Exam. Code : 206704
Subject Code : 4645

M.Sc. (Computer Science) Semester—IV
MCS–402 : MICROPROCESSOR AND ITS
APPLICATIONS

Time Allowed—3 Hours]   [Maximum Marks—100

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

1. Discuss the detail of input unit, output unit and auxiliary
   storage unit of Microprocessor.   20

2. (a) Explain the description of different pins of 8086
       microprocessor for minimum mode system.   10

   (b) Describe the sequence of instruction execution of
       8086 microprocessor.   10

3. (a) How address space and data is organized for
       8086/8088 microprocessor ? Explain.   10

   (b) What are the major memory control signal for 8086
       memory interfacing ? Describe their role.   10

4. Explain the following :

   (a) Procedure of generating memory addresses

   (b) Input/Output Bus cycles.   20

5. What is the role of UART chip ? Discuss the block
   diagram of this chip and role of different units of this
   chip.   20

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6. Discuss the different types of interrupts and need of IVT in detail. 20

7. Discuss the following :

   (a) Input/Output Instructions

   (b) Read bus cycle of 8086. 20

8. Write short notes on the following :

   (a) Difference between minimum and maximum mode of Microprocessor

   (b) USART. 20