



Internal Assesment Test - 2

Sub: Computer Aided Electrical Drawing (Professional Elective)				Cod	Code: 18EE643		
Date: 24/05/2023	Duration: 90 mins	Max Marks: 50	Sem: 6	Section:	A&B		
	Answer BOTH the questions. Explain your notations explicitly and clearly. Sketch figures wherever necessary. Use AutoCAD Software for drawing. Good luck!						
				Marks	OBE		
Q1. Draw the single line diagram of a substation with the following details:					СО	RBT	
(i) 66 kV incoming lines, 2; (ii) Transformers 5 MVA, 66 kV/11 kV, 3-phase, 50 Hz, 2; (iii) Auxiliary station supply transformer 500 kVA, 11 kV/400 V, 3-phase, 50 Hz, 2; (iv) Bus bars, 66 kV double bus bar and 11 kV double bus bar; (v) 66 kV outgoing line, 1 and 11 kV outgoing line, 5; (vi) Position of CC, LA, IS, CT's, PT's, CB, WT are to be indicated.			[20]	CO2	L3		
 Q2. Draw the following views of a 3Φ, core type, 250 KVA, 11KV / 400 V transformer: Front elevation full in section and Plan in full section. Magnetic Circuit: Cross section of the core = 3 stepped core; Diameter of the circumscribing circle = 24 cm; and Distance between adjacent core centers = 42.5 cm. Yoke: Height of the yoke 25 cm. Details of LV Winding: Outer diameter of LV Coil = 28.3 cm; Inner diameter of LV coil = 25 cm; Height of LV winding = 43.5 cm; and Number of turns per phase = 12. Details of HV Winding: Outer diameter of HV Coil = 41.5 cm; Inner Diameter of HV coil = 34.3 cm; Height of HV winding = 43.5 cm; and Number of turns / phase = 572. Total Height of the transformer = 100 cm. 					CO3	L3	

CI	CCI	HOD

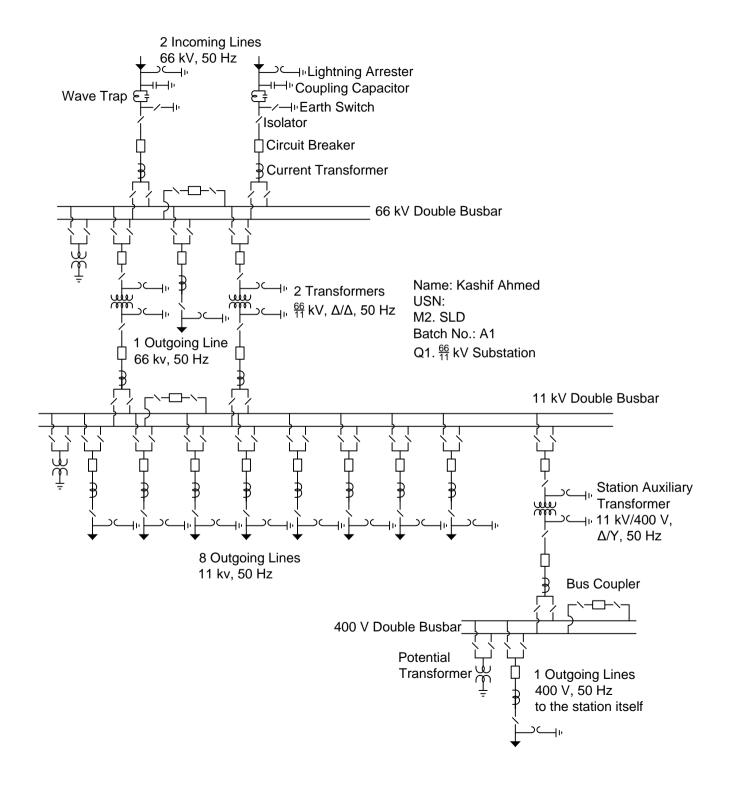
CMR INSTITUTE OF TECHNOLOGY

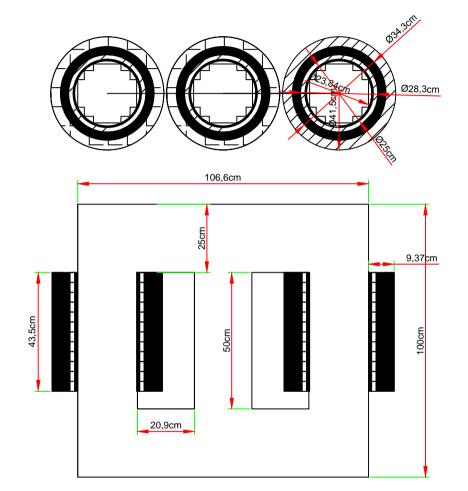
USN 1 C R E E



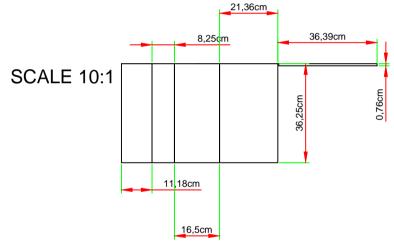
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NAME= POOJA BP USN = 1CR19EE060 DATE=12/07/2022 IAT=2 QUESTION NO =1 BATCH NO = A1



3 PHASE, CORE TYPE ,250KV,11KVV/400V TRANSFORMER SCALE 10:1 LV WINDING 43.5,HV WINDING 43.5 FRONT ELEVATION FULL IN SECTION AND PLAN IN FULL SECTION