

Syllabus for the subject

of

ENGINEERING DRAWING

(For 3rd & 4th semester)

Under

CRAFTSMEN TRAINING SCHEME (CTS)

(For Wireman)

Re-Designed in - 2015

By

Government of India

Ministry of Skill Development & Entrepreneurship

Directorate General of Training

CENTRAL STAFF TRAINING AND RESEARCH INSTITUTE

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DETAILS OF SYLLABUS
3rd SEMESTER ENGINEERING DRAWING

For the trade of

Wireman

Sl. No.	Topics	Duration in Hours
1	<p><u>Sign & Symbol Trade related</u> <u>Alternating Current</u> Drawing of simple electrical circuit using electrical symbols. Drawing of sine square & triangular waves. Diagram of battery charging circuit. Practice in reading typical example of circuit containing R, L & C. Reading of electrical drawing.</p>	66
2	<p><u>Electronic components</u> Symbols for electronic components. Diode, Transistor, Zener diode, S.C.R., UJT, FET, I.C. Diac, Triac Drawing of half wave, Full wave and Bridge rectifier circuit.</p>	
3	<p><u>Electric wirings & Earthing</u> Detailed diagram of calling bell, & Buzzers etc Free hand sketching of Staircase wiring. Drawing the schematic diagram of plate and pipe earthing. Diagram for electroplating from A.C and D.C source.</p>	
4	<p><u>DC machines</u> Graphic symbols for Rotating machines. Sketching of brush and brush gear of D.C. machines. Sketching of D.C. 3-point and 4-point starter . Layout arrangement of D.C. Generators & motors, control panel. Exercises on connection to motors through Ammeter, voltmeter & K.W. meters of electrical wiring diagram.</p>	

DETAILS OF SYLLABUS

4th SEMESTER ENGINEERING DRAWING

Wireman

Sl. No.	Topics	Duration in Hours
1	Transformer Graphic symbols for Transformers. Free hand sketching of transformer and auxiliary parts and sectional views.	66
2	Alternator Tracing of panel wiring diagram of an alternator. Drawing the schematic diagram of automatic voltage regulators of A.C. generators.	
3	Control Panel Practice in reading panel diagram. Local & Remote control of Induction motor with inching. Forward & Reverse operation of Induction motor Automatic Star Delta Starter Automatic star delta starter with change of direction of rotation Sequential control of three motors.	
4	Distribution of Power Types of insulator used in over head line. (Half sectional views) Different type of distribution systems and methods of connections. Layout diagram of a substation. Single line diagram of substation feeders.	
5	Free hand drawing of Fuse, circuit breakers and relays.	