Code No: H4307/R13

M. Tech. II Semester Regular/ Supplementary Examinations, July-2016

ELECTRICAL DISTRIBUTION SYSTEMS

(Common to PE, P & ID, PE & ED, PE & D and EM &D)

Time: 3 Hours **Max. Marks: 60**

Answer any FIVE Questions
All Questions Carry Equal Marks

1.	a	Explain about each block in distribution planning system.	6
	b	Explain how the electrical loads are classified.	6
2.	a	Bring out the differences between LVDS and HVDS systems	6
	b	Explain how the general circuit parameters are useful in analyzing distribution networks	6
3.	a	Derive the expression for voltage drop and power loss in 3 phase primary lines.	6
	b	A single phase 50 Hz ac distributor AB 300m long is fed from one end and is loaded as under: 1. 100A at 0.707 pf lag 200m fed from one end A 2. 200A at 0.8 pf lag 300m fed from one end A The total resistance and reactance of the distributor is 0.2 ohms and 0.1 ohm per kilometer. Calculate the total voltage drop in the distributor AB.	6
4.	a	Explain the procedure for fault calculation of the most common fault.	6
	b	Discuss about operation of circuit enclosures.	6
5.	a	Explain the procedure for insulation coordination between enclosure and circuit breaker.	6
	b	Explain the classification of fuses.	6
6.	a	Discuss about different types of capacitors.	6
	b	Explain the differences between fixed and switched type capacitors.	6
7.	a	What are the various types of voltage control equipment used in distribution system?	6
	b	How does the capacitor location influence economy?	6
8.	a	Write short notes on types of distribution feeders.	6
	b	Write short notes on relationship between the load factor and loss factor.	6

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