PVP 12

Code: **EEPC1T1**

I M.Tech-I Semester-Regular Examinations-February 2016

MICROPROCESSORS & MICROCONTROLLERS

(POWER SYSTEM CONTROL AND AUTOMATION)

Duration: 3 hours Max. Marks: 70

Answer any FIVE questions. All questions carry equal marks

1 a) How many memory locations are available in 8086 microprocessor. 4 M

b) Explain the architecture of 8086 with the help of a block diagram. 10 M

2 a) What are the general purpose registers in 8086? 7 M

b) Describe the sequence of event that may occur during the different T state in the opcode fetch machine cycle of 8086. 7 M

3 Explain the Maximum mode of operation and timings 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 D to A 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) Explain the architecture of 8051 microcontroller with a neat block diagram. 10 M

b) Explain different modes of operation of timer in 8051. 4 M