

- Q.28 Explain the arithmetic group instructions with example. (CO3)
- Q.29 Write a note on machine language. (CO2)
- Q.30 Differentiate machine and fetch cycle of microprocessor? (CO3)
- Q.31 What is the structure of Embedded C program? (CO5)
- Q.32 What is I/O mapped I/O. (CO4)
- Q.33 Write a note on generation of read / write control signals in 8085. (CO2)
- Q.34 Illustrate the interfacing of seven segment with 8085. (CO6)
- Q.35 Describe the bus organization of 8085. (CO1)

SECTION-D

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

- Q.36 Explain the internal architecture of 8085 microprocessor with the help of neat and clean block diagram. (CO2)
- Q.37 Classify the different interrupts used in 8085 Microprocessor. (CO3)
- Q.38 Explain the interfacing of Stepper Motor with 8051. (CO6)

No. of Printed Pages : 4
Roll No.

202443

4th Sem. / Mechatronics Sub. : Embedded System

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 a special-purpose register of microprocessor? (CO1)
 a) Program counter b) Instruction register
 c) Accumulator d) Temporary register
- Q.2 What is the frequency of the clock that is being used as the clock source for the timer? (CO1)
 a) Some externally applied frequency f
 b) Controller's crystal frequency f
 c) Controller's crystal frequency /12
 d) Externally applied frequency/1
- Q.3 Which register is used to make the interrupt level or an edge triggered pulse? (CO4)
 a) TCON b) IE
 c) IPR d) SCON
- Q.4 Which of the following is the correct sequence of operations in a microprocessor? (CO2)
 a) Opcode fetch, memory read, memory write, I/O read, I/O write
 b) Opcode fetch, memory write, memory read, I/O read, I/O write
 c) I/O read, opcode fetch, memory read, memory write, I/O write
 d) I/O read, opcode fetch, memory write, memory read, I/O write

- Q.5 The address bus of 8085 is _____ bit. (CO2)
 a) 8 b) 16
 c) 32 d) 64
- Q.6 How an embedded system communicates with the outside world? (CO5)
 a) Memory b) Output
 c) Peripherals d) Input
- Q.7 The stack pointer is 8085 is a _____ (CO2)
 a) 16 bits register which points to stack memory locations
 b) 16 bits accumulator
 c) Memory location in a stack
 d) Flag register used in stack
- Q.8 Which of the following flag is used to mask INTR interrupt? (CO4)
 a) Zero flag b) Auxiliary carry flag
 c) Interrupt flag d) Sign flag
- Q.9 Which pin provides a reset option (RST) in 8051? (CO1)
 a) Pin 1 b) Pin 8
 c) Pin 12 d) Pin 9
- Q.10 For writing commands on an LCD, RS bit is (CO6)
 a) Set b) Reset
 c) Set & Reset d) Non of the mentioned

SECTION-B

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

- Q.11 List various flags of 8085 flag register. (CO2)

- Q.12 Write the full form of ALE. (CO2)
 Q.13 Define instruction cycle. (CO3)
 Q.14 What is compiler? (CO1)
 Q.15 What is Micro-Processor? (CO2)
 Q.16 Write the full form of RIM. (CO2)
 Q.17 What is difference between microprocessor and micro controller? (CO4)
 Q.18 What is the term “Keywords”? (CO3)
 Q.19 What is “Non Maskable interrupt”? (CO1)
 Q.20 What is program counter? (CO2)

SECTION-C

- Note:** Short answer type Questions. Attempt any twelve questions out of fifteen Questions. (12x5=60)
- Q.21 What is the use of PUSH and POP instruction in 8085 microprocessor? (CO3)
 Q.22 Explain the special function registers of 8085? Discuss their functions in detail. (CO2)
 Q.23 Give different instruction format of 8085 with examples. (CO3)
 Q.24 Explain the addressing modes of 8051 microcontroller. (CO2)
 Q.25 What is the sequence of execution of a program by microprocessor? (CO5)
 Q.26 Define PSW? Explain different flags present in 8051? (CO2)
 Q.27 Discuss the impact of microprocessor on modern society. (CO2)