

3093

B.Tech. (ECE) 4th Semester (G Scheme)
Examination, July-2022
MICROCONTROLLERS
Paper- PCC-ECE-210-G

Time allowed : 3 hours] [Maximum marks : 75

Note : The students have to attempt five questions in total, first being compulsory and selecting one from each unit.

1. (a) What is the function of ALU in a Microprocessor? 2.5
- (b) Explain the flag register of 8086. 2.5
- (c) Enlist the name of segment registers in a Pentium processor. 2.5
- (d) Discuss briefly MUL and DIV instructions with example. 2.5
- (e) Discuss briefly the BSR mode of Intel 8255. 2.5
- (f) What do you understand by the term Interrupt in microprocessor? 2.5

Unit - I

2. Draw the pin diagram of 8086 Microprocessor and explain the function of each pin. 15
3. Explain in detail the memory segmentation implemented in 8086 Microprocessor. 15

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Unit - II

4. Explain in detail the programming model of X86 family of microprocessors. 15
5. Explain string instructions used in X86 family of Microprocessors. 15

Unit - III

6. Discuss the enhanced features of Pentium Processor in detail. 15
7. Write a short note on Mobile Processors. 15

Unit - IV

8. Explain the block diagram of PPI chip. Also explain its mode of operation in detail. 15
9. (a) Explain Intel 8259 with the help of block diagram. 7.5
- (b) Explain Intel 8237 with the help of pin diagram. 7.5