Q.28 Define interrupt and types of interrupt used in 8085. (CO9)

Q.29 Explain octal to Binary encoder. (CO4)

Q.30 Explain NAND Gate with Truth Table. (CO2)

Q.31 Define Flip-Flop and explain S-R Flip-Flop. (CO5)

Q.32 Differentiate between combinational and sequential circuit. (CO4)

Q.33 Explain the following instructions. (CO9)

a) POP

b) MOV

Q.34 Define De Morgan's Theorems. (CO3)

Q.35 Simplify the Expression (A+B) (A+C)

SECTION-D

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

Q.36 Explain universal gate. Realize NOT, AND, OR using NAND Gate. (CO2)

Q.37 Minimise the following expression by using K-map and realize the result by using NAND gates Y= Sm (0,1,4,5,12,13,8,9,2,6,14). (CO3)

Q.38 Explain the followings:

a) Successive approximation A/D converter. (CO7)

b) Application of Flip-Flops. (CO5)

Roll No. .....

5th Sem / Elect, GE, Power Station Engg.
Subject:- Digital Electronics and Microprocessors

Time : 3Hrs. M.M. : 100

SECTION-A

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

Q.1 A NAND gate is equivalent to an AND gate followed by_____ gate. (CO1)

a) XOR b) NOT

c) OR d) NOR

Q.2 The number of select line for 4:1 MUX are_____. (CO4)

a) 6 b) 4

c) 2 d) 3

Q.3 A.A= (CO3)

a) 1 b) 0

c) A d) $\ddot{A}$

Q.4 A half adder can add_____ number of bits. (CO4)

a) 1 b) 3

c) 2 d) 4

Q.5 Radix of octal number system is_____. (CO1)

a) 6 b) 8

c) 16 d) 2

Q.6 How many bits make a Nibble? (CO1)

a) 4 Bits b) 8 Bits

c) 16 Bits d) 2 Bits

Q.7 The 2's complement of 0110101 binary is (CO1)

a) 110001 b) 001001

c) 1001011 d) 111001

Q.8 The basic storage element is a digital system is _____. (CO7)

a) Flip-Flop b) Counter

c) MUX d) Encoder

Q.9 How many bit program counter is available in 8085? (CO8)

a) 8 Bit b) 16 Bit

c) 32 Bit d) Both a and b

Q.10 The highest priority interrupt in 8085 is_____ (CO9)

a) TRAP b) RST6.5

c) INTR d) RST7.5

SECTION-B

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

Q.11 1001+1100=_____ (CO1)

Q.12 PIPO stands for_____. (CO6)

Q.13 Define combinational circuit. (CO4)

Q.14 Write full form of LCD. (CO8)

Q.15 Draw the symbol of EX-OR gate. (CO2)

Q.16 The number of digits in hexadecimal system. (CO1)

Q.17 Define Minterm. (CO3)

Q.18 EEPROM stands for_____. (CO8)

Q.19 Define Encoder. (CO4)

Q.20 Define ALU. (CO9)

SECTION-C

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

Q.21 Design and implement a half adder with neat diagram. (CO4)

Q.22 What are different type of semiconductor memory. (CO8)

Q.23 Write short note an D/A Converter. (CO7)

Q.24 Compare 8-bit & 16-bit microprocessor. (CO9)

Q.25 Differentiate between latch and flip flop. (CO5)

Q.26 Convert $(8.625)_{10}$ to binary. (CO1)

Q.27 Write short note on 8:1 MUX. (CO4)