

- Q.27 Describe working of induction motor.
 Q.28 Describe concealed conduit of wiring.
 Q.29 Explain various types of earthing.
 Q.30 What is P-N junction? Explain the formation of potential barrier in a P-N junction.
 Q.31 Define SCR and its characteristics.
 Q.32 Define transistors and its types.
 Q.33 Explain the factors affecting the electric shock.
 Q.34 Define four applications of single phase induction motor.
 Q.35 State working principle of a transformer.

SECTION-D

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

- Q.36 Give difference between alternating and direct current.
 Q.37 Discuss :
 a) Impedance of a circuit
 b) Peak value
 Q.38 Explain :
 a) Zener diode
 b) Distribution system with block diagram

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4th Sem / Plastic Engineering Subject:- Basic of Electrical and Electronics Engg.

Time : 3Hrs.

M.M. : 100

SECTION-A

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

- Q.1 RMS stands for _____
 a) Root Mean Square b) Root Mean Sum
 c) Root Maximum sum d) Root Minimum Sum
 Q.2 The resistance of a conductor varies inversely according to _____
 a) length b) area of cross-section
 c) temperature d) resistivity
 Q.3 Out of the following which is an insulating material?
 a) Copper b) Gold
 c) Silver d) Plastic
 Q.4 A battery converts _____.
 a) electrical energy to chemical energy
 b) chemical energy to electrical energy
 c) mechanical to electrical energy
 d) none of these
 Q.5 The P-type semiconductor impurities are also called as _____.

- a) Acceptor impurities b) Donor impurities
 c) Either (a) or (b) d) None of these
- Q.6 The full form of LED is _____.
- a) Liquid emitting diodes
 b) liquid energy display
 c) Light emitting diode
 d) Light emitting display
- Q.7 In case of an inductance, current is proportional to _____.
- a) Voltage across the inductance
 b) Magnetic field
 c) Both (a) and (b)
 d) Neither (a) nor (b)
- Q.8 Correct form of ohm's law
- a) $I = VR$ b) $V \propto I$
 c) $V = IR$ d) Both b and c
- Q.9 Which of the following is a universal gate?
- a) NAND gate b) OR gate
 c) AND gate d) All of them
- Q.10 A transistor is device which converts _____.
- a) d.c power into a.c power
 b) a.c. power into d.c power
 c) d.c into resistance
 d) none of the above

SECTION-B

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

- Q.11 What is extrinsic semiconductor?
- Q.12 Draw symbol for NOT gate.
- Q.13 Give application of MCB.
- Q.14 Define fuse.
- Q.15 Earthing is done to prevent _____ to the user.
- Q.16 What is starter?
- Q.17 Expand ACSR.
- Q.18 Name different types of cores used in transformer.
- Q.19 What is power factor?
- Q.20 frequency of D.C supply is _____.

SECTION-C

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

- Q.21 What are the advantages of electric energy over other form of energy?
- Q.22 Explain RLC series circuit.
- Q.23 Explain RMS value of an alternating quantity.
- Q.24 Define :
- a) Frequency b) Amplitude
- Q.25 What are the advantages of three phase system over single phase system?
- Q.26 Define phase voltage and line voltage.