

# MICROPROCESSORS AND APPLICATIONS

Year/Sem. : III Year/VI Semester

Time : 2.30 Hours]

[Maximum Marks : 50

Minimum Marks : 17]

## NOTE :

Attempt all questions.

1. Attempt **any two** parts of the following : [2 × 5 = 10]
  - (a) What is microprocessor? Explain the different types.
  - (b) What is a bus? Explain the 8085 microprocessor bus organisation system.
  - (c) Explain the various program control operations in a microprocessor.
2. Attempt **any two** parts of the following : [2 × 5 = 10]
  - (a) Explain the 8251 programmable communication interface.
  - (b) Explain briefly the architecture of 8085 microprocessors with diagram.
  - (c) Explain the concept of multiplexing in microprocessor.
3. Attempt **any two** parts of the following : [2 × 5 = 10]
  - (a) What are sub routines? Explain the CALL and RET instructions of 8086.
  - (b) What are different types of memory? Explain.
  - (c) Write a short note on 8259 programmable interrupt controller.
4. Attempt **any two** parts of the following : [2 × 5 = 10]
  - (a) What are flags? Explain the various flags used in a microprocessor.
  - (b) Explain the concept of parallel processing.
  - (c) Describe the function of 8255 chip.
5. Write notes on **any four** of the following : [4 × 2½ = 10]
  - (a) Virtual memory
  - (b) A/D conversion
  - (c) Machine language
  - (d) Segment register
  - (e) Accumulator
  - (f) DRAM interfacing