

M.Sc. Computer Science 4<sup>th</sup> Semester  
MICROPROCESSOR AND ITS APPLICATIONS

Paper—MCS-402

Time Allowed—3 Hours]

[Maximum Marks—100

**Note** :— Attempt any **five** questions. All questions carry equal marks.

1. What is a Microcomputer ? Draw the block diagram of a Microcomputer and explain its various components. 20
2. Explain the role of a Microprocessor in a Computer System. Discuss applications of Microprocessors in other Industries. 20
3. Discuss the read/write bus cycles of 8086/8088 Microprocessor. 20
4. Explain the pin configuration of 8086/8088 Microprocessor. 20
5. What is Memory Address Space ? Discuss the hardware organization of memory address space. 20
6. Explain the instruction execution cycle. 20
7. What is an Interrupt ? Explain the interrupt interface of 8086/8088 microprocessor. 20
8. How does 8086/8088 handle interaction with I/O devices ? 20