#### **EVALUATION SCHEME**

For March-2019 and on words Examinations STD-X (Level 2)

# **Electrical Technology (92)**

#### **Scheme of Examination:**

Sr.	Method of	Weightage of Marks	Evaluator
No.	Assessment		
1	Theory Paper	30 Marks	School / State Board
	(Written)	(80 Marks converted 30 Marks)	
2	Practical Exam	30 Marks	Certified Assessor/State
			Board
3	Term Work (Journal)	10 Mark	School Instructor /
			Trainer
4	Project Work	10 Mark	School Instructor /
			Trainer
5	Oral / Viva Vocu	10 Mark	School Instructor /
			Certified Assessor
6	Direct Observation	10 Mark	School Instructor /
			Certified Assessor
	Total Marks	100 Marks	

## 1] Unit wise Marks Distribution of written test paper:

Paper Time: 3 hours Marks: -80

	Time. 5 nours	Warks60						
Sr. No	Unit (Contains)	Mark	Mark With option					
1	Repair & Maintenance of heating appliances (Electric Iron/Water heater/Geyser)	05	10					
2	Repair & Installation of Electric Bell	05	05					
3	Repair & Installation of Electric/Electronic Tube Light	05	05					
4	Single Phase transformer-Study & Testing	06	09					
5	D.C. Power supply. Assembly & Applications	05	09					
6	Solar cell & Power supply. Applications	02	10					
7	Repair & Maintenance of Battery & emergency Light	06	06					
8	Rules & Installation of Basic house wiring	10	10					
9	Installation & Testing of Single phase Motors	06	06					
10	Repair & Maintenance of Induction cooker /Hot plate	10	10					
11	Engineering Drawing	20	40					
_	Total Marks	80	120					

#### 2] Practical Exam:

Practical Time	• 3 Hours								
Practical Subject	As per Electrical Technology practical book								
Any one practical should be given from the text book by lot system to each group									
/ individual.									
Total Marks of Practical	• 30 Marks								

#### 3] Term Work (Journal):

Term Work (Journal)	Journal maintained by the students during the academic year.
Term Work (Journal)	Electrical Technology
Subject	
Total Marks	• 10 Marks

#### 4] Project Work:

- The project work given in syllabus is only for guideline.
- Candidate, with approval from the Instructor / Trainer, may choose any one project and prepare it.
- He has full liberty to prepare any useful project other than the mentioned projects.
- He may write a visit report about any nearest Industry and their product.
- One project should be compulsory for each student or a group of maximum 4 students.

• Total Marks	• 10 Marks

5] Oral/Viva vocu:
10 Marks
6] Direct Observation:
10 Marks

# Written Test Paper - STD-X (Level 2)

# **Electrical Technology (92)**

## Question Wise Distribution of Marks.

Sr. No	Types of Questions	Marks	Marks with option
1	Objectives (1 Mark)	20	20
2	Short Answer Type (3 Marks)	12	21
3	Long Answer Type (4 Marks)	12	20
4	Long Answer Type (5 Marks)	10	15
5	Long Answer Type (8 Marks)	16	24
6	Long Answer Type (10 Marks)	10	20
	Total Marks	80	120

# Pattern of Question Paper STD- X (Level-2) Electrical Technology (92)

Time: 3	hrs.	Marks: 80
Notes:	<ol> <li>All questions are compulsory.</li> <li>Draw diagrams wherever necessary.</li> <li>Drawing supplement should be attached to main answer book.</li> </ol>	
Q. No. 1	A) Select the correct alternative and rewrite the sentence.	5
	1	
	a) b) c)	
	2	
	a) b) c)	
	3	
	a) b) c)	
	4	
	a) b) c)	
	5	
	a) b) c)	
1	B) Match the following pairs.	5
	Column 'A' Column 'B'	3
	1. a)	
	2. b)	
	3. c)	
	4. d)	
	5. e)	
(	C) State the following statement is true or false.	5
	1.	
	2.	
	3.	
	4.	
	5.	

D) Answer the following questions in ONE sentence.	5
1.	
2.	
3.	
4.	
5.	
Q. No. 2) Answer the following questions in short. (Any four)	12
1.	
<ul><li>2.</li><li>3.</li></ul>	
4.	
5.	
6. 7	
7.	
Q. No. 3) Answer the following questions in short. (Any Three)	12
1.	
2. 3.	
4.	
5.	
Q. No. 4) Answer the following questions in brief. (Any Two)	10
1.	
2	
<ul><li>2.</li><li>3.</li></ul>	
J.	
Q. No. 5) Answer the following questions in brief. (Any Two)	16
1.	
<ul><li>2.</li><li>3.</li></ul>	
Q. No. 6) Answer the following questions in brief. (Any One)	10
2.110. 0, 1 monor the following questions in other. (1 my One)	10
1.	
2.	
<del>-</del> ·	

# Pattern of Question Paper STD- X (Level-2)

# **Electrical Technology (92)**

Time: 3 hrs.	Marks: 80
Notes: 1. All questions are compulsory. 2. Draw diagrams wherever necessary. 3. Drawing supplement should be attached to main answer book.	
<ul> <li>Q. No. 1.A) Select the correct alternative and rewrite the sentence <ol> <li>Repair &amp; Maintenance of heating appliances (Electric Iron/Water heater/Ca)</li> <li>Repair &amp; Installation of Electric/Electronic Tube Light</li> <li>a)</li></ol></li></ul>	5 Geyser)
a)	
B) Match the following pairs.  Column 'A'  Column 'B'  Repair & Installation of Electric Bell  Repair & Installation of Electric/Electronic Tube Light  Single Phase Transformer-Study & Testing  Rules & Installation of Basic house wiring  Repair & Maintenance of Induction cooker /Hot plate  e)	5
<ul> <li>C) State the following statement is true or false.</li> <li>1. Repair &amp; Maintenance of heating appliances (Electric Iron/Water heater/</li> <li>2. Repair &amp; Installation of Electric Bell</li> <li>3. Single Phase Transformer-Study &amp; Testing</li> <li>4. D.C. Power supply. Assembly &amp; Applications</li> <li>5. Rules &amp; Installation of Basic house wiring</li> </ul>	/Geyser)
<ul> <li>D) Answer the following questions in ONE sentence.</li> <li>1. Solar cell &amp; Power supply. Applications</li> <li>2. Repair &amp; Maintenance of Battery &amp; emergency Light</li> <li>3. D.C. Power supply. Assembly &amp; Applications</li> <li>4. Installation &amp; Testing of Single Phase Motors</li> <li>5. Repair &amp; Maintenance of Induction cooker /Hot plate</li> </ul>	5

Q. No. 2) Answer the following questions in short. (Any four)	12
1. Repair & Maintenance of heating appliances (Electric Iron/Water heater/Geyser)	
2. Repair & Installation of Electric Bell	
3. Repair & Installation of Electric/Electronic Tube Light	
4. Single Phase Transformer-Study & Testing  5. D.C. Power supply: Assembly: & Applications	
5. D.C. Power supply. Assembly & Applications	
6. Engineering Drawing (Electrical Symbols)	
7. Engineering Drawing (Auto CAD)	
Q. No. 3) Answer the following questions in short. (Any Three)	12
1. Single Phase Transformer-Study & Testing	
2. Repair & Maintenance of Battery & emergency Light	
3. Installation & Testing of Single Phase Motors	
4. D.C. Power supply. Assembly & Applications	
5. Engineering Drawing (Auto CAD)	
Q. No. 4) Answer the following questions in brief. (Any two)	10
1. Repair & Maintenance of heating appliances (Electric Iron/Water heater/Geyser)	
2. Engineering Drawing (Free hand Sketches of wiring diagram /Auto CAD)	
3. Engineering Drawing (Free hand sketch of D.C. machine parts /elect. Accessories)	
Q. No. 5) Answer the following questions in brief. (Any two)	16
1. Solar cell & Power supply. Applications	
2. Rules & Installation of Basic house wiring	
3. Repair & Maintenance of Induction cooker /Hot plate	
Q. No. 6) Answer the following questions in brief. (Any one)	10
1. Engineering Drawing (Orthographic Projection without curve)	
2. Engineering Drawing (Isometric View without curve)	

#### STD-X (Level-2)

#### **Blue Print of Unit wise Marks Distribution**

**Electrical Technology (92)** 

S.N.	Knowledge						Understanding						Application							ith	
		(	ЭB	S	.A	L.	A.	C	В	S	.A	L.	A.	OB		S	A	I	.A.	arks	ks w ns
		Mark	Questions	Mark	Questions	Mark	Questions	Mark	Questions	Mark	Questions	Mark	Questions	Mark	Questions	Mark	Questions	Mark	Questions	Total Marks	Total Marks with options
1	Repair & Maintenance of heating appliances (Electric Iron/Water heater/Geyser)	1	1	3	1	5	1	1	1											5	10
2	Repair & Installation of Electric Bell	1	1					1	1	3	1									5	5
3	Repair & Installation of Electric/Electronic Tube Light	1	1					1	1							3	1			5	5
4	Single Phase transformer-Study & Testing	1	1			4	1	1	1							3	1			6	9
5	D.C. Power supply. Assembly & Applications	1	1					1	1	3	1							4	1	5	9
6	Solar cell & Power supply. Applications	1	1									8	1	1	1					2	10
7	Repair & Maintenance of Battery & emergency Light	1	1			4	1							1	1					6	6
8	Rules & Installation of Basic house wiring	1	1			8	1							1	1					10	10
9	Installation & Testing of Single phase Motors	1	1											1	1			4	1	6	6
10	Repair & Maintenance of Induction cooker /Hot plate	1	1											1	1			8	1	10	10
11	`Engineering Drawing			3	2	10	1					10	1			4	1	5	2	20	40
		1	10	3	3	10	1	1	5	3	2	10	1	1	5	3	2	5	2		71
						8	1					8	1			4	1	8	1		28
						5	2											4	2		13
						4	2													80	120

Note  $\_O$  .B-Objective, S.A- Short answer type (3 Marks),

L.A.- Long answer type (4 Marks & 5 Marks & 8 Marks & 10 Marks)