⑤

752304

Jan 2022
M.Sc. (Physics) - IIIrd SEMESTER
Microprocessor (PHL-304)

Time : 90 Minutes]   [Max. Marks : 25

Instructions :

1. *It is compulsory to answer all the questions (1 mark each) of Part-A in short.*
2. *Answer any three questions from Part-B in detail.*
3. *Different sub-parts of a question are to be attempted adjacent to each other.*

PART - A

1. (a) Write the example of Accumulator based micro-processor.   (1)

   (b) How many types of the addressing in memory? (1)

   (c) What is the EPROM stands for?   (1)

   (d) How many modes of operation 8086 Microprocessor supports?   (1)

   (e) In 8086 how much memory space contains?   (1)

   (f) Write the grouping of register AX.   (1)

(g) Write the name of instruction that pushes the contents of the specified register/memory location on to the stack. (1)

(h) How many pins of the 8255 can be used as the I/O ports? (1)

(i) Write the two examples of output device. (1)

(j) Which bus is available when the DMA controller receives the signal? (1)

PART - B

2. (a) Define the program execution for 8085. (3)
   (b) Define the BUS. (2)

3. (a) What is flag? (2)
   (b) Explain the stack pointer? (3)

4. Sketch the timing diagram of 8085. (5)

5. (a) Define the segment registers for 8086. (3)
   (b) Explain the ADD instruction for 8086. (2)

6. (a) Sketch the 7 segment LED display interfacing. (2)
   (b) Sketch the operation block diagram of 8237 DMA controller. (3)