

Code No: **R32024**

R10

Set No. 1

III B.Tech II Semester Supplementary Examinations, October/November-2020

MICROPROCESSORS AND MICROCONTROLLERS

(Electrical and Electronics Engineering)

Time: 3 hours

Max. Marks: 75

**Answer any FIVE Questions
All Questions carry equal marks**

- 1 a) With a neat block diagram explain the architecture of 8086 Microprocessor. [8M]
b) Discuss the significance of Memory Organization of 8086. [7M]
- 2 a) Draw and explain the read and write cycle timing diagrams of 8086 in minimum mode. [8M]
b) List the addressing modes of 8086 with an example of each. [7M]
- 3 a) What are the Assembler directives and explain them briefly. [8M]
b) Discuss the function of the following: [7M]
(i) Loop (ii) REPEAT (iii) WHILE.
- 4 With a neat sketch explain the internal architecture of 8255. [15M]
- 5 a) Enumerate the Command words and operating modes of 8259. [8M]
b) Explain the static memory interfacing with 8086. [7M]
- 6 a) Explain the Memory Organization in 8051 micro controller. [8M]
b) Describe the critical special function register formats of 8051. [7M]
- 7 a) What are the addressing modes of 8051? Explain them briefly. [8M]
b) Mention the interrupts of 8051. Explain them briefly. [7M]
- 8 a) Explain the difference between common anode and common cathode of 7-segment LEDS. [8M]
b) Enlist the applications of Micro Controllers. [7M]
