



**ANJUMAN-I-ISLAM'S  
KALSEKAR TECHNICAL CAMPUS, NEW PANVEL**

Approved by : All India Council for Technical Education, Council of Architecture, Pharmacy Council of India New Delhi,  
Recognised by : Directorate of Technical Education, Govt. of Maharashtra, Affiliated to : University of Mumbai.

- SCHOOL OF ENGINEERING & TECHNOLOGY
- SCHOOL OF PHARMACY
- SCHOOL OF ARCHITECTURE

**DEPARTMENT OF ELECTRICAL ENGINEERING**

REV:00	<b>QUESTION PAPER CLASS TEST 02</b>	EXM-04 B	
CLASS:-BE		SEM:-VII	
COURSE:- CONTROL SYSTEM II		DATE:- 24/ 10/2018	
DURATION:- 60 min.		MARKS:- 20	
<b>Q.01 Attempt any two: (08 Marks)</b>		<b>Marks</b>	<b>CO</b>
a)	Explain the scan cycle of PLC	4	CO4
b)	Explain jump and label operation in PLC.	4	CO4
c)	Explain architecture of PLC.	4	CO4
<b>Q.02 Attempt any two: (12 Marks)</b>			
a)	Explain the program files and data files in PLC.	6	CO5
b)	Explain timers of PLC with example.	6	CO5
c)	Explain counters of PLC	6	CO5



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CRITERION : 2.2.2, 3.2.2.

FILE NO : P25, P31

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REV:00	<b>QUESTION PAPER CLASS TEST 02</b>	EXM-04 B
CLASS:-BE		SEM:-VII
COURSE:- EMD		DATE:- 25/10/2018
DURATION:- 60 min.		MARKS:- 20
<b>Q.1 Attempt any ONE. (08 Marks)</b>		<b>Marks</b>
a)	A 11kw 3ph 6pole 50Hz,220v star connected induction motor has 55 stator slot each containing 9 conductors.calculate bar & end ring current.the number of rotor bar is 64.the machine has efficiency of 0.86 & pf of 0.85 the rotor mmf may be assume as 85% of stator mm f.	8
b)	Derive output equation of ac machine.	8
<b>Q.2 Attempt any TWO (12 Marks)</b>		
a)	Explain the effect of Dispersion coefficient on maximum power factor..	6
b)	Explain factor affecting Size of machine	6
c)	Explain total loading & specific loadings.	6



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CRITERION:

2.2.2, 3.2.2

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REV:00	<b>QUESTION PAPER CLASS TEST 02</b>	EXM-04 B
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CLASS:- BE	SEM:- VII
COURSE:- HVDCT	DATE:- 23/10/18
DURATION:- 60 min.	MARKS:- 20

Q.01 Attempt any ONE: (08 Marks)		Marks	CO
a)	Discuss desired features of control of HVDCT. Explain control characteristic of HVDC system under normal and abnormal conditions.	8	CO3
b)	Explain different types of faults in HVDC system. Explain single and double commutation failure with waveforms.	8	CO5
c)	Explain causes and consequences of harmonics in HVDC systems. Explain the various types of filters used.	8	CO6

Q.02 Attempt any TWO: (12 Marks)		Marks	CO
a)	Explain two methods of Equidistant Pulse Control (EPC) with their advantages and disadvantages.	6	CO4
b)	Explain power reversal in HVDC and significance of current margin.	6	CO3
c)	Explain overvoltage and overcurrent protection in HVDCT.	6	CO5

**CRITERION : 2.2.2, 3.2.2.**

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REV:00	<b>QUESTION PAPER CLASS TEST 02</b>	EXM-04 B	
CLASS:-BE		SEM:-VII	
COURSE:-PSOC		DATE:- <del>27</del> 10 / 2018	
DURATION:- 60 min.		MARKS:- 20	
<b>Q.01 Attempt any two: (08 Marks)</b>		<b>Marks</b>	<b>CO</b>
a)	Define stability and explain its types.	04	1
b)	Write a short note on power pool.	04	3
c)	Explain surge impedance loading in detail.	04	1
<b>Q.02 Attempt any two: (12 Marks)</b>			
a)	Derive the swing equation of power system.	06	3
b)	Discuss the other type transaction in interchange of power and energy.	06	2
c)	A generator at 50 Hz deliver 1pu power to an infinite bus through a transmission circuit in which resistance is ignored. A fault takes place reducing the maximum power transferable to 0.5pu whereas before the fault, this power was 2.0pu and after the clearance of the fault, it is 1.5pu. By the use of equal area criteria determine critical clearing angle.	06	2



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COURSE:- HVE		DATE:- 25/10/18	
DURATION:- 60 min.		MARKS:- 20	
<b>Q.01 Attempt any ONE: (08 Marks)</b>		<b>Marks</b>	<b>CO</b>
a)	DESCRIBE IN BRIEF VARIOUS TEST CARRIED ON BUSHINGS	8	CO3
b)	WHAT ARE VARIOUS FACTORS TO BE CONSIDERED WHILE DESIGNING HIGH VOLTAGE LABORATORY	8	CO4
<b>Q.02 Attempt any ONE: (12 Marks)</b>			
a)	NAME DIFFERENT METHODS FOR GENERATION OF HIGH CURRENT. EXPLAIN HALL GENERATOR FOR MEASUREMENT OF HIGH CURRENTS.	12	CO2
b)	EXPLAIN HOW SPHERE GAP CAN BE USED TO MEASURE PEAK VALUE OF VOLTAGES. WHAT ARE THE FACTORS INFLUENCING SUCH MEASUREMENTS.	12	CO3

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