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.
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DEPARTMENT OF ELECTRICAL ENGINEERING

REV:00	DEPARTMENT OF ELECTRICAL ENGINEERING	EXM- 4 B
CLASS:- TE		SEM:- V
SUBJECT:- POWER SYSTEM-II		DATE:- 27 / 8 /18
DURATION:- 1hr		MARKS:- 20

CLASS TEST 01

	Q.01 Attempt any TWO: (0 8Marks)	**Marks**	**CO**
A	Discuss the short circuit of synchronous machine under load condition.	4	CO1
B	Explain term symmetrical & unsymmetrical Fault also write formula for fault current & Short circuit MVA.	4	CO1
C	Discuss the ZBus formulation technique.	4	CO1
	Q.02 Attempt any ONE: (12Marks)	**Marks**	**CO**
A	Explain the Power in variance in unsymmetrical fault analysis.	12	CO2
B	The line current in three phase systems are I a = 5 $\angle 60^0$ Amp, I b = 5 $\angle -60^0$ Amp, I c = 0^c Amp .Calculate the symmetrical component.	12	CO2
C	Write short notes on selection of circuit breaker.	12	CO1

CRITERION: 2.2.2,

FILE NO;P25,P31

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REV:00	**QUESTION PAPER CLASS TEST 01**	EXM-04 B
CLASS:-**TE**		SEM:-**V**
COURSE:-**Electrical Machines-III (EMC-III)**		DATE:-27/8/18
DURATION:- **60 min.**		MARKS:- **20**

	Q.01 Compulsary: (08 Marks)	Marks	CO
a)	A three phase, star connected, 400V, 50Hz, 4 pole induction motor has the following per phase constants in ohm referred to stator R1=0.15, X1=0.45, R2=0.12, X2=0.45, Xm=28.5 Fixed losses (core and friction and windage losses)=400w. compute stator current, rotor speed, output torque and efficiency when motor is operated at rated voltage and frequency at a slip of 4%.	08	CO2

	Q.02 Attempt any two: (12 Marks)		
a)	Speed control methods of 3 phase induction motor including V/f method.	06	CO3
b)	Draw equivalent circuit of single phase induction motor.	06	CO4
c)	Explain construction and working of three phase induction motor.	06	CO1

CRITERION : 2.2.2, 3.2.2.

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REV:00	DEPARTMENT OF ELECTRICAL ENGINEERING	EXM-04(b)
CLASS:- TE		SEM:- V
SUBJECT:- PE		DATE:-28/8/18
DURATION:- 1hr		MARKS:- 20

CLASS TEST 01

	Q.01 Attempt any TWO: (8 Marks)	**Marks**	**CO**
1	Draw and explain V I characteristics of SCR.	4	CO1
2	SCR is a semi-controlled device.Justify?	4	CO1
3	Compare R, RC, UJT Triggering circuits.	4	CO1
	Q.02 Attempt any ONE: (12 Marks)		
1	Draw FWHC Bridge Rectifier and describe the circuit operation with waveform.	12	CO2
2	Derive Average and RMS Values of FW Controlled Rectifier with R and RL load?	12	CO2

CRITERION : 2.2.2, 3.2.2
FILE NO : P25, P31

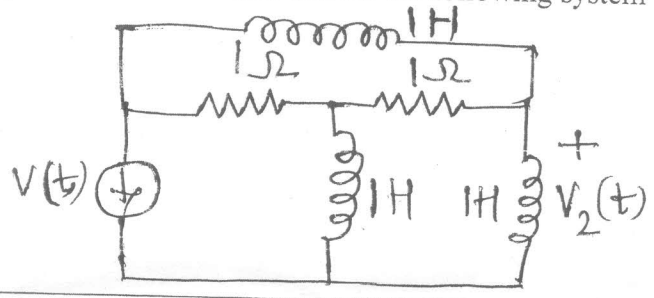
REV:00	**QUESTION PAPER CLASS TEST 01**	EXM-04 B
CLASS:- **TE**		SEM:-**V**
COURSE:-**EEC503**		DATE:-28/**08 / 2018**
DURATION:- **60 min.**		MARKS:- **20**

Q.01 Attempt 2: (8 Marks)

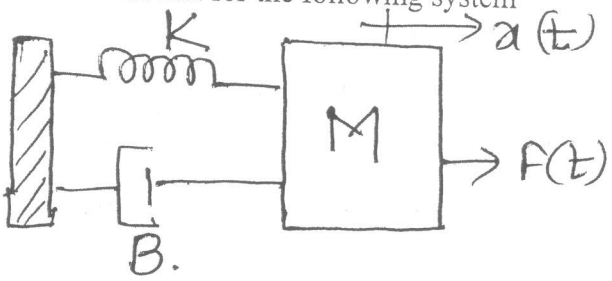
		Marks	CO
a)	Distinguish between open loop and closed loop control system	4	1
b)	Explain 11 rules for block reduction technique	4	2

Q.02 Attempt any 2 : (12 Marks)

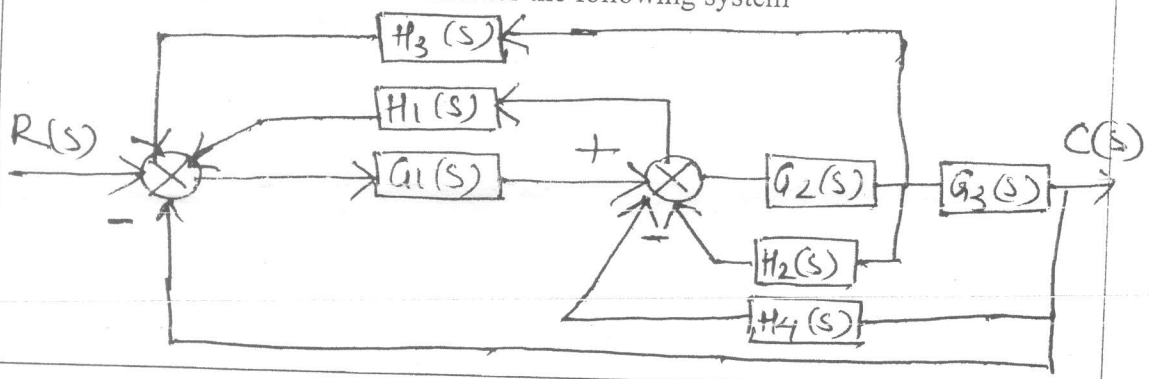
a) Find the equivalent transfer function for the following system — 6 — 2



b) Find the equivalent transfer function for the following system — 6 — 2



c) Find the equivalent transfer function for the following system — 6 — 2



CRITERION : 2.2.2, 3.2.2.

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REV:00	**QUESTION PAPER CLASS TEST 01/ 02**	EXM-04 B
CLASS:-TE		SEM:-V
COURSE: REES		DATE:- 29/8/18
DURATION:- 60 min.		MARKS:- 20

	Q.01 Attempt any two: (08 Marks)	Marks	CO
a)	Explain in brief various forms of energy sources	04	CO1
b)	State the effects of the following on Solar PV system performance a)Mismatch in modules b)Hotspots in the modules c) Bypass diode and d) Blocking diode	04	CO2
c)	Explain in detail Future trends in power generation and distribution	04	CO1
d)	What are the solar cell parameters? Define the terms Isc,Voc, FF(Fill Factor) and Efficiency of solar cell	04	CO2

	Q.02 Attempt any two: (12 Marks)		
a)	Explain in detail equivalent circuit of Solar PV model and Derive I-V equation of solar cells	06	CO2
b)	Explain the concept of maximum power point tracking (MPPT) in solar PV? Explain the working principle of Perturb and Observe MPPT algorithm with the help of suitable diagram.	06	CO2
c)	Explain in detail standalone PV system configuration	06	CO2

CRITERION : 2.2.2, 3.2.2.

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