

Total No. of Questions : 6]

SEAT No. :

P4901

[Total No. of Pages : 2

T.E./Insem. - 128
T.E. (E & TC) (Semester - I)
Microcontroller and Application
(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) Figures to the right indicate full marks.*

Q1) a) Define Embedded system. Explain its characteristics. **[5]**

b) Write note on Logic Analyzer. **[5]**

OR

Q2) a) Differentiate Harward & Von Neumann Architecture by giving one example of each. **[4]**

b) Explain software development tools: **[6]**

i) Assembler.

ii) Compiler.

Q3) a) Explain the use of following registers of 8051. **[6]**

i) DPTR.

ii) TMOD.

iii) PC.

b) Explain port structure of 8051. **[4]**

P.T.O.

OR

Q4) a) Explain Mode 1 & Mode 2 of timers in 8051. [4]

b) In serial communication, how baud rate is set? Show calculation for 2400 baud. [6]

Q5) a) List various features of PIC 18. [5]

b) Write short note on BOD. [5]

OR

Q6) a) Draw & explain structure of program memory map of PIC 18. [5]

b) Explain working register (WREG) & status register in PIC 18. [5]

