PVP 12

Code: **EEPC1T1**

I M.Tech-I Semester-Regular Examinations-April 2015

MICROPROCESSORS & MICROCONTROLLERS

(POWER SYSTEM CONTROL AND AUTOMATION)

Duration: 3 hours Marks: 5x14=70

Answer any FIVE questions. All questions carry equal marks

1 a) What are the advantages of having segmentation? How does the 8086 microprocessor support segmentation? 5 M

b) Describe the different addressing modes of 8086 microprocessor. 5 M

c) How is pipelining achieved in 8086 microprocessor? 4 M

2 a) Draw and discuss the bus activities of an 8086 Microprocessor during WRITE operation. 7 M

b) Explain how 8086 enters into WAIT state with neat diagram. 7 M

3 Explain about various assembler directives of 8086. 14 M

4 a) Explain Programmed I/O and Interrupt I/O. 7 M

b) What is DMA? Explain the need of DMA. 7 M

5 a) Explain the stack structure of 8086. 7 M

b) Explain the following interrupts. 7 M

i) NMI ii) INTR

6 a) Explain various operating modes of 8255 PPI. 10 M

b) Explain briefly about Interfacing A to D converters. 4 M

7 a) What are the different modes of operation 8251 USART. 7 M

b) Explain FIFO status word of 8279. 7 M

8 a) Discuss the addressing mode available in 8051 with an example to each module. 7 M

b) Discuss the function of TCON and TMOD special function registers. 7 M