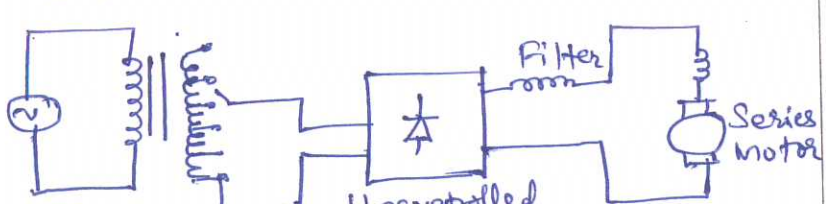
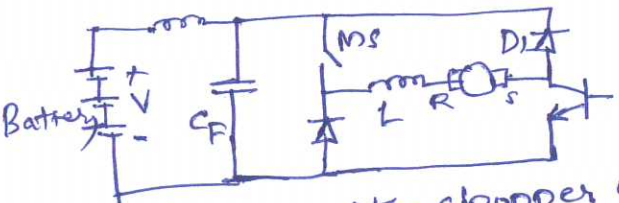


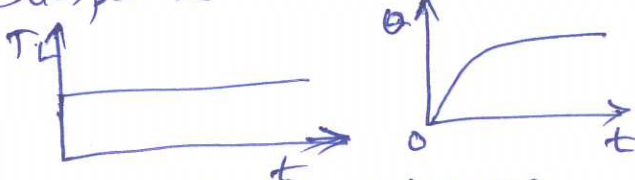
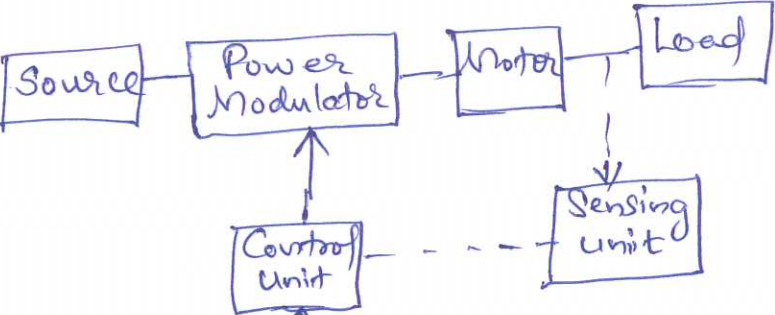
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Version A.

Revision: 2015		Course Code:6034		
Course Title: Electrical drives and control				
Qst. No.	Scoring Indicator	Split up	Sub Total	Total
<u>PART A</u>				
I 1.	Source, load, motor, Converter, feed back mechanism		2	10
2.	Regenerative braking, Rheostatic braking		2	
3.	Armature voltage control, field flux control.		2	
4.	Regenerative braking, dynamic braking		2	
5.	Seperately Excited DC motor		2	
<u>Part B</u>				
II 1.	Flexible control, cost less, Maintenance less, η high etc (any 3)	3x2	6	
2.	Permanent Magnet Synchronous motor drives (fig)	3	6	
	explanation	3		
3.	variable frequency control from voltage source.		6	
	Explanation	2		
	V-f relation graph	2		
	Speed torque chara	2		

Revision: 2015		Course Code:6034		
Course Title: Electrical drives and control				
Qst. No.	Scoring Indicator	Split up	Sub Total	Total
	PART B			
4.	<p>Speed control by transformer and uncontrolled rectifier fed DC drives</p>  <p style="text-align: center;">fig. explanation</p>	3 3	6	42
5.	<p>Cycloconverter controlled induction motor drive phase voltage waveforms Explanation</p>	3 3	6	
6.	 <p>dc drive with chopper control for EV fig Explanation</p>	4 2	6	
7.	<p>Basic function Motors expl. mine fan motor expl</p>	3 3	6	

Course Title: Electrical drives and control

Qst. No.	Scoring Indicator	Split up	Sub Total	Total
III(a)	<p style="text-align: center;"><u>PART C</u> <u>UNIT I</u></p> <p>Any 4 factors affecting size & rating of motor explanation</p>	4x2	8	15
(b)	<p>Power rating motor for pumps & fans.</p>  <p>constant load torque... OR figure OR expla</p>	4 3	7	
IV(a)	 <p>Block dgm explanation</p>	4 4	8	15
(b)	<p>Factors for choice of electric drives. explanation.</p>	7	7	

Revision: 2015		Course Code:6034		
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Qst. No.	Scoring Indicator	Split up	Sub Total	Total
V(a)	<p style="text-align: center;">PART C UNIT II</p> Any method of starting of 3 ϕ Induction motors figure explanation	4 3	7	
(b)	Comparison of VSI vs CSI CSI has high cost. CSI more reliable VSI can feed a no: of motor in // etc (4 points) for each. OR	4x2 = 8	8	15
VI(a)	Explanation of 2 modes of synchronous motor from variable frequency (i) true synchronous mode (ii) self controlled mode.	3 1/2 x 2 = 7	7	15
(b)	Regenerative braking (fig.) with speed torque curve. (Explanation) UNIT III	4 4	8	
VII(a)	Speed control by transformer & uncontrolled rectifier fed DC drives. figure explanation	4 4	8	15
(b)	DC traction using dropper controlled DC motor drives fig explanation	4 3	7	

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Qst. No.	Scoring Indicator	Split up	Sub Total	Total
VIII (a)	^{PART} ^{OR} Any two methods of starting of DC motors.	4+4	8	15
(b)	Chopper controlled dc drives .. figure explanations	4 3	7	
UNIT IV				
IX(a)	Solar powered pump drives figure Speed torque char explanation	3 2 3	8	15
(b)	Petrochemical industry explanat'ns Pump curve system curve	3 4	7	
OR				
X(a)	Battery powered vehicle drive, figure explanations.	4 4	8	15
(b)	Electric drives in sugar mills explanation Duty cycle graph	4 3	7	