

**BILL OF MATERIAL REQUIRED FOR EACH TRAINEE FOR THE FOLLOWING
TRADES DURING THE ALL INDIA TRADE TEST OF CRAFTSMEN (ANNUAL
PATTERN) UNDER CRAFTSMAN TRAINING SCHEME TO BE HELD IN THE
MONTH OF MARCH – 2021**

421. COMPUTER OPERATOR PROGRAMMING ASSISTANT***991. DRAUGHTSMAN CIVIL (1st YEAR)**

i. Mini drafter	:	01 No/ each Trainee
ii. Set of scale	:	01 No/ each Trainee
iii. Metric chain 20m or 30m	:	01 No/4 Trainees
iv. Wooden cross staff	:	01 No / 4 Trainees
v. Ranging rod 3m height	:	0 4 No / 4 Trainees
vi. Arrows	:	05 Nos./ 4Trainees
vii. Measuring tape 30m	:	01 No / 4 Trainees
viii. A1 drawing sheet	:	02 Nos./ each Trainee
ix. A2 drawing sheet (Trimmed size)	:	01 No/ each Trainee
x. Pencil 'H'	:	01 No/ each Trainee
xi. Pencil '2H'	:	01 No.
xii. Pencil 'HB'	:	01No.
xiii. Eraser	:	01 No/ each Trainee
xiv. Cello tape	:	As required
xv. Leveling instrument with tripod	:	01 No/4 Trainees
xvi. Telescopic staff 4m length	:	01 No / 4 Trainees

442. ELECTRICIAN (1st YEAR)

i. Insulated Combination pliers 150mm/200MM	:	01 No.
ii. D.E. Knife 100mm	:	01 No.
iii. Connector screw driver 100mm	:	01 No.
iv. Wheatstone bridge kit with Galvanometer battery, ratio and fixed arms	:	01 No.
v. Resistors 2 Ω / 5W	:	01 No.
vi. Resistors 50 Ω / 5W	:	01 No.
vii. Resistors 10 Ω / 5W	:	01 No.
viii. Resistors 1 Ω / 2W	:	01 No.
ix. Resistors 330K Ω / 2W	:	01 No.
x. Cells/ battery for Wheatstone bridge	:	01 No.
xi. Insulated screw driver 150mm/ 200mm	:	01 No.
xii. Ball pen hammer 250gm	:	01 No.
xiii. Try square 150mm	:	01 No.
xiv. Mallet	:	01 No.
xv. Gimlet 150mm	:	01 No.
xvi. Steel rule	:	01 No.
xvii. Hand drilling machine 6mm (cap) with drill bit	:	01 No.

xviii.Hacksaw frame with blade 24 TPI	:	01 No.
xix.P.V.C. conduit pipe 19mm	:	2m
xx.P.V.C. terminal box 100mm X 100mm X 50mm	:	02 Nos.
xxi.Battern holder 6A/ 250V	:	01 No.
xxii.Flush type two way switches 6A/ 250V	:	02 Nos.
xxiii.P.V.C aluminium wire 1.5mm ²	:	As reqd.
xxiv.P.V.C. Round blocks (90mm X 40mm)	:	01 No.
xxv.P.V.C. bends 19mm	:	01 No.
xxvi.P.V.C. 'T' 19mm	:	02 Nos.
xxvii.B.C. bulb 100W/ 250V	:	01 No.
xxviii.P.V.C. insulation tape	:	As reqd.
xxix.Voltmeter M.I. 0 – 300V/ 100V	:	01 No.
xxx.Watt meter 250V/5A	:	01 No.
xxxi.Ammeter 0- 15A M.I.	:	01 No.
xxxii.Frequency meter 45 – 55Hz	:	01 No.
xxxiii.Transformer 240V/115V, 1KVA, 50Hz	:	01 No.
xxxiv.DPST knife switch 16A/ 250V	:	01 No.
xxxv.Connecting wires	:	As reqd.
xxxvi.Long nose pliers 150mm	:	01 No.
xxxvii.Ammeter M.I. 0 -5A/ 10A	:	01 No.
xxxviii.Single phase energy meter 250V/ 5A	:	01 No.
xxxix.Stop watch	:	01 No.
xl.Lamp load 250V/5A	:	1 set
xli.Auto transformer (varies) 0 – 270V/5A	:	01 No.
xlii.Long round nose pliers 15mm	:	01 No.
xliii.Tube light fitting 1200 m (Single Patti)	:	02 Nos.
xliv.Choke 40W/ 250V	:	02 Nos.
xlv.Tube light holders (plain)	:	04Nos.
xlvi.Starter holder	:	02 Nos.
xlvii.Fluorescent tube lamp 40W	:	02 Nos.
xlviii.Twin core flexible P.V.C. 23/0.2mm wire	:	As reqd.
xlix.Wire stipper	:	01 No.
i.Ammeter 0-1A M.I	:	02 Nos.
ii.Rheostat (variable) 100Ω/ 5W	:	01 No.
iii.Connecting leads	:	As reqd.
iiii.Wooden Board 8" x 10" inch	:	01 No.
liv.Sun mica sheet 8" x 10" inch	:	01 No.
lv.Socket φ6A/16A	:	01 No.

446. ELECTRONIC MECHANIC (1st YEAR)

i.DMM with probes or Ohm meter	:	01 No.
ii.DC regulated power supply 0-30V, 2A	:	01 No.
iii.Soldering Iron 25W/240V	:	01 No.
iv.Relay 12V/2CO/10A	:	01 No.
v.SPST toggle switch-2A	:	01 No.
vi.Hook up wire	:	01 m.
vii.Rosin cored solder wire 60/40	:	As reqd.
viii.SPST toggle switch-(miniature type)	:	07 Nos.

ix.CR25 (1/4 Watt) Resistors -330 Ohms	:	07 Nos.
x.Breadboard	:	01 No.
xi.Hook up wire	:	As reqd.
xii.CRO - 0 to 20MHz –Dual trace with probe kit	:	01 No.
xiii.Function generator 0-1MHz	:	01 No.
xiv.Transistor SL100	:	01 No.
xv.Capacitors 25 VDC wkg. –100 μ F	:	01 No.
xvi.Capacitors 25 VDC wkg. – 25 μ F	:	02 Nos.
xvii.CR25(1/4 Watt) Resistors values in Ohms–220,1.2K,1K, 3.3K, 22K	:	01 No. (each)
xviii.Assorted transistors	:	5 Nos.
xix.Volt meter 0-50VDC –MC type	:	01 No.
xx.Volt meter 0-15VDC –MC type	:	03 Nos.
xxi.Ammeter -0- 25mA - MC type	:	01 No.
xxii.SPST toggle switch-2A	:	01 No.
xxiii.CR25 (1/4 Watt) Resistors –100,150,220 Ohms	:	1 No. each
xxiv.DC regulated power supply 0-30V, 2A – Dual supply	:	01 No.
xxv.Soldering iron 25W/250V	:	01 No.
xxvi.Step down Transformer- 250V/0-12V 500mA	:	01 No.
xxvii.SPST toggle switch-2A	:	01 No.
xxviii.Diode- 1N4007 or equivalent	:	4 Nos.
xxix.Potentiometer-470 Ohm Linear	:	01 No.
xxx.Capacitor 1000 μ F, 25V wkg.	:	01 No.
xxxii.CR25 (1/4 Watt) Resistor – 1 Kilo Ohms	:	01 No.
xxxiii.General purpose PCB/Breadboard	:	01 No.
xxxiiii.60/40 Rosin cored solder wire	:	As reqd.
xxxv.Step down Transformer 9-0-9V/250mA	:	01 No.
xxxvi.Seven segment display (CA or CC)	:	01 No.(each)
xxxvii.IC 7805	:	01 No.

969. WELDER

i.M.S. Flat 150 x 50 x 10 mm	:	02 Nos. (Each trainee)
ii.GMAW Plant with necessary material for GMAW process	:	
iii.Stainless Steel 150 X 50 X 06 mm	:	02 Nos. (Each trainee)
iv.GTAW plant with necessary material for GTAW process (S.S filler rod & argon gas)	:	
v.M.S. Electrode dia 3.15 mm.	:	
vi.GMAW(CO ₂) filler wire dia 1.2 mm	:	
vii.Carbon dioxide gas	:	
viii.Mild steel PIPE dia 50mmX 3mm WTX 75 mm length	:	02 No (Each trainee)
ix.M. S. filler rod dia 1.6 mm	:	
x.Argon gas	:	
xi.SMAW Machine	:	

453. FITTER (1st YEAR)

i.M.S. Flat 50 x 50 x 10 mm	:	01 No.
ii.M.S. Flat 25 x 25 x 10 mm	:	01 No.
iii.M.S. Flat 55 x 50 x 10 mm	:	01 No.
iv.M.S. Flat 50 x 35 x 10 mm	:	01 No.

Contd...4/-

515. MECHANIC DIESEL

- i. Trainee's tool kit
- ii. Engine drive belt
- iii. Water pump repair kit
- iv. Grease
- v. Starter motor repair kit
- vi. Radiator pressure cap
- vii. Thermostat valve
- viii. Diesel
- ix. Coolant

502. MECHANIC MOTOR VEHICAL (1st YEAR)

- i. Trainee' tool kit
- ii. Dial indicator
- iii. Metal shims
- iv. Starter motor repair kit
- v. Oil pressure gauge
- vi. Engine oil
- vii. Cleaning material
- viii. Wire brush
- ix. Outside micro meter
- x. Oil pressure relief valve
- xi. Big end and main bearing shells

503. MECHANIC REFRIGERATION & AIR - CONDITIONING TECHNICIAN (1st YEAR)

- i. Hand hacksaw (or) AG4 Grinding machine : 01 No.
- ii. Blade high speed-24TPI X300 m : 01 No.
- iii. 4" cutting wheel : 02 Nos.
- iv. Hermetic compressor : 01 No.
- v. Gasket material as required
- vi. Lapping phase(Fine and Corse)
- vii. Kerosene.
- viii. Refrigerant oil
- ix. Emery sheet
- x. Clean cloth.
- xi. TCE
- xii. Welding electrode
- xiii. 1/18 PVC wire 250 V grade : 5m
- xiv. PVC flexible wire 14/0.2 mm : 2m
- xv. PVC heavy duty flexible wire : 3m
- xvi. Insulation tape : 1/2m
- xvii. 3/20 PVC copper wire : 8m
- xviii. SPT Switch 250 V, 6A : 1No.

xix. Lamp-250V, 100W, 60W, 40W	:	01 No. (each)
xx. Multi strand wire, Red, Blue mains	:	0.5m each
xxi. Thermostat	:	01No.
xxii. OLP-1no		
xxiii. PVC wire 1.5 sq.mm, 2m, 250 V rating PVC wire 3/22 SWG 650 V grading	:	6m
xxiv. Electric lamps 100W	:	06 Nos.
xxv. Bakelite batten holder 5A 250V	:	06 Nos.
xxvi. SP One-way switch 5A, 250V	:	03 Nos.
xxvii. TPIC main switch 15 A 650 V		
xxviii. Fuse wire 35 SWG	:	1m
xxix. 5 ton capacity system		

592. WIREMAN (1st YEAR)

i. Combination plier 150mm	:	01 No.
ii. D.E. Knife 100mm	:	01 No.
iii. Connector screw driver 100mm	:	1 No.
iv. Screwdriver (insulated) 150mm	:	01 No.
v. Wheatstone bridge with decade box and Galva no meter:	:	1 Kit
vi. Resistors 2 Ω / 5W	:	01 No.
vii. Resistors 50 Ω / 5W	:	01 No.
viii. Resistors 10 Ω / 5W	:	01 No.
ix. Resistors 1 Ω / 2W	:	01 No.
x. Resistors 330K Ω / 2W	:	01 No.
xi. Battery for wheat stone bridge	:	As reqd.
xii. Connecting leads	:	As reqd.
xiii. D.E. spanner (6mm – 25mm)	:	06 Nos.
xiv. Tube light fitting 1200mm double patti	:	1 set.
xv. Choke 40W/ 250V	:	02 Nos.
xvi. Tube light holder for 40W T.L	:	02 set.
xvii. Tube light starter holders	:	02 Nos.
xviii. Starters (T.L)	:	02 Nos.
xix. Tube lamps (Fluorescent) 40W/ 250V	:	02 Nos.
xx. Flexible P.V.C. Copper twisted wire 23/0.2mm	:	6m
xxi. P.V.C. insulation tape	:	As reqd.
xxii. Combination plier 150mm/200mm	:	01 No.
xxiii. Single phase watt meter 250V/ 5A	:	01 No.
xxiv. 3 phase watt meters 500V/5A	:	02 Nos.
xxv. P.F. meter single phase 250V/5A	:	01 No.
xxvi. M.I. Voltmeter 0 -500V	:	01 No.
xxvii. M.I. Ammeter 0- 5A	:	01 No.
xxviii. 3 phase induction motor 3HP/ 415V coupled with generator	:	01 No.
xxix. Lamp bank	:	01 No.
xxx. 200W – 250V lamps	:	06 Nos.
xxxi. 100W – 250V lamps	:	06 Nos.
xxxii. Pendent holders 6A/ 250V	:	06 Nos.
xxxiii. M.C. Ammeter 0 -500Ma	:	01 No.

xxxiv. Multi meter/ ohm meter	:	01 No.
xxxv. D.C. power supply unit 0 -30V	:	01 No.
xxxvi. M.C. Volt meter 0 -30 V	:	01 No.
xxxvii. High value resistors	:	02 Nos.
xxxviii. Low value resistors	:	02 Nos.
xxxix. Insulated screw driver 150mm	:	01 No.
xl. Long nose plier 150mm	:	01 No.
xli. Soldering iron 25W/ 250V	:	01 No.
xlii. Multi meter (DMM)	:	01 No.
xlili. M.C. Volt meter 0 -30V	:	01 No.
xliv. Lug board general purpose 5 point	:	02 Nos.
xlv. Diodes IN 4007	:	01 No.
xlvi. Step down transformer 240V/12 -0-12V, 500mA	:	As reqd.
xlvii. Multi stranded wire red, blue, 23/02/650V grade	:	01 No.
xlviii. Base board (laminated board) (30 X 15 X 3mm)	:	01 No.
xlix. Mains cord 3 core cable 23/ 0 -2	:	01 No.
1. 3 pin socket outlet 6 A/ 250V	:	As reqd.
li. Resin core solder 60/40	:	01 No.
lii. Combination plier (insulated) 150mm	:	01 No.
liii. M.I. Volt meter 0 – 300V/600V	:	01 No.
liv. M.I. Ammeter 0-5A/10A	:	01 No.
lv. Watt meter 250V/ 500V. 5A/ 10A	:	01 No.
lvi. P.F. meter 415V/ 20A	:	01 No.
lvii. 3 phase induction motor 415V/ 5HP	:	1 set.
lviii. 3 phase lamp load (6 Nos. of 100W)	:	01 No.
lix. TPIC main switch 16A/ 500V	:	20m.
lx. P.V.C. insulated copper wire	:	

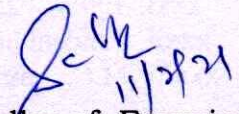
Note: *All tools, Instrument and equipment as per syllabus of the trade should be kept ready in working condition.



SCTE&VT

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