

No. of Printed Pages : 4 180952/170952/120952/
Roll No. 030952/106552

5th Sem / Electrical Engg.
Subject:- Elect & Elx. Engg.

Time : 3Hrs. M.M. : 100

SECTION-A

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

- Q.1 Following power plant has instant starting (CO1)
a) Nuclear power plant b) Hydro power plant
c) Diesel power plant d) Both (B) and (C)
- Q.2 Hydroelectric power plant is best suited as: (CO2)
a) Base load plant b) Stand by plant
c) general purpose plant d) All of these
- Q.3 Load factor value is (CO2)
a) always less than 1 b) always greater than 1
c) Unity d) None of these
- Q.4 Top conductor of EHV Transmission line is: (CO3)
a) Neutral Conductor b) Earth Conductor
c) Phase Conductor d) None of these
- Q.5 _____ is the main consideration while designing a distributor. (CO5)
a) current carrying capacity
b) voltage drop
c) A and B both

d) None of above

- Q.6 Sag in the Line is given by : (CO4)
a) $WL^2/8T$ b) $W^2L/8T$
c) $WT^2/8L$ d) $LT/8L$
- Q.7 Cooling Tower is not used in (CO1)
a) Thermal power plant
b) Nuclear Power Plant
c) Hydroelectric power plant
d) Gas power station
- Q.8 Insulator used at dead end or at crossing is (CO3)
a) Pin type insulator b) Strain type insulator
c) Real insulator d) Egg Insulator
- Q.9 Most reliable Distributor scheme is : (CO4)
a) Ring main system b) Interconnected system
c) Radial system
- Q.10 _____ is a conventional Energy Sources. (CO1)
a) Coal b) Diesel oil
c) Wind d) both A and B

SECTION-B

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

- Q.11 Define Demand factor (CO2)
- Q.12 If Diversity factor is high, the cost of generation is _____ (CO2)
- Q.13 Interconnection of power plants _____ economy. (CO2)

(1) 180952/170952/120952/
030952/106552

(2) 180952/170952/120952/
030952/106552

- Q.14 Expand ACSR (CO3)
- Q.15 Skin effect is more pronounced in DC (T/F) (CO3)
- Q.16 Armoring is used in the cable to _____ of cable. (CO5)
- Q.17 The outdoor substation are costlier than indoor substation in initial cost (T/F) (CO6)
- Q.18 An over excited synchronous motor operates at _____ power factor. (CO7)
- Q.19 String efficiency = _____ / _____ (CO4)
- Q.20 Penstock is used in gas power stations (T/F) (CO1)

SECTION-C

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

- Q.21 Explain the significance of load and diversity factor. (CO2)
- Q.22 Explain the significance of Load curve of Power station. (CO2)
- Q.23 Enlist Five merits and Demerits of Non-Conventional energy sources. (CO1)
- Q.24 Define Peak load plant. (CO2)
- Q.25 Explain the advantages of transmit electric power at high transmission voltage. (CO4)
- Q.26 Explain the different types of insulators used in Transmission and distribution of power (CO3)
- Q.27 Define corona. Explain the method of reducing corona. (CO4)

- Q.28 Compare the outdoor and indoor substations. (CO6)
- Q.29 Explain the transposition of conductors. (CO4)
- Q.30 Explain the points of site selection that should be in mind while installing Nuclear power plant. (CO1)

- Q.31 Explain the significance of power factor in power system. (CO7)
- Q.32 Differentiate Ring main and interconnected system. (CO5)
- Q.33 Enlist the faults occurs in overhead and underground lines. (CO5)
- Q.34 Define plant capacity factor. (CO2)
- Q.35 Describe the present scenario of energy in India. (CO1)

SECTION-D

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

- Q.36 Explain the working of Hydroelectric Power plant with the help of a labeled diagram and points of its site selection. (CO1)
- Q.37 Describe the concept of sag. Explain the significance and factors affecting the Sag. (CO4)
- Q.38 Explain the Murray loop test For fault finding in Underground cables. (CO5)
- (**Note:** Course outcome/CO is for office use only)