Total No. of Questions : 6]

SEAT No. :

P5028

[Total No. of Pages : 2

TE / Insem- 526

T.E. (Electrical)

ADVANCE MICROCONTROLLER & ITS APPLICATIONS

(Semester - I)

(2012 Pattern)

Time : 1 Hour] *[Max. Marks :30*

Instructions to the candidates:

1) *Answer Q.No.1, or Q.No.2, Q.No.3 or Q.No.4, Q.No.5 or Q.No.6 .*
2) *Neat diagrams must be drawn wherever necessary.*
3) *Figures to the right side indicate full Marks.*
4) *Assume suitable data, if necessary.*

Q1) a) Compare CISC and RISC **[6]**

b) Write a short note on Stack organization of PIC18 microcontroller **[4]**

OR

Q2) a) Explain any three addressing modes of PIC 18 microcontroller **[6]**

b) Explain the function of Program counter and File Select Register. **[4]**

Q3) a) Explain the instruction **[6]**

i) BSF PORTD,0 ii) MOVWF 0 × 04,0

iii) MOVF 0 × 01,0,1

b) Write a program in assembly language to get a data from SFR of Port B and send the data to SFR of PORT C **[4]**

OR

Q4) a) What will be the contents of location 0 × 000 and 0 × 100 after execution of an instruction BSF 0 × 00,1,0 Assume these locations originally contained 32H and 44H Respectively **[6]**

b) write a short note on any two C data types for PIC 18 microcontroller.**[4]**

P.T.O

Q5) a) Explain Assembler and Compiler **[4]**

b) Write a program in C using Timer 0 to create a square waveform of 2 kHz on PORTB. 5 (RB5). Assume the crystal frequency to be 10 MHz Use timer 0 in 16 bit mode without a pre scalar **[6]**

OR

Q6) a) Explain T0CON register **[4]**

b) Write a short note on interrupt structure of PIC 18 microcontroller. **[6]**

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