P4901

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]**

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

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

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

b) Write short note on BOD. **[5]**

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

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

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