No. of Printed Pages : 4

Roll No.....

180817

1st Year Annual Pattern (Re-app)

Branch : ECE

Subject: Fundamentals of Electrical & Electronics Engg.

Time : 3 Hrs. **M.M. : 60**

SECTION-A

Note: Multiple Choice Questions. All Questions are compulsory. (6x1=6)

Q.1 The unit of flux density is

a) Wb/m2 b) Tesla

c) Joule d) Wb/m

Q.2 The cell in which the chemical action is reversible is known as

a) Secondary Cell b) Primary Cell

c) Nickel Cadmium cell d) None of these

Q.3 The frequency of DC supply is

a) Zero Hz b) 5o Hz

c) 2f Hz d) f Hz

Q.4 Collector of BJT is

a) Lightly doped b) Heavily doped

c) Moderately doped d) Not doped

Q.5 The peak factor =

a) rms value/average value

b) max value/rms value

c) peak value/rms value

d) Average value/rmss value

Q.6 An ideal transformer is considered to have

a) Zero iron loss

b) No leakage of magnetic flux

c) Zero resistance of primary & Secondary winding

d) All these factor

Section-B

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

Q.7 Define Reluctance.

Q.8 Define Primary Cell.

Q.9 Define r.m.s. Value.

Q.10 Full Form of CMOSFET.

Q.11 Define power factor.

Q.12 Define permeability.

Section-C

Note: Short answer type Question. Attempt any Eight questions out of Ten Questions. (8x4=32)

Q.13 Define instantaneous value & average value.

Q.14 Write the care & maintenance of lead acid battery.

Q.15 List different parts of a transformer.

Q.16 Explain the construction & operation of BJT.

Q.17 Define flux, mmf, permeability.

Q.18 Write the losses in transformer.

Q.19 What do you understand by transistor biasing. Name different methods used for transistor biasing.

Q.20 Explain the construction of operation of FET.

Q.21 Write a short note on DC motor.

Q.22 Define faithful amplification

Section-D

Note: Long answer questions. Attempt any Two question out of Three Question. (2x8=16)

Q.23 State & explain the Faraday's law of Electro-magnetic Induction.

Q.24 Draw the circuit diagram of a transistor amplifier in CE configuration. Explain it's working.

Q.25 Explain the concept of resonance in series & parallel circuit