Question Paper Code: R18A32EE03/R15A32EE03

R18/R15

ANURAG Engineering College

(An Autonomous Institution)

III B.Tech II Semester Supplementary Examinations, June/July - 2024

ELECTRICAL DISTRIBUTION SYSTEMS

(ELECTRICAL AND ELECTRONICS ENGINEERING)

Time: 3 Hours **Max.Marks:75**

Section – A (Short Answer type questions) (25 Marks)

Answer All Questions		Course Outcome	B.T Level	Marks
1.	Draw the characteristics of Industrial loads.	CO1	L1	2M
2.	How the loads are classified? What are its various types?	CO1	L2	3M
3.	What is need of distribution substation?	CO2	L1	2M
4.	What are the merits and demerits of loop type primary feeders?	CO2	L2	3M
5.	What are the types of common faults occur in power system?	CO3	L1	2M
6.	What is the principle of operation of Fuse?	CO3	L1	3M
7.	Give justification of economic capacitors.	CO4	L2	2M
8.	What are the different types of power capacitors	CO4	L1	3M
9.	What is the need of voltage control?	CO5	L2	2M
10.	What are the various methods adopted for voltage control.	CO5	L1	3M

Section B (Essay Questions)

Answer all questions, each question carries equal marks. **(5 X 10M = 50M)**

11. A)	What are the classifications of loads? Explain its characteristics.	CO1	L2	10M
	OR			
B)	Draw the single line diagram of radial type primary feeder and mention the factors that influence the selection of primary feeder.	CO1	L3	10M
12. A)	Mention the factors that are to be considered in selecting ideal substations.	CO2	L2	10M
	OR			
B)	Derive the voltage drop and power loss for uniformly radial type distribution load.	CO2	L3	10M
13. A)	Distinguish between Fuse and automatic circuit recloser.	CO3	L2	10M
	OR			
B)	Explain the general coordination procedure of protective devices in distribution systems.	CO3	L2	10M
14. A)	Explain the effect of shunt capacitor for power factor improvement in distribution system with diagram.	CO4	L3	10M
	OR			
B)	Explain the procedure to determine the best capacitor location in distribution systems.	CO4	L3	10M
15. A)	Describe the operation of AVR with neat diagram and Also write its merits and demerits.	CO5	L3	10M
	OR			
B)	Explain different types of equipment used for voltage control.	CO5	L2	10M