe stacks and subroutines in PICI8F. **[10]**

Q.6 Describe the basic concepts of serial I/O in PIC18F. **[10]**

OR

Discuss different types of Timers in PIC18F. **[10]**

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