No. of Printed Pages : 4 180817
Roll No. .....

1st Year/ Computer Engg.
Subject:- Fundamental of Electrical & Electronics Engineering

Time : 3Hrs. M.M. : 60

SECTION-A

Note: Multiple choice questions. All questions are compulsory (6x1=6)

Q.1 In P-type semiconductor which type of impurity is added

a) Pentavalent b) Trivalent

c) None of these d) a and b both

Q.2 The unit of Inductance is

a) Henry b) Ohm

c) Farad d) none of these

Q.3 The frequency of Direct Current is

a) 0 Hz b) 50 Hz

c) 100 Hz d) 120 Hz

Q.4 BJT Stands for

a) Bijunction Transistor

b) Bipolar Junction Transistor

c) Binary Junction Transistor

d) None of these

Q.5 In lead acid battery, positive plate is made up of

a) $PbSO_4$ b) Pb

c) PbO d) PbO_2

Q.6 The winding of a transformer is made up of

a) Copper b) Aluminium

c) Nickel d) Both a and b

SECTION-B

Note: Objective/Completion type questions. All questions are compulsory. (6x1=6)

Q.7 MOSFET stands for _____.

Q.8 What is permeability?

Q.9 What is primary cell?

Q.10 What is Ohm's Law?

Q.11 Draw the symbol of NPN Transistor

Q.12 Define Energy.

SECTION-C

Note: Short answer type questions. Attempt any eight questions out of ten questions. (8x4=32)

Q.13 Differentiate between resistivity & conductivity.

Q.14 What are the different factors which affects the capacitance of a capacitor?

Q.15 What is the analogy between electric and magnetic circuits?

Q.16 Explain Kirchoff's Voltage Law.

Q.17 What is inductive and capacitive reactance?

Q.18 What is active & reactive power factor?

Q.19 What is Faraday's Law of electro-magnetic induction?

Q.20 What are the principles of self & mutual induction?

Q.21 What are the applications of solar cells?

Q.22 What are the charging methods used for a lead acid battery?

SECTION-D

Note: Long answer type questions. Attempt any two questions out of three questions. (2x8=16)

Q.23 Explain Thevenin's & Nortan's theorem in detail.

Q.24 Write a short note on series and parallel grouping of cells/batteries.

Q.25 Define r.m.s value, maximumm value, from factor and peak factor of AC Circuits.