

**ANNAMACHARYA INSTITUTE OF TECHNOLOGY AND SCIENCES, RAJAMPET
(AUTONOMOUS)**

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

Subject: SWITCH GEAR AND PROTECTION(7G263)

Class: III B.Tech (EEEE, B &C)-II Semester

Academic Year: 2019-2020

**UNIT-V
ASSIGNMENT QUESTIONS**

		Marks	Course Outcomes	Bloom's Level
1	What are the characteristics of lightning arresters?	10M	CO4	L1
2	Explain the different methods of neutral grounding.	10M	CO4	L2
3	Write short notes on the following: a) Resistance grounding b) Perterson coil grounding c) Zinc-oxide lightning arrester	10M	CO4	L1
4	Outline the advantages of (i) grounding the neutral of the system (ii) keeping the neutral isolated.	10M	CO4	L2
5	A 50HZ overhead line has line to earth capacitance of $1\mu\text{F}$. It is decided to use an earth fault neutralizer. Determine the reactance to neutralize the capacitance of (i) 100%length of line (ii) 90%length of line (ii) 50%length of line.	10M	CO4	L3
6	Describe the construction, principle of operation and application of Zinc oxide lightning arrestor.	10M	CO4	L1
7	What are the causes of over voltages? Mention the methods of protection against lightning over voltages.	10M	CO4	L1
8	Outline the advantages of grounding of neutral of the system.	10M	CO4	L2
9	Discuss the phenomenon of 'Arcing grounds' and suggest the method to minimize it.	10M	CO4	L1
10	Describe the construction, principle of operation and application of Valve type lightning arrestor.	10M	CO4	L1