



**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

DEPARTMENT OF ELECTRICAL ENGINEERING			
CLASS:- THIRD YEAR	SEM:- V		
SUBJECT:- POWER ELECTRONICS	DATE:-		
DURATION:- 1 HOUR	MARKS:- 20		
CLASS TEST 01			
Q.01 Attempt any TWO: (10 Marks)		Marks	CO
1	Explain Dynamic characteristic of SCR.	05	CO1
2	Explain two transistor model of SCR.	05	CO1
3	Explain class C model.	05	CO2
Q.02 Attempt any ONE: (10 Marks)			
1	Explain IGBT.	05	CO2
2	Explain symmetrical Semi-converter.	05	CO3
3	Explain different MOSFET in detail.	05	CO2

Innovative Teaching - Exuberant Learning

Vision : To be the most sought after academic, research and practice based department of Electrical Engineering that others would wish to emulate.



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CLASS:- T.E SEM:- V

SUBJECT:- PSE DATE:- 22/08/2017

DURATION:- 1Hr MARKS:- 20

CLASS TEST 01

Q.01 Attempt any TWO: (14 Marks)		Marks	CO
a	Explain different types of fuses available. Explain construction details of HRC fuse.	07	[CO2]
b	Explain arc quenching techniques in CB.	07	[CO2]
c	With Neat diagram explain principle of Induction Disc Relay.	07	[CO2]
Q.02 Attempt any ONE: (06 Marks)			
a	Write a note on CT.	06	[CO1]
b	Write a note on Contactors.	06	[CO1]

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DEPARTMENT OF ELECTRICAL ENGINEERING

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CLASS:- TE	SEM:- V	
SUBJECT:- EM-II	DATE:- /08/17	
DURATION:- 1 HOUR	MARKS:- 20	
CLASS TEST 01		
Q.01 Attempt any ONE out of TWO: (10 Marks)	Mark	CO
1 Explain Scott Connection of transformer	10	CO1
2 Explain Harmonics in three phase transformer connections	10	CO1
Q.01 Attempt any TWO out of THREE: (10 Marks)	Mark	
1 Draw connection and phasor diagram of Dy11 and Yy6	5	CO3
2 Explain need of Parallel operations of transformer and write necessary condition for parallel operations.	5	CO3
Explain open delta connection in short.	5	CO1



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DEPARTMENT OF ELECTRICAL ENGINEERING

DEPARTMENT OF ELECTRICAL ENGINEERING			
CLASS:- THIRD YEAR		SEM:- V	
SUBJECT:- ELECTROMAGNETIC FIELD AND WAVE		DATE:- 23/08/2017	
DURATION:- 1 HOUR		MARKS:- 20	
CLASS TEST 01			
Q.01 Attempt any TWO QUESTIONS: (10 Marks)		Marks	CO
A	Express the following vector field in Cartesian coordinate system $\vec{A} = 2 \cos \Phi \vec{a}_r + 3r \vec{a}_\Phi - 4 \vec{a}_z$	05	CO2
B	Given the general vector $\vec{A} = 2 \cos \theta / r^3 \vec{a}_r + \sin \theta / r^3 \vec{a}_\theta$ Show that curl of \vec{A} vector is everywhere Zero.	05	CO1
C	Find the volume defined by the region $4 \leq r \leq 6$; $30^\circ \leq \phi \leq 60^\circ$; $2 \leq z \leq 5$.	05	CO1
Q.02 Attempt any TWO QUESTIONS: (10 Marks)			
A	Three point charges $Q_1 = -6 \mu\text{C}$ at $(1,0,0)$ $Q_2 = 10 \mu\text{C}$ at $(2,0,0)$ $Q_3 = 4 \mu\text{C}$ at $(4,0,0)$ Find vector force on each charge. Which charge has greatest magnitude of force.	05	CO3
B	Find Electric field intensity at point $p(1,1,1)$ caused by four identical 3 nano Coulomb point charges located at $p_1(1,1,0)$ $p_2(-1,1,0)$ $p_3(-1,-1,0)$ $p_4(1,-1,0)$	05	CO3
C	State Gauss law and prove that electric flux passing through any closed surface is equal to the charge enclosed by that surface.	05	CO3



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CLASS:- TE ELECTRICAL	SEM:- V
SUBJECT:- COMMUNICATION ENGG	DATE:- 24/08/2017
DURATION:- 60 min.	MARKS:- 20

CLASS TEST 01

Q.01 Attempt any TWO: (10 Marks)		Marks	CO
A)	Explain how Power and Bandwidth saving is achieved using SSB system.	(04)	02
B)	Explain need for modulation.	(04)	01
C)	Derive AM wave Equation	(04)	02
Q.02 Attempt any ONE: (12 Marks)			
A)	Explain a method for generation of DSB-SC signal.	(06)	02
B)	Explain a method for generation of SSB signal.	(06)	01
C)	Explain TRF Receiver and disadvantages associated with TRF Receiver. Also explain Superhetrodyne Receiver.	(06)	02