Q.28 Write the applications of MCBs and ELCBs. (CO8)

Q.29 Explain star-delta starter. (CO6)

Q.30 Write a note on the servo motor. (CO9)

Q.31 Explain the working principle of the transformer. (CO4)

Q.32 Define motor? Write applications of 3 phase induction motors. (CO6)

Q.33 Write a note on the Zener diode. (CO9)

Q.34 Write the factors intensity on which electric shock depends. (CO7)

Q.35 Define : Frequency, Time period, r.m.s. value, peak value. (CO1)

Section-D

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

Q.36 Give the relation of power in the Star and Delta connected system. (CO3)

Q.37 Draw and explain the characteristics of P-N junction diodes. (CO9)

Q.38 Explain principle, construction and working of single phase transformers. (CO4)

Roll No. .....

Sem. 4 Branch : Plastic
Sub. : Basics of Electrical & Electronics Engineering

Time : 3 Hrs. M.M. : 100

SECTION-A

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

Q.1 The unit of electric volt is : (CO1)

a) Volt b) Ampere

c) Watt d) Joule

Q.2 Maximum value of power factor is _____ (CO2)

a) 0.5 b) 1

c) 2 d) 0

Q.3 Two resistance of 4 ohm and 4 ohm are connected in series. Total resistance will be. (CO2)

a) 2ohm b) 6 ohm

c) 4/3 ohm d) 8 ohm

Q.4 A trivalent impurity has _____ valence electrons. (CO9)

a) 1 b) 2

c) 3 d) 5

Q.5 A diode has _____ terminals. (CO9)

a) 2 b) 3

c) 4 d) 5

Q.6 The positively charged ions are known as (CO6)

a) Protons b) Holes

c) Anions d) Cations

Q.7 Which type of motor is used in ceiling fan. (CO6)

a) Shade pole

b) Universal motor

c) Permanent capacitor start

d) Capacitor start capacitor run

Q.8 SCR is a _____ layer and _____ terminal device. (CO9)

a) 3,3 b) 4,4

c) 4,3 d) 3,4

Q.9 The street lighting bulbs are connected in _____. (CO7)

a) Parallel b) Series

c) Inverted series d) None

Q.10 Star connection is also known as _____. (CO3)

a) Y-Connection b) Mesh Connection

c) Either Y or mesh d) None

Section-B

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

Q.11 Expand MCB. (CO8)

Q.12 Write two applications of the transformer? (CO4)

Q.13 What is DPIC? (CO7)

Q.14 Define power factor. (CO3)

Q.15 Define form factor. (CO3)

Q.16 Define Semiconductor. (CO1)

Q.17 Define current. (CO2)

Q.18 Earth wire is made of _____. (CO8)

Q.19 What is the energy gap? (CO9)

Q.20 Draw symbol of SCR. (CO9)

Section-C

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

Q.21 Give the advantage of A.C. over D.C. (CO1)

Q.22 Mention various applications of electricity. (CO1)

Q.23 Define capacitance and drive the equation for parallel plate capacitor. (CO2)

Q.24 Explain ohm's law and verify it. (CO2)

Q25 Explain Fleming's right hand rule and state where it is used. (CO3)

Q.26 What is the difference between neutral and earth wire? (CO5)

Q.27 What are the safety measures taken during electric installation. (CO7)