

T E / Y / Bmed / CSBSAS / up (Microprocessor)

QP Code : 564202

14

(3 Hours)

[Total Marks : 80

- N.B. : (1) Question No. 1 is compulsory.
 (2) Attempt any three questions from remaining five.
 (3) Draw neat labelled diagram wherever necessary.
1. (a) Compare Von-Neumann and Harvard architecture. 20
 (b) Draw the interfacing diagram of 8086 with ADC.
 (c) Explain Queue and Pipelining. Explain its advantages.
 (d) Compare memory mapped I/O and I/O Mapped I/O.
 (e) Explain the control word register of 8087.
 2. (a) Explain with suitable examples the various addressing modes of 8086. 10
 (b) List the features of 8259. Draw the interfacing diagram of 8086 with 8259. 10
 3. (a) Explain the string instruction of 8086. 5
 (b) Draw and explain I/O mode control word format of 8255. 5
 (c) Explain the interfacing and working of 8086 with 8087. Draw neat labeled diagram. 10
 4. (a) Write a program to find maximum number from a series of 10 bytes stored in an array. 10
 (b) Explain the interrupt structure of 8086. 10
 5. (a) Explain the exceptions of 8087. How are these exceptions handled by 8087. 10
 (b) Draw and explain the read machine cycle in maximum mode and write machine cycle in minimum mode. 10
 6. (a) Write a program using 8087, to find the hypotenuse of a right angled triangle. 10
 (b) State the features of 8237. Draw the interfacing diagram of 8086 with 8237. 10