[Total No. of Questions - 9] [Total No. of Printed Pages - 2]

Dec.-23-0504

EE-602 (Microprocessors & Applications)

B.Tech. 6th (CBCS)

Time : 3 Hours **Max. Marks : 60**

The candidates shall limit their answers precisely within the answer-book (40 pages) issued to them and no supplementary/continuation sheet will be issued.

Note : Attempt five questions in all, by selecting one question each from units I, II, III, IV and Queastion no. 9 which is compulsory.

UNIT - I

1. Discuss

   (a) (i) The features of 8085 microprocessor.

   (ii) The role of clock in 8085.

   (b) Various addressing modes of 8085 with examples. (10)

2. Draw the block diagram showing the architecture of 8085 microprocessor and explain the function of its important components. (10)

UNIT - II

3. Write an 8085 assembly language program for

   (a) Finding the largest number in a string N elements

   (b) Arranging the string of 155 elements in a descending order. (10)

4. Explain:

   (a) The hardware and software interrupts of 8085.

   (b) The I/o data transfer with the help of interrupts. (10)

UNIT - III

5. Write a detailed note on 8255 programmable peripherial interface (PPI). (10)

6. Explain:

   (a) I/o mapped I/o and memory mapped I/o.

   (b) The features of 8251 chip. (10)

UNIT - IV

7. Describe:

   (a) Limitations of 8085, main features of 8086 and then its limitations.

   (b) How to select a microprocessor among 8085, 8086 for a microprocessor based applications?

   (c) How many address lines does 8086 have? (10)

8. (a) Draw and explain the block diagram of 8086 microprocessor for maximum mode of operation.

   (b) Discuss the architecture of 8086. (10)

UNIT - V (Compulsory)

9. Describe:

   (a) What are the various 8085 Flags? Explain them.

   (b) What is stack? What are instructions associated with 8085 stack? What are its applications?

   (c) Important features of 8257 chip.

   (d) Working of RIM and SIM instructions of 8085. Also EI and DI.

   (e) How will you distinguish between synchronous Asynchronous communication? Explain Asynchronus serial data communication using SOD and SID.

(5×4=20)