Total No. of Questions : 6]

SEAT No. :

P5804

[Total No. of Pages : 2

T.E./Insem./Oct.-22
T.E. (E & TC) (Semester - I)
MICROCONTROLLER AND APPLICATIONS
(2012 Pattern)

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

Instructions to the candidates :

1) *Answer Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6.*
2) *Neat diagrams must be drawn wherever necessary.*
3) *Figures to the right side indicate full marks.*
4) *Use of Calculator is allowed.*
5) *Assume Suitable data if necessary.*

Q1) a) Differentiate between Microprocessor and Micro controllers. **[5]**

b) Draw and explain the block schematic of Logic analyzer. **[5]**

OR

Q2) a) Explain in detail RS 485 communication protocol. **[5]**

b) Explain role of microcontroller in Embedded system with example. **[5]**

Q3) a) State features of 8051 and draw the block diagram. **[5]**

b) Explain following instructions with operation, addressing mode, no. of cycles and time required to execute the following instructions i. DJNZ Rn,X, ii. MOVC A, @A+DPTR iii. DAA, **[5]**

OR

Q4) a) Draw and explain in depth functional diagram of Timer/Counter of 8051. **[5]**

b) Write an ALP to transfer SPPU continuously at the baud rate of 9600 continuously. **[5]**

P.T.O.

www.manaresults.co.in

Q5) a) Draw and explain the data memory organization of PIC 18. **[5]**

b) Enlist and explain the factors used in selection of PIC 18. **[5]**

OR

Q6) a) Explain with example functioning of ALU in PIC18. **[5]**

b) Explain the power down modes of PIC18. **[5]**

www.manaresults.co.in