

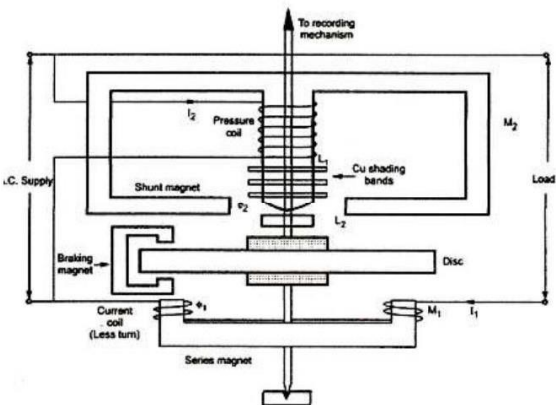
## Scoring Indicators

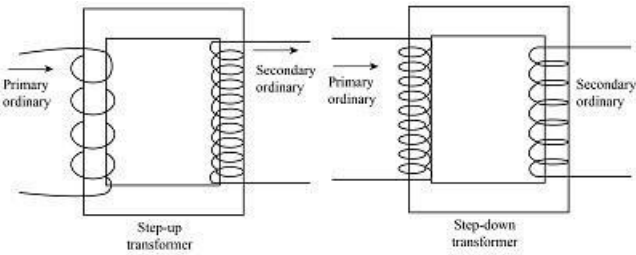
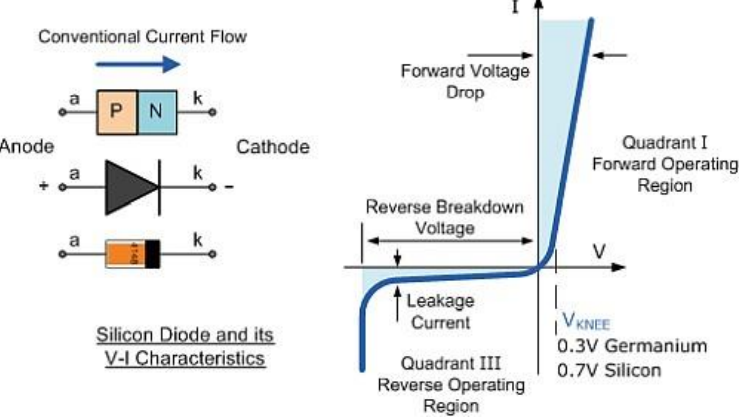
COURSE NAME : ELECTRICAL ENGINEERING-2 (TRADE THEORY)

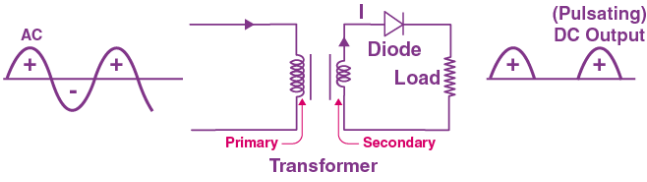
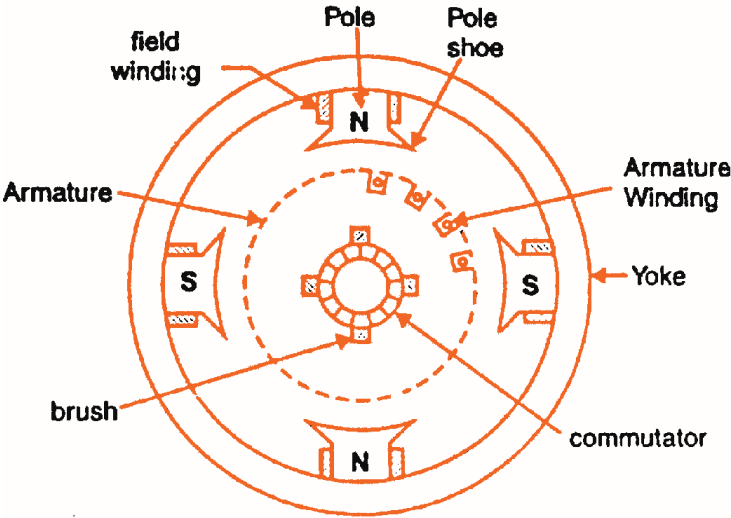
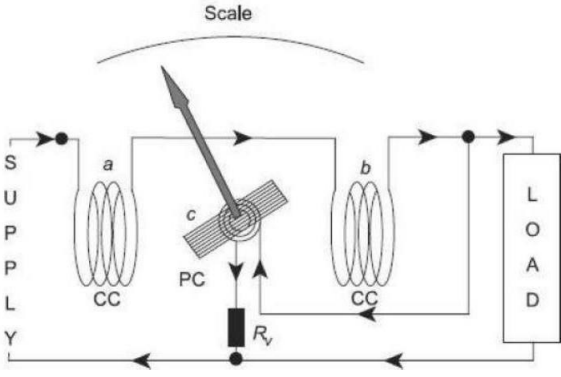
COURSE CODE :2031

QID:

Q No	Scoring Indicators	Split score	Sub Total	Total Score
	<b>PART A</b>			<b>20</b>
<b>I. 1.</b>	b		<b>1</b>	
<b>I. 2.</b>	b		<b>1</b>	
<b>I. 3.</b>	a		<b>1</b>	
<b>I. 4.</b>	a		<b>1</b>	
<b>I. 5.</b>	d		<b>1</b>	
<b>I. 6.</b>	c		<b>1</b>	
<b>I. 7.</b>	b		<b>1</b>	
<b>I. 8.</b>	a		<b>1</b>	
<b>I. 9.</b>	a		<b>1</b>	
<b>I.10.</b>	d		<b>1</b>	
<b>I.11.</b>	a		<b>1</b>	
<b>I.12</b>	a		<b>1</b>	
<b>I.13</b>	b		<b>1</b>	

I.14	a		1	
I.15	a		1	
I.16	b		1	
I.17	c		1	
I.18	a		1	
I.19	a		1	
I.20	a		1	
		<b>PART B</b>		<b>60</b>
II. 1.	Figure 	3	5	
	Working		2	
II. 2.	<i>Diagram with major components</i>		5	
II. 3.	<i>Explanation</i>		5	

<b>II.4</b>	Any 5 comparison <table border="1" data-bbox="347 255 1074 663"> <thead> <tr> <th></th> <th>HID</th> <th>LED</th> </tr> </thead> <tbody> <tr> <td>Energy Efficiency</td> <td>Low</td> <td>High</td> </tr> <tr> <td>Durability</td> <td>Fragile - has moving parts, glass bulbs, and filaments</td> <td>Heavy-duty, has no electrode or filament, shock &amp; vibration resistant</td> </tr> <tr> <td>Lifetime</td> <td>10,000 to 25,000 hours</td> <td>100,000 hours</td> </tr> <tr> <td>Lumen Depreciation</td> <td>Moderately high</td> <td>Low</td> </tr> <tr> <td>Operating Temperature</td> <td>-30° to 65°</td> <td>-55° to 70°</td> </tr> <tr> <td>Performance</td> <td>Requires 5-10 minute warm-up time, creates light in all directions</td> <td>Turns on instantly, no flickering, creates focused light</td> </tr> <tr> <td>Color Quality</td> <td>Average</td> <td>Superior</td> </tr> <tr> <td>Light Pollution</td> <td>High</td> <td>No</td> </tr> <tr> <td>Dimmable/controllable</td> <td>No</td> <td>Yes</td> </tr> <tr> <td>Cost</td> <td>Lower upfront cost, but requires regular relamping and ballast replacement</td> <td>Higher upfront cost but virtually no maintenance expenses</td> </tr> </tbody> </table>		HID	LED	Energy Efficiency	Low	High	Durability	Fragile - has moving parts, glass bulbs, and filaments	Heavy-duty, has no electrode or filament, shock & vibration resistant	Lifetime	10,000 to 25,000 hours	100,000 hours	Lumen Depreciation	Moderately high	Low	Operating Temperature	-30° to 65°	-55° to 70°	Performance	Requires 5-10 minute warm-up time, creates light in all directions	Turns on instantly, no flickering, creates focused light	Color Quality	Average	Superior	Light Pollution	High	No	Dimmable/controllable	No	Yes	Cost	Lower upfront cost, but requires regular relamping and ballast replacement	Higher upfront cost but virtually no maintenance expenses	<b>5x1</b>	<b>5</b>	
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<b>II.5.</b>	Figure Explanation	<b>2</b> <b>3</b>	<b>5</b>																																		
<b>II.6.</b>	Any 3 points figure 	<b>3</b> <b>2</b>	<b>5</b>																																		
<b>II.7.</b>	Characteristics – forward bias Reverse bias  <p style="text-align: center;"><u>Silicon Diode and its V-I Characteristics</u></p>	<b>2.5</b> <b>2.5</b>	<b>5</b>																																		
<b>II.8.</b>	Figure	<b>2.5</b> <b>2.5</b>	<b>5</b>																																		

	 <p>Explanation</p>			
<b>II.9.</b>	Figure Explanation	2.5 2.5	5	
<b>II.10.</b>	 <p>Explanation</p>	2.5 2.5	5	
<b>II.11</b>	<i>any two application : BLDC          PMSM</i>	2.5 2.5	5	
<b>II.12</b>	 <p>Explanation</p>	2.5 2.5	5	

