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4th Sem / Branch : Comp, Eltx,Med Eltx, Mecatronics,(5th Sem) Power Eltx

Subject:- Microprocessor and Peripheral Devices /Microp. & App

Time : 3Hrs. M.M. : 100

SECTION-A

Note: Multiple choice questions. All questions are compulsory (10x1=10)

Q.1 Address lines necessitate for the 64kB memory is (CO1)

a) 24 b) 36
c) 12 d) 16

Q.2 The term gigabytes refers to (CO1)

a) 1024 bytes b) 1024 kilobytes
c) 1024 megabytes d) 1024 gigabytes

Q.3 In 8085 microprocessor with memory mapped I/O which of the following is true? (CO1)

a) I/O devices have 16 bit addresses
b) I/O devices are accessed during IN and OUT instruction
c) There can be a maximum 256 input and 256 output instructions
d) Logical operation cannot be performed

Q.4 What is the maximum addressing capability of 8085? (CO1)

a) 64KB b) 1MB
c) 4KB d) 32KB

Q.5 In 8085 microprocessor, which one is the non - maskable interrupt? (CO1)

a) RST 7.5 b) TRAP
c) HOLD d) INTR

Q.6 Which of the following interfacing IC is a DMA controller? (CO1)

a) 8257/37 b) 8155
c) 8253/54 d) 8279

Q.7 What is the use of Zero flags in the 8086 microprocessor? (CO1)

a) Use to check the result of arithmetic operation
b) Use to check the result of bitwise logical operation
c) Both a and b
d) None

Q.8 The control signal employed to differentiate amongst an input or output operation and memory operations is (CO1)

a) ALE b) IO/M
c) SID d) SOD

Q.9 8086 can operate in_____modes (CO1)

a) 1 b) 2
c) 3 d) 4

Q.10 The microprocessor of a computer can operate on any information if it is present in_____only (CO1)

a) Program Counter b) Flag
c) Main Memory d) Secondary Memory

SECTION-B

Note: Objective type questions. All questions are compulsory. (10x1=10)

Q.11 Define DMA (CO3)
Q.12 Define RIM (CO3)
Q.13 Define Microprocessor (CO1)
Q.14 Name two types of interrupts (CO4)
Q.15 Define implied addressing mode (CO3)
Q.16 Define two byte of instruction (CO2)
Q.17 Define instruction format (CO2)
Q.18 Define interfacing (CO2)
Q.19 Define system bus (CO2)
Q.20 Define instruction-cycle (CO2)

SECTION-C

Note: Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)

Q.21 Define microprocessor, its evolution, and impact on modern society (CO1)
Q.22 Define bus. Give concept of bus organization of 8085 with diagram. (CO2)
Q.23 Give four examples of arithmetic group instructions of 8085? (CO4)
Q.24 Write steps how to execute a program in 8085 kit with example (CO5)
Q.25 Difference between I/O mapped I/O and memory mapped I/O? (CO6)
Q.26 Define addressing modes? Explain different addressing modes with example? (CO4)

Q.27 Explain basic features of 8253 PIT. (CO6)
Q.28 Differentiate between asynchronous and synchronous mode of data transfer. (CO6)
Q.29 Write a short note on: (CO5)
a) USART b) Stack
Q.30 WAP in assembly language to find largest out of 4 numbers sorted at some location. (CO5)
Q.31 Explain programmed data transfer techniques with suitable example. (CO6)
Q.32 Classify the interrupts of 8085. Explain the steps to process the interrupt generated in 8085. (CO5)
Q.33 Explain applications of microprocessor in various fields. (CO4)
Q.34 WAP in assembly language for the multiplication of two given numbers (CO3)
Q.35 Draw and explain timing diagram. (CO3)

SECTION-D

Note: Long answer type questions. Attempt any two questions out of three questions. (2x10=20)

Q.36 Define instruction set? Explain at least 5instruction set with the suitable example? (CO5)
Q.37 Explain and draw function of each block of 8257 DMA controller (CO6)
Q.38 Draw and discuss pin configuration of 8085 in detail. Draw an architecture and function of each block of microprocessor 8086 in detail. (CO7)