

Unit	UEPOP525A Co-ordinate Direct Switching Program	Test Number	1
Total Marks	100	Time allowed	2 hr

Instruction to assessors	
<ul style="list-style-type: none"> • Please provide the blank A4 sheets to students to write the answers on them • Please tell the students not to write on the question papers • Online test can also be supplemented. • The marking can be done by referring the attached marking guide • Giving the marks based on students' effort & demonstration of the absorbed study & competency rather than the final answer is to made • The necessary formulas can be provided on the white board. • The formula which can be provided will be advised separately. • No notes, digital storage devices, programmable calculators are allowed. • Page 1 = Instruction to assessors & students • Page 2+3= Question Paper • Page 4 and the remaining pages= Marking Guide 	
Instruction to students	
<ul style="list-style-type: none"> • Write the answers on provided A4 blank sheets • Do not write the answers on the question papers • Online test can also be supplemented. • The marking can be done by referring the attached marking guide • The necessary formulas can be provided on the white board on request.. • The formula which can be provided will be advised separately. • No notes, digital storage devices, programmable calculators are allowed. 	

1	Sketch Star Delta starting method and Auto Transformer starting method.	10
2	Explain the following (i) Protection against low voltage (ii) Time delay protection	10
3	Sketch the wound rotor motor.	10
4	Explain the followings (a)Cable Tag (b) Distribution Cable (c) Control Cable	10
5	Explain ship propulsion electrical control system What is steering system?	10

6	Describe turbo electric propulsion system with necessary sketch.	10
7	Explain the synchronous motor based propulsion and control system	10
8	Write the procedure for operation of hydraulic power plant for deck machineries	10
9	What are the safety features in modern electric cranes	10
10	Sketch the arrangement of compressed air system	10

