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	QUESTION PAPER CLASS TEST 01	EXM-04 B
CLASS:-BE		SEM:- VII
COURSE:-PSOC		DATE:~~27~~/ 08 / 2018
DURATION.- 60 min.		MARKS.- 20

	Q.01 Attempt any two: (08 Marks)	Marks	CO
a)	Draw and explain in/out curve and increment rate curve.	04	1
b)	Explain are the types of buses and the need of slack bus in load flow studies.	04	3
c)	Derive the equation of real and reactive power of load flow studies.	04	1
	Q.02 Attempt any two: (12 Marks)		
a)	Derive the expression for the Coordinate Equation.	06	3
b)	Compare GS ,NR and FDL method in load flow studies.	06	2
c)	In a two bus system,bus no.1 is a slack bus with V_1 = 1 pu & bus no.2 is a load bus with demanded power of S_2=2.8+j0.6. The transmission line is connected between bus 1 & 2 with impedance of Z=0.02+j0.04. By using Guass Siedel method find V_2 at the end of one iteration	06	2

CRITERION : 2.2.2, 3.2.2.

FILE NO : P25, P31

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	QUESTION PAPER CLASS TEST 01	EXM-04 B
CLASS:-BE		SEM:-VII
COURSE:- HVDCT		DATE:- 27/08/18
DURATION:- 60 min.		MARKS:- 20

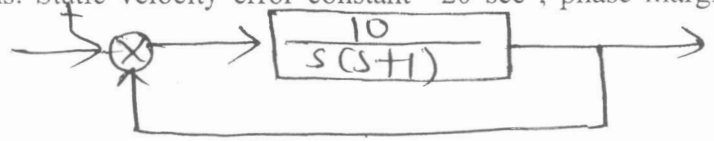
	Q.01 Attempt any TWO: (08 Marks)	Marks	CO
a)	"Converter consumes reactive power" justify the statement.	04	CO2
b)	What are the limitations of AC transmission and advantages of HVDC transmission?	04	CO1
c)	Explain recent trends in HVDC.	04	CO1
	Q.02 Attempt any TWO: (12 Marks)		
a)	Draw and explain complete equivalent circuit of HVDC link.	06	CO2
b)	Derive the output voltage DC equation of a 6 pulse converter operating with delay angle α and overlap angle μ .When (μ <60)	06	CO2
c)	Explain types of HVDC links. State advantages and disadvantages of ground return.	06	CO1

CRITERION : 2.2.2, 3.2.2.

FILE NO : P25, P31

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	QUESTION PAPER CLASS TEST 01	EXM-04 B
CLASS:-BE		SEM:-VII
COURSE:-EEC704		DATE:-28/ 08/ 2018
DURATION:- 60 min.		MARKS:- 20

	Q.01 Attempt any 2: (8 Marks)	Marks	CO
a)	Explain Reverse Acting Controller	4	2
b)	Explain integral windup effect and antiwindup circuit.	4	2
c)	Explain bandwidth limit derivative	4	2
	Q.02 Attempt any 1: (10 Marks)		
a)	Explain Derivative kick and Proportional Kick in detail	12	2
b)	Design a lead compensator such that the closed loop system will satisfy the following specifications. Static velocity error constant =20 sec , phase margin=60, gain margin >=10dB 	12	1

CRITERION : 2.2.2. 3.2.2.
FILE NO : P25, P31

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	**QUESTION PAPER CLASS TEST 01**	EXM-04 B
CLASS:-BE		SEM:-VII
COURSE:-_EMD		DATE:- 28/08/2018
DURATION:- 60 min.		MARKS:- **20**

		Marks	CO
Q.01	**Attempt any ONE. (08 Marks)**		
a)	Discuss design of core of transformer.	**8**	**CO2**
b)	Derive output equation of 3ph transformer.	**8**	**CO2**
Q.02	**Attempt any TWO (12 Marks)**		
a)	Explain classification of insulating material based on temperature.	**6**	**Co1**
b)	Show that for two stepped core Agi=0.56d2 or Ai=0.6626d2.	**6**	**Co2**
C)	Show that Et=K $\sqrt{Q}$	**6**	**Co2**

CRITERION : 2.2.2 , 3.2.2

FILE NO : P25, P31

REV:00	**QUESTION PAPER CLASS TEST 01**	EXM-04 B
CLASS:- **BE**		SEM:- **VII**
COURSE:- **HVE**		DATE:- **29/08/ 2018**
DURATION:- **60 min.**		MARKS:- **20**

	Q.01 Attempt any ONE : (08 Marks)	**Marks**	**CO**
a)	Explain Thermal Breakdown In Solid Di-Electric.	08	1
b)	What Is Electric Field Stress And Explain Uniform And Non- Uniform Fileds.	08	1
c)	What Is Treeing And Tracking?	08	1
	Q.02 Attempt Any One: (12 Marks)		
a)	What Is Intrinsic Strength Of Solid Di-Electric ? Explain In Detail Breakdown Of Solid.	12	1
b)	Expalin All Three Theories Explaining Breakdown Of Liquid Di-Electric	12	1
c)	Write in Brief about FEM	12	1