Q.25 What is a cell? Explain its types. (CO5)

Q.26 Difference between electrical and magnetic circuits. (CO6)

Q.27 What is a solar panel. (CO5)

Q.28 What is self induction and mutual induction? (CO4)

Q.29 Write differences between AC and DC circuits. (CO1)

Q.30 Discuss working of Ideal Voltage sources. (CO3)

Q.31 Discuss average and RMS value of AC. (CO6)

Q.32 Explain form factor and peak factor. (CO6)

Q.33 Discuss about impedance and admittance. (CO7)

Q.34 Explain power factor and its significance. (CO7)

Q.35 Discuss active power and reactive power. (CO7)

SECTION-D

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

Q.36 State and explain Faraday's law of electro-magneticinduction. (CO4)

Q.37 Explain the construction and working of silver oxide batteries. (CO5)

Q.38 Explain Maximum Power Transfer Theorem and its use in electric circuit. (CO2)

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2nd Sem / Comp, ECE, IT, I & Control, Med. Eltx, Eltx & Instr., Power Eltx, EEE

Subject:- Basic Electrical Engineering

Time : 3Hrs. M.M. : 100

SECTION-A

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

Q.1 Electric Power is measured by (CO1)

a) Ammeter b) Voltmeter

c) Wattmeter d) None of these

Q.2 Electrical energy is used for (CO1)

a) Lighting b) Heating

c) Fabrication d) All of the above

Q.3 The unit of emf is (CO1)

a) Ampere b) Volt

c) Watt d) None of these

Q.4 Internal resistance of ideal current source is (CO3)

a) Zero b) Infinite

c) Very low d) Very high

Q.5 The resistance of wire varies inversely as (CO1)

a) Area of cross-section b) Length

c) Resistivity d) Temperature

Q.6 The chemical cell converts chemical energy in to _____ energy. (CO5)

a) Chemical b) Mechanical

c) Electrical d) None of above

Q.7 The frequency of DC is (CO6)

a) Zero b) 50

c) 100 d) infinite

Q.8 The maximum value of power factor is (CO7)

a) Zero b) 1

c) 2 d) None

Q.9 The unit of Capacitance is (CO7)

a) Henery b) Farad

c) Volt d) Ohm

Q.10 Unit of magneto motive force is (CO4)

a) Weber b) Tesla

c) Amp-turns d) Reluctance

SECTION-B

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

Q.11 Unit of inductance is_____. (CO1)

Q.12 Define Resistance? (CO1)

Q.13 Define Ohm's law? (CO1)

Q.14 Define time period. (CO6)

Q.15 Expand M.M.F. (CO4)

Q.16 Unit of conductance is_____. (CO4)

Q.17 Positive plate of lead acid battery is of_____.(CO5)

Q.18 Define ideal current source (CO3)

Q.19 What are active components? (CO1)

Q.20 Define current? (CO1)

SECTION-C

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

Q.21 What are the various advantages of electrical energy? (CO1)

Q.22 What is the Superposition theorem? (CO2)

Q.23 Discuss series combination of Inductance. (CO1)

Q.24 Explain maximum power transfer theorem (CO2)