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Roll No. /031045/30834

4th Sem. / Comp. Eltx. Med Eltx, Mecatronics
(5th Sem) Power Eltx.
Sub : Microprocessor & Peripheral Devices/
Microprocessor & Applications

Time : 3 Hrs. M.M. : 100

SECTION-A

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

- Q.1 Which of the following is not a microprocessor? (CO1)
a) Android b) Intel i4
c) Intel 8086 d) Pentium3
- Q.2 How many flags are there in a 8085 microprocessor? (CO3)
a) 4 b) 5
c) 7 d) 10
- Q.3 Which of the following is not true about 8085 microprocessor? (CO1)
a) It is an 8-bit microprocessor
b) It is a 40 pin DIP chip
c) It is manufactured using PMOS technology
d) It has 16 address lines
- Q.4 Which of the following is a special-purpose register of microprocessor? (CO1)
a) Program counter b) Instruction register
c) Accumulator d) Temporary register

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- Q.5 DMA is a (CO5)
a) Interrupt b) Data transfer technique
c) Addressing mode d) None
- Q.6 Addressing mode used in MVI, A, 08 is (CO2)
a) Register mode b) Direct Mode
c) Indirect mode d) Immediate mode
- Q.7 SP in 8085 stands for (CO2)
a) Stack pointer b) Shift pin
c) Serial process d) None
- Q.8 Which of the following flag is used to check null output? (CO3)
a) Zero flag b) Auxiliary carry flag
c) Interrupt flag d) Sign flag
- Q.9 ALE is used for (CO1)
a) Data transfer
b) Control signal transfer
c) Demultiplexing address and data bus
d) All of above
- Q.10 Microprocessor codes are written using (CO2)
a) High level language b) Assembly language
c) Machine language d) Java

Section-B

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

- Q.11 8085 is called _____ bit microprocessor. (CO1)

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- Q.12 Data bus has _____ pins in 8085 microprocessor. (CO1)
- Q.13 ALE stands for _____. (CO1)
- Q.14 Name two addressing modes in 8085. (CO2)
- Q.15 _____ is the highest priority interrupt in 8085. (CO5)
- Q.16 8085 is a _____ pin microprocessor. (CO1)
- Q.17 What is the size of Program counter register? (CO1)
- Q.18 FLAG is the non maskable interrupt. (True/False)(CO3)
- Q.19 Name two Arithmetic group instructions. (CO2)
- Q.20 DMA is interrupt driven data transfer technique. (True/False) (CO5)

Section-C

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

- Q.21 What is the role of ALU in micro processor. (CO1)
- Q.22 Explain the function of various registers available in 8085. (CO1)
- Q.23 Explain how ALE helps in de-multiplexing address and data bus in 8085. (CO1)
- Q.24 What are addressing modes? Explain various addressing modes available in 8085. (CO2)
- Q.25 What is the significance of flag register. Discuss various flags in 8085. (CO3)
- Q.26 Discuss various type of interrupts in 8085. (CO5)
- Q.27 Explain in steps how a stored program is executed in 8085. (CO2)

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- Q.28 Write a program in assembly language for multiplication of two 8-bit numbers. (CO2)
- Q.29 Draw the timing diagram of MEMW operation. (CO1)
- Q.30 Define instruction and classify them on the basis of size. (CO3)
- Q.31 What are interrupts. Differentiate between maskable and non-maskable interrupts. (CO5)
- Q.32 Draw and explain the pin diagram of 8257 DMA controller. (CO4)
- Q.33 Discuss the concept of memory mapping and compare memory mapped i/o with i/o mapped i/o. (CO5)
- Q.34 Discuss various type of data transfer instruction available in 8085 with example. (CO5)
- Q.35 What is the purpose of status bits in 8085. What role they play in decision making in 8085. (CO1)

Section-D

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

- Q.36 Draw and explain the functional block diagram of 8086 microprocessor. (CO1)
- Q.37 Discuss in detail various data transfer techniques in 8085. (CO5)
- Q.38 Draw and explain the pin diagram of 8085 with functional detail of each pin. (CO1)

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