

**B.TECH. SEM -V INFO. TECH. 2014 COURSE (CBCS) : WINTER -
2017**

SUBJECT : MICROPROCESSOR ARCHITECTURE & PROGRAMMING

Day : **Thursday**
Date : **18/01/2018**

Time : **02.30 PM TO 05.30 PM**
Max. Marks : **60**

W-2017-2152

N.B.:

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Use of non-programmable **CALCULATOR** is allowed.
- 4) Draw neat and labeled diagram **WHEREVER** necessary.
- 5) Assume suitable data if necessary.

Q.1 Enlist and explain features of 8086 in detail. **[10]**

OR

Define 8086 interrupt structure in detail.

Q.2 Define programmers model of 8086 in detail. **[10]**

OR

Define function calls, procedures and macros in detail with respect to 8086 Assembly Language.

Q.3 Describe 8087 Architecture in detail with suitable diagram. **[10]**

OR

Explain the master-slave mode of 8259 PIC with neat diagram.

Q.4 What is Closely Coupled and Loosely Coupled Architecture? Explain in detail with suitable diagrams. **[10]**

OR

Explain SPARC architecture in detail with neat diagram.

Q.5 Explain the on-chip data memory and program memory organization in 8051 microcontroller with neat diagram. **[10]**

OR

What are the different addressing modes in 8051? Explain with examples.

Q.6 What are the various registers associated with interrupt programming in 8051? Explain in detail. **[10]**

OR

Explain the timer/counters in 8051 with neat diagrams.

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