

B.TECH. SEM -V INFO. TECH. 2014 COURSE (CBCS) :
SUMMER - 2018
SUBJECT : MICROPROCESSOR ARCHITECTURE & PROGRAMMING

Day : **Thursday**
Date : **24/05/2018**

S-2018-2360

Time : **10.00 AM TO 01.00 PM**
Max. Marks : 60

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.
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Q.1 Explain block diagram of 8086 in detail. Also explain the concept of [10]
pipelining.

OR

Explain memory segmentation of 8086 in detail.

Q.2 Enlist and explain 8086 addressing modes in detail with suitable examples. [10]

OR

Explain DOS and BIOS interrupts in detail, with examples.

Q.3 With a neat diagram, explain the working of 8237 DMA controller. [10]

OR

Draw and explain the block diagram of 8255 PPI. Also explain the BSR and control word for 8255.

Q.4 What is RISC and CISC Architecture? Explain in detail with neat diagrams. [10]

OR

Describe Multicore Architecture in detail.

Q.5 Describe 8051 microcontroller architecture in detail. [10]

OR

What are the different SFRs in 8051? Explain in detail.

Q.6 Explain the interrupt structure and interrupt response of 8051 microcontroller. [10]

OR

What are the different hardware and software tools for the development of microcontroller based system? Explain

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