

- Q.27 Explain Kirchhoff Current Law. (CO1)
 Q.28 Discuss working of Ideal current source. (CO3)
 Q.29 Discuss about parallel resonance in AC circuit. (CO3)
 Q.30 Explain Thevenin theorem. (CO2)
 Q.31 Write the care & maintenance of lead Acid batteries. (CO5)
 Q.32 Difference between Electrical & Magnetic Circuit. (CO6)
 Q.33 Explain the Fleming's Right Hand Rule. (CO5)
 Q.34 Explain energy stored in an Inductor. (CO4)
 Q.35 Explain series & Parallel combination of resistance with circuit diagram. (CO4)

SECTION-D

- Note:** Long answer type questions. Attempt any two questions out of three questions. (2x10=20)
- Q.36 Define power factor ? What are the disadvantages of low Power factor. (CO7)
 Q.37 State & explain Faraday's law of Electromagnetic Induction. (CO4)
 Q.38 Explain the construction, Principle & Working of lead Acid battery. (CO5)

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2nd Sem / Branch : Comp, ECE, IT, & 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 The resistance of wire varies inversely as (CO1)
 a) Area of cross section
 b) Length
 c) Resistivity
 d) Temperature
- Q.2 Electrical conductivity is measured in (CO1)
 a) Mho/m b) Mho/m₃,
 c) Mho-m d) Mho/m₂,
- Q.3 The number of cycles completed in one second is called (CO6)
 a) Frequency b) Voltage
 c) Time Period d) None of above
- Q.4 The solar cell converts solar energy into _____ energy. (CO5)
 a) Chemical b) Mechanical
 c) Electrical d) None of above

- Q.5 The rate of doing work is called (CO)
 a) Power b) Voltage
 c) Current d) None of above
- Q.6 The frequency of DC is (CO6)
 a) 0 Hz b) 50 Hz
 c) 100 Hz d) Infinite
- Q.7 The unit of current is (CO1)
 a) Ampere b) Volt
 c) Watt d) None of above
- Q.8 The unit of Inductance is (CO7)
 a) Henry b) Watt
 c) Volt d) Ohm
- Q.9 The energy meter measures the energy in (CO2)
 a) Watt b) Kilowatt Hour
 c) Megawatt d) Kilowatt
- Q.10 Unit of flux density is (CO4)
 a) Tesla
 b) Weber/m₂
 c) Joule
 d) None of above

SECTION-B

- Note:** Objective type questions. All questions are compulsory. (10x1=10)
- Q.11 Define MMF. (CO4)
 Q.12 Unit of Resistance. (CO1)
 Q.13 Magnetic Flux (CO4)
 Q.14 Unit of Inductance. (CO4)
 Q.15 KVL stands for (CO1)
 Q.16 What is meant by Mutual Inductance. (CO4)
 Q.17 Draw the symbol of constant voltage source. (CO3)
 Q.18 Define AC. (CO6)
 Q.19 The wave shape of an AC is _____. (CO1)
 Q.20 Form Factor. (CO6)

SECTION-C

- Note:** Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)
- Q.21 Classify different batteries (CO5)
 Q.22 Discuss in detail Solar cells. (CO5)
 Q.23 Define RMS value & average value of AC. (CO6)
 Q.24 Explain maximum power transfer theorem. (CO2)
 Q.25 Give significance of the power factor. (CO4)
 Q.26 Difference between AC & DC. (CO6)