



No. 1373 /Dt. 20.06.2026.
(VT-I-3/2024)

To

The Principal,
All Govt. & Private ITI s of Odisha .

Sub: Bill of Materials for Practical Examinations of AITT July-2026 Mains Examination -
Regarding.

Ref: DGT Notification File No. MSDE-18011/08/CTS/CTS/Dec-21/2021-TTC.

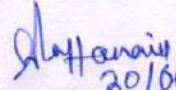
Madam/Sir,

In inviting a reference to the DGT Notification on the subject cited above, I
am to say that Practical AITT- July 2026 Mains Examination have been scheduled with
effect from 6th July -2026 to 10th July -2026.

In view of the above, the Bill of Materials are enclosed herewith for procurement of
Raw Materials & smooth conduct of AITT July-2026 Mains Examination. However the
details of Raw Materials required for the Seven Trades (Electrician, Fitter, Electronics
Mechanic, MMV (Mechanic Motor Vehicle), COPA (Computer Operator and Programming
Assistant), Welder, Mechanic Diesel) received from DGT are attached herewith for
reference.

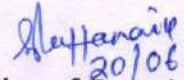
Yours faithfully,

Encl: As above.


20/06/2026
Controller of Examinations.

Memo No. 1374 /Dt. 20.06.2026.

Copy to the NSTI Bhubaneswar for information & necessary action.


20/06/2026
Controller of Examinations.

1760

DIRECTORATE GENERAL OF TRAINING (DGT)
ALL INDIA TRADE TEST, MAINS JULY 2026
CRAFTSMEN TRAINING SCHEME (CTS)
TRADE PRACTICAL EXAMINATION

TRADE: ELECTRICIAN (NSQF), 2nd YEAR
SUBJECT: TRADE PRACTICAL
PAPER CODE: 26/07/C/A-2/2

Date: 10/07/2026
TRADE CODE: 442

Bill of Materials

Name of the tools, instruments and equipments with specification

1. 3-point starter for 220V 3HP DC Shunt motor - 1 No.
2. Battery 12V, 10 AH - 1 No.
3. D.E. spanner set 5mm to 20mm - 1 Set
4. DC Shunt motor 220V 3 HP - 1 No.
5. Digital Multimeter - 1 No.
6. Digital trainer kit - 1 No.
7. ICDP switch 250V/16A - 1 No.
8. Insulated combination plier 150mm - 1 No.
9. Insulated cutting pliers 150mm - 1 No.
10. Megger 500V - 1 No.
11. Multimeter - 1 No.
12. Regulated DC power supply 5V/500mA - 1 No.
13. Screwdriver 150mm - 1 No.
14. Screwdriver 200mm - 1 No.
15. Solar charge controller 12V, 10A - 1 No.
16. Solar panel 12V, 10W - 1 No.
17. Tachometer- 3000 rpm - 1 No.
18. Test lamp with 220V 25W lamp - 1 No.
19. Wire Stripper - 1 No.

Name of the materials with specification

1. 2.5 sq. mm P.V.C. copper multi-strand cable - 18m
2. Bread board general purpose PCB - 1 No.
3. Hook up wire 0.5 sq. mm - 2 meters
4. IC 7432 - 1 No.
5. IC Base 14 pin - 2 Nos.
6. LED Lamp 12V, 3W - 1 No.
7. LED Red 5mm - 1 No.
8. PVC insulated copper wire 1.5 sq. mm - 3 meters
9. Resistance 330Ω - 1 No.
10. Solder/flux - As required
11. SPDT switches (miniature toggle) - 2 Nos.

Note: All tools and equipment should be kept ready to perform the job as per syllabus of the trade.



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DIRECTORATE GENERAL OF TRAINING (DGT)
ALL INDIA TRADE TEST, MAINS JULY 2026
CRAFTSMEN TRAINING SCHEME (CTS)
TRADE PRACTICAL EXAMINATION

TRADE: MECHANIC MOTOR VEHICLE (NSQF), 2nd YEAR
SUBJECT: TRADE PRACTICAL
PAPER CODE: 26/07/C/A-2/2

Date: 10/07/2026
TRADE CODE: 502

Bill of Materials

Tools and Instruments Required

1. 12V automotive test lamp
2. Bearing puller
3. Crimping tool
4. Dial test indicator with magnetic stand
5. Digital multimeter
6. Feeler gauge
7. Socket spanner set
8. Torque wrench
9. Trainees tool kit
10. Tray
11. Tyre pressure gauge
12. Wire stripper

Equipment and Machineries Required

13. Air compressor
14. Vehicle
15. Vehicle LMV/HMV
16. Workbench with vice

Materials Required

17. Auto electrical cable (assorted gauge) - as required
18. Automotive fuses - as required
19. Banian cloth - as required
20. Bulbs - as required
21. Cotton waste - as required
22. Diesel/kerosene - as required
23. Flasher relay - as required
24. Grease - as required
25. Insulation tape - as required
26. SAE 120 Differential oil - as required
27. Soap oil - as required
28. Switches (2 way / combination) - as required
29. Valve core (tube) - as required
30. Wire sleeve - as required

Note: All tools and equipment should be kept ready to perform the job as per syllabus of the trade.



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DIRECTORATE GENERAL OF TRAINING (DGT)
ALL INDIA TRADE TEST, MAINS JULY 2026
CRAFTSMEN TRAINING SCHEME (CTS)
TRADE PRACTICAL EXAMINATION

TRADE: ELECTRONICS MECHANIC (NSQF), 2nd YEAR
SUBJECT: TRADE PRACTICAL
PAPER CODE: 26/07/C/A-2/2

Date: 10/07/2026
TRADE CODE: 446

Bill of Materials

Tools / Equipment / Instruments / Materials as required:

1. 3.5 mm stereo EP to EP cable – 1 No.
2. 6 mm to 3.5 mm phono adapter – 1 No.
3. A computer SMPS – 1 No.
4. Adjustable type table lamp
5. Audio signal source
6. Cleaning brush
7. Crimping tools
8. CRO (0- 20) MHz, dual trace / DSO
9. Desktop PC with cabinet
10. Digital multimeter with probes
11. IPA cleaning solution
12. LCD/LED TV
13. Loudspeaker / Headphone – 1 No.
14. Magnifier with lamp
15. Magnifying lens
16. Media source with HDMI, RCA, USB output
17. Microphone (Dynamic) – 1 No.
18. OFC cables
19. OFC data manual
20. Optical fiber trainer kit
21. Paper clip
22. Patch cords – as required
23. RC solder
24. Rosin cored solder and flux
25. SMD soldering workstation
26. Solder flux pen/liquid flux
27. Trainees tool kit

Note: All tools and equipment should be kept ready to perform the job as per syllabus of the trade.



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DIRECTORATE GENERAL OF TRAINING (DGT)
ALL INDIA TRADE TEST, MAINS JULY 2026
CRAFTSMEN TRAINING SCHEME (CTS)
TRADE PRACTICAL EXAMINATION

TRADE: FITTER (NSQF), 2nd YEAR
SUBJECT: TRADE PRACTICAL
PAPER CODE: 26/07/C/A-2/2

Date: 10/07/2026
TRADE CODE: 453

Bill of Materials

Fe310 - 50 ISF 8 x 75 mm – 2 Pieces

Note: All tools and equipment should be kept ready to perform the job as per syllabus of the trade.



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DIRECTORATE GENERAL OF TRAINING (DGT)
ALL INDIA TRADE TEST, MAINS JULY 2026
CRAFTSMEN TRAINING SCHEME (CTS)
TRADE PRACTICAL EXAMINATION

TRADE: ELECTRICIAN (NSQF), 2nd YEAR
SUBJECT: TRADE PRACTICAL
PAPER CODE: 26/07/C/A-2/2

Date: 09/07/2026
TRADE CODE: 442

Bill of Materials

Name of the tools, instruments and equipments with specification

1. 4 point starter 3 HP 220V - 1 No.
2. Combination plier 200mm - 1 No.
3. D.P.I.C. switch 32 amps 250V - 1 No.
4. DC Drive unit suitable for DC shunt motor 3HP - 1 No.
5. DC shunt machine, 3HP 220V - 1 No.
6. DC shunt motor 3HP, 220V - 1 No.
7. DC source/rectifier suitable for above motor - 1 No.
8. Digital multimeter - 1 No.
9. Double ended spanner set 5mm to 20mm - 1 No.
10. Field rheostat suitable for motor - 1 No.
11. Frequency meter 45 to 55Hz - 1 No.
12. Insulated combination plier 150mm - 1 No.
13. MC Ammeter 1A - 1 No.
14. Megger 500V - 1 No.
15. MI Ammeter 10A - 1 No.
16. MI Voltmeter 0-500V - 1 No.
17. Multimeter - 1 No.
18. Neon Tester - 1 No.
19. Ohmmeter 100 ohm - 1 No.
20. Screwdriver 150mm - 1 No.
21. Screwdriver 200mm - 1 No.
22. Synchronous motor 3 KVA, 500V 3 phase 50Hz with suitable starter - 1 Set
23. Tachometer 300 rpm to 3000 rpm - 1 No.
24. TPIC switch 32A 500V - 1 No.
25. Trainees tool kit - 1 No.
26. Wire stripper - 1 No.
27. Wire stripper 150mm - 1 No.



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Name of the materials with specification

1. 2.5 sq. mm P.V.C. copper multi-strand cable - 20m
2. Insulation Tape - 1 No.
3. PVC insulated copper wire 1.5 sq. mm - 3 meters
4. PVC insulated copper wire 2.5 sq. mm - 2 meters
5. Sand paper - 1 No.
6. Two pole MCB 220V, 16A - 1 No.

Note: All tools and equipment should be kept ready to perform the job as per syllabus of the trade.



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DIRECTORATE GENERAL OF TRAINING (DGT)
ALL INDIA TRADE TEST, MAINS JULY 2026
CRAFTSMEN TRAINING SCHEME (CTS)
TRADE PRACTICAL EXAMINATION

TRADE: MECHANIC MOTOR VEHICLE (NSQF), 2nd YEAR
SUBJECT: TRADE PRACTICAL
PAPER CODE: 26/07/C/A-2/2

Date: 09/07/2026
TRADE CODE: 502

Bill of Materials

Tools and Instruments Required

1. Dial indicator with magnetic base
2. Digital multimeter
3. Plastic hammer
4. Socket spanner set
5. Steel rule
6. Test lamp 12V
7. Torque wrench
8. Trainees tool kit
9. Tray

Equipment and Machineries Required

1. Vehicle
2. Vehicle LMV
3. Air compressor

Materials Required

1. Auto electrical wires - as required
2. Banian cloth - as required
3. Cleaning solvent - as required
4. Cotton waste - as required
5. Diesel/kerosene - as required
6. Emery sheet - as required
7. Gasket kit - as required
8. Horn relay - as required
9. Horns - as required
10. Insulation tape - as required
11. Oil seal - as required
12. Power steering oil - as required
13. Soap oil - as required
14. Wheel chocks - as required

Note: All tools and equipment should be kept ready to perform the job as per syllabus of the trade.



753

DIRECTORATE GENERAL OF TRAINING (DGT)
ALL INDIA TRADE TEST, MAINS JULY 2026
CRAFTSMEN TRAINING SCHEME (CTS)
TRADE PRACTICAL EXAMINATION

TRADE: ELECTRONICS MECHANIC (NSQF), 2nd YEAR
SUBJECT: TRADE PRACTICAL
PAPER CODE: 26/07/C/A-2/2

Date: 09/07/2026
TRADE CODE: 446

Bill of Materials

Tools / Equipment / Instruments / Materials as required:

1. 3.5 mm stereo EP to EP cable – 1 No.
2. 6 mm to 3.5 mm phono adapter – 1 No.
3. 8051 microcontroller trainer kit
4. Audio signal source
5. Cleaning brush – 1 No.
6. CRO (0- 20) MHz, dual trace / DSO
7. Crocodile clips holder for MDF board
8. Digital multimeter with probes
9. Flux pen/Liquid flux
10. FM receiver using IC TEA 5591 A – 1 No.
11. IFA cleaning solution
12. Logic probe
13. Loudspeaker / Headphone – 1 No.
14. Magnifier with lamp
15. Microphone (Dynamic) – 1 No.
16. OFC cables with connector – 1 set
17. Optical fiber trainer kit
18. Patch cords – as required
19. Piece of medium density fiberboard (MDF)
20. Rosin cored solder wire
21. SMD soldering work station (hot air temperature/flow controller)
22. Solder paste tube/syringe
23. Trainees tool kit
24. Vacuum pick up tool

Note: All tools and equipment should be kept ready to perform the job as per syllabus of the trade.



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DIRECTORATE GENERAL OF TRAINING (DGT)
ALL INDIA TRADE TEST, MAINS JULY 2026
CRAFTSMEN TRAINING SCHEME (CTS)
TRADE PRACTICAL EXAMINATION

TRADE: FITTER (NSQF), 2nd YEAR
SUBJECT: TRADE PRACTICAL
PAPER CODE: 26/07/C/A-2/2

Date: 09/07/2026
TRADE CODE: 453

Bill of Materials

Fe310 - 50 ISF 8 x 75 mm – 2 Pieces

Note: All tools and equipment should be kept ready to perform the job as per syllabus of the trade.



1787

DIRECTORATE GENERAL OF TRAINING (DGT)
ALL INDIA TRADE TEST, MAINS JULY 2026
CRAFTSMEN TRAINING SCHEME (CTS)
TRADE PRACTICAL EXAMINATION

TRADE: ELECTRICIAN (NSQF), 1st YEAR
SUBJECT: TRADE PRACTICAL
PAPER CODE: 26/07/C/A-1/2

Date: 08/07/2026
TRADE CODE: 442

Bill of Materials

Name of the tools, instruments and equipments with specification

1. Automatic electric iron box 750W 250V - 1 No.
2. Ball peen hammer 250gms - 1 No.
3. Connector/Screw driver 100mm - 1 No.
4. Cutting plier 150mm - 1 No.
5. DC regulated power supply (0 to 30)V - 1 No.
6. Digital multimeter - 1 No.
7. Electrician trainees tool kit - 1 No.
8. Firmer chisel 12mm - 1 No.
9. Gimlet 5mm dia. 200mm - 1 No.
10. Hand drilling machine 6mm capacity - 1 No.
11. Keyhole saw 200mm - 1 No.
12. Mallet 75mm dia. head with handle - 1 No.
13. MC Ammeter 0 to 5A - 1 No.
14. MC Voltmeter 0 to 30V - 1 No.
15. Megger 500V - 1 No.
16. Multimeter - 1 No.
17. Nose plier 150mm - 1 No.
18. Rheostat 50 ohms, 2A - 1 No.
19. Screwdriver 150mm - 1 No.
20. Steel rule 30cm - 1 No.
21. Tenon-saw 300mm - 1 No.
22. Try square 150mm - 1 No.



250

Name of the materials with specification

1. 12mm screws - As required
2. 14 SWG Copper bare conductor - 1m
3. 20mm screws - As required
4. 25mm screws - As required
5. 3-core flexible cord (48/0.2 with 15A, 3 pin plug) - 1 No.
6. Batten lamp-holder 6A 250V - 1 No.
7. Bulb 60W, 250V - 1 No.
8. Flush mounting 250V 6A 3-pin socket - 3 Nos.
9. Flush mounting 250V 6A One way switch - 2 Nos.
10. Flush mounting type D.P. switch 250V 20A with neon indicator - 1 No.
11. Hook up wire 0.5 sq.mm - 2 meter
12. Kit-kat fuse-carrier with base flush-type 16A 250V - 1 No.
13. Neon lamp flush-mounting 250V with holder 6A - 1 No.
14. PVC copper cable 1.5 Sq.mm - 3m
15. Resistor 2000 ohms, 1 watt - 1 No.
16. Resistor 500 ohms, 1 watt - 1 No.
17. Test lamp 100W/240V - 1 No.
18. Thermostat for electric iron 750W 250V - 1 No.
19. Three core cable 2.5 Sq.mm - 5 metre
20. Three pin top 16A , 250V - 1 No.
21. Wooden board 375x250x80mm - 1 No.

Note: All tools and equipment should be kept ready to perform the job as per syllabus of the trade.



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DIRECTORATE GENERAL OF TRAINING (DGT)
ALL INDIA TRADE TEST, MAINS JULY 2026
CRAFTSMEN TRAINING SCHEME (CTS)
TRADE PRACTICAL EXAMINATION

TRADE: FITTER (NSQF), 1st YEAR
SUBJECT: TRADE PRACTICAL
PAPER CODE: 26/07/C/A-1/2

Date: 08/07/2026
TRADE CODE: 453

Bill of Materials

Fe310 - 75 ISF 8 x 54 mm - 1 No.

Note: All tools and equipment should be kept ready to perform the job as per syllabus of the trade.



178

DIRECTORATE GENERAL OF TRAINING (DGT)
ALL INDIA TRADE TEST, MAINS JULY 2026
CRAFTSMEN TRAINING SCHEME (CTS)
TRADE PRACTICAL EXAMINATION

TRADE: COMPUTER OPERATOR AND PROGRAMMING ASSISTANT
(NSQF)
SUBJECT: TRADE PRACTICAL
PAPER CODE: 26/07/C/A-1/1

Date: 08/07/2026
TRADE CODE: 421

Bill of Materials

1. MICROSOFT WORD 2019/Latest
2. MICROSOFT EXCEL 2019/Latest
3. MySQL Latest Version
4. Notepad/ any text editor
5. Web Browser
6. JAVA JDK LATEST VERSION
7. ANY TEXT EDITOR
8. PYTHON VER 3.10.5 OR LATEST

Note: All tools and equipment should be kept ready to perform the job as per syllabus of the trade.



247

DIRECTORATE GENERAL OF TRAINING (DGT)
ALL INDIA TRADE TEST, MAINS JULY 2026
CRAFTSMEN TRAINING SCHEME (CTS)
TRADE PRACTICAL EXAMINATION

TRADE: MECHANIC DIESEL (NSQF)
SUBJECT: TRADE PRACTICAL
PAPER CODE: 26/07/C/A-1/1

Date: 08/07/2026
TRADE CODE: 515

Bill of Materials

Tools/Instruments Required:

1. Circlip plier
2. Dial test indicator
3. Feeler gauge
4. Multimeter
5. Outside micrometer
6. Philips screwdriver set
7. Plastic hammer
8. Socket spanner set
9. Tachometer
10. Test lamp
11. Trainees tool kit
12. V-block

Equipment and Machineries Required:

1. Auto electrical test bench
2. Battery 12 V
3. Multi-cylinder diesel engine
4. Multi-cylinder diesel engine with mechanical governor in running condition
5. Surface table

Materials Required:

1. Banian cloth – as required
2. Carbon brushes – as required
3. Cotton waste – as required
4. Diesel/Kerosene – as required
5. Emery sheet – as required
6. Engine oil 20 W 40 – as required
7. Grease – as required
8. Lube oil – as required
9. Soap oil – as required
10. Solenoid switch – as required
11. Tray – as required

Note: All tools and equipment should be kept ready to perform the job as per syllabus of the trade.



746

DIRECTORATE GENERAL OF TRAINING (DGT)
ALL INDIA TRADE TEST, MAINS JULY 2026
CRAFTSMEN TRAINING SCHEME (CTS)
TRADE PRACTICAL EXAMINATION

TRADE: ELECTRONICS MECHANIC (NSQF), 1st YEAR
SUBJECT: TRADE PRACTICAL
PAPER CODE: 26/07/C/A-1/2

Date: 08/07/2026
TRADE CODE: 446

Bill of Materials

Tools / Equipment / Instruments / Materials as required:

1. 8-pin IC base – 1 No.
2. Breadboard – 3 No.
3. Capacitor 0.1 μ F – 2 Nos.
4. Capacitors - 0.01 μ F, 4.7 μ F, 25 V DC – 1 No.(each)
5. Carbon resistors 10 M Ω , 33 k Ω , 330 Ω , 1 M Ω , 1/4 watt – 1 No.(each)
6. CRO (0- 20) MHz, dual trace / DSO
7. Digital multimeter with probes
8. Flexible multi strand wire pieces (red colour, green colour, black colour) – as required
9. Hookup wire – as required
10. IC 555 – 1 No.
11. IC-7432 – 1 No.
12. LED 5mm (Red, Green) – 1 No.(each)
13. LED 5mm, Red – 1 No.
14. Miniature toggle switch SPST – 5 No.
15. Outside micrometer (0 – 25mm)
16. Pocket table book / wire table
17. Preset 47k Ω – 1 No.
18. Push-button switch (Push-to-ON) – 1 No.
19. Regulated DC power supply (0-30V/2A)
20. Resistor 10 Ω /1/4 W, 47 Ω /1/4 W, 330 Ω /1/4 W – 1 No.(each)
21. Resistor 330 Ω /1/4 W/CR25 – 2 Nos.
22. Rigid multistand wire piece – as required
23. Rosin cored solder
24. Single strand wire pieces (assorted sizes) – as required
25. Soldering iron (25W/230V)
26. Standard wire gauge
27. Trainees tool kit
28. UJT 2646 – 1 No.

Note: All tools and equipment should be kept ready to perform the job as per syllabus of the trade.



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DIRECTORATE GENERAL OF TRAINING (DGT)
ALL INDIA TRADE TEST, MAINS JULY 2026
CRAFTSMEN TRAINING SCHEME (CTS)
TRADE PRACTICAL EXAMINATION

TRADE: WELDER (NSQF)
SUBJECT: TRADE PRACTICAL
PAPER CODE: 26/07/C/A-1/1

Date: 08/07/2026
TRADE CODE: 969

Bill of Materials

1. MS Pipe Ø50 x 50 x 2 mm WT - 1 No.
2. MS Sheet 100 x 100 x 2 mm thick - 1 No.
3. CCMS filler wire - As required
4. Argon gas cylinder - 2 Nos. (As required)
5. Tungsten electrode - As required
6. GTAW plant
7. MS Plate 180 x 50 x 10 mm - 3 Nos.
8. MS Wire spool - As required
9. MS Electrode - As required
10. CO₂ gas - As required
11. GMAW plant
12. SMAW plant

Note: All tools and equipment should be kept ready to perform the job as per syllabus of the trade.



DIRECTORATE GENERAL OF TRAINING (DGT)
ALL INDIA TRADE TEST, MAINS JULY 2026
CRAFTSMEN TRAINING SCHEME (CTS)
TRADE PRACTICAL EXAMINATION

TRADE: MECHANIC MOTOR VEHICLE (NSQF), 1st YEAR
SUBJECT: TRADE PRACTICAL
PAPER CODE: 26/07/C/A-1/2

Date: 08/07/2026
TRADE CODE: 502

Bill of Materials

Tools and Instruments Required

1. Dial gauge
2. Feeler gauge
3. Plastic mallet
4. Socket spanner set
5. Straight edge
6. Torque wrench
7. Trainees tool kit
8. Tray

Equipment and Machineries Required

1. Air compressor
2. Multi cylinder diesel engine
3. Multi cylinder engine
4. Surface plate
5. Work bench
6. Work bench with vice

Materials Required

1. Anti-corrosive solution - as required
2. Banian cloth - as required
3. Cleaning brush - as required
4. Copper washer - as required
5. Cotton waste - as required
6. Diesel/Kerosene - as required
7. Emery sheet - as required
8. Engine oil 20W 40 - as required
9. Oil filter element - as required
10. Soap oil - as required
11. Turbocharger service kit - as required

Note: All tools and equipment should be kept ready to perform the job as per syllabus of the trade.



743

DIRECTORATE GENERAL OF TRAINING (DGT)
ALL INDIA TRADE TEST, MAINS JULY 2026
CRAFTSMEN TRAINING SCHEME (CTS)
TRADE PRACTICAL EXAMINATION

TRADE: COMPUTER OPERATOR AND PROGRAMMING ASSISTANT
(NSQF)
SUBJECT: TRADE PRACTICAL
PAPER CODE: 26/07/C/A-1/1

Date: 07/07/2026
TRADE CODE: 421

Bill of Materials

1. MICROSOFT WORD 2019/Latest
2. MICROSOFT EXCEL 2019/Latest
3. MySQL Latest Version
4. Notepad/ any text editor
5. Web Browser
6. JAVA JDK LATEST VERSION
7. ANY TEXT EDITOR
8. PYTHON VER 3.10.5 OR LATEST

Note: All tools and equipment should be kept ready to perform the job as per syllabus of the trade.



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DIRECTORATE GENERAL OF TRAINING (DGT)
ALL INDIA TRADE TEST, MAINS JULY 2026
CRAFTSMEN TRAINING SCHEME (CTS)
TRADE PRACTICAL EXAMINATION

TRADE: FITTER (NSQF), 1st YEAR
SUBJECT: TRADE PRACTICAL
PAPER CODE: 26/07/C/A-1/2

Date: 07/07/2026
TRADE CODE: 453

Bill of Materials

Fe310 - 65 ISF 8 x 65 mm - 1 No.

Note: All tools and equipment should be kept ready to perform the job as per syllabus of the trade.



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DIRECTORATE GENERAL OF TRAINING (DGT)
ALL INDIA TRADE TEST, MAINS JULY 2026
CRAFTSMEN TRAINING SCHEME (CTS)
TRADE PRACTICAL EXAMINATION

TRADE: ELECTRONICS MECHANIC (NSQF), 1st YEAR
SUBJECT: TRADE PRACTICAL
PAPER CODE: 26/07/C/A-1/2

Date: 07/07/2026
TRADE CODE: 446

Bill of Materials

Tools / Equipment / Instruments / Materials as required:

1. Analog/Digital multimeter with probes
2. Analog/Universal IC tester
3. Assorted types and values of different types of capacitors – as required
4. Breadboard – 1 No.
5. Cleaning brush
6. Connecting wires – as required
7. Cotton cloth
8. CRO (0- 20) MHz, dual trace / DSO
9. DC ammeter (0-500 mA)
10. DC voltmeter (0-24V)
11. Digital LCR meter
12. Digital multimeter with probes
13. Diodes (1N4001) – 4 Nos.
14. Dual regulated DC power supply (0-30V/2A)
15. Electrician knife
16. Function generator
17. Gloves
18. Goggles
19. Hookup wire – as required
20. IC 74HC00 (Quad Nand Gate) – 2 Nos.
21. IC base (8 pin), DIP – 2 Nos.
22. IC MC74HC73 (Dual JK Flip-Flop) or IC 74LS76 (JK-FF) – 1 No.
23. LED (Red, Green) – 1 No.(each)
24. Ohm meter
25. Op-Amp IC's LM324, UA741 – 2 Nos.(each)
26. Regulated DC power supply (0-30V/2A)



Tools / Equipment / Instruments / Materials as required:

27. Resistor $330\Omega/1/4$ W/CR25 – 4 Nos.
28. Resistors $1/4$ W/CR25 - $10K\Omega$ – 4 Nos.
29. Resistors $1/4$ W/CR25 -100 K – 2 Nos.
30. Semiconductor data book
31. Small PV cells – as required
32. Source of bright light or access to direct sunlight (desk lamp or flashlight could be substituted)
33. Toggle switch – 4 Nos.
34. Trainees tool kit
35. Two electrical leads with crocodile clips

Note: All tools and equipment should be kept ready to perform the job as per syllabus of the trade.



1739

DIRECTORATE GENERAL OF TRAINING (DGT)
ALL INDIA TRADE TEST, MAINS JULY 2026
CRAFTSMEN TRAINING SCHEME (CTS)
TRADE PRACTICAL EXAMINATION

TRADE: ELECTRICIAN (NSQF), 1st YEAR
SUBJECT: TRADE PRACTICAL
PAPER CODE: 26/07/C/A-1/2

Date: 07/07/2026
TRADE CODE: 442

Bill of Materials

Name of the tools, instruments and equipments with specification

1. Autotransformer 270V, 1KVA - 1 No.
2. Combination Plier 150mm - 1 No.
3. Digital multimeter - 1 No.
4. Electrician's Tool kit - 1 No.
5. Flat file bastard 250mm - 1 No.
6. MC Milliammeters 0 - 30mA - 1 No.
7. MC Milliammeters 0 - 500mA - 3 Nos.
8. MC Voltmeter 0 to 15V - 1 No.
9. MI Ammeter 0 to 10A - 1 No.
10. MI Voltmeter 0 to 300V - 1 No.
11. Multimeter - 1 No.
12. Ohmmeter 500 ohms - 1 No.
13. Power supply unit 0 - 30V - 1 No.
14. Regulated power supply 0 to 30V - 1 No.
15. Screw driver 150mm - 1 No.
16. Single phase Transformer 115/230V, 1KVA - 1 No.
17. Soldering iron 65 watts, 220 volt - 1 No.
18. Steel rule 30cm - 1 No.
19. Trainees tool kit - 1 No.
20. Variable DC power supply unit 0-30V/1A - 2 Nos.
21. Wire Stripper - 1 No.



Name of the materials with specification

1. Lug board / Bread board - 1 No.
2. Patch cords - As required
3. Push button 250V, 6A - 1 No.
4. PVC insulated Copper wire 1.5 sq.mm - 5 meter
5. PVC insulated copper wire 7/1.06mm - 0.5 meter - 2 Nos.
6. Resin cored solder 25gms - 1 No.
7. Resin Flux 10gms - 1 No.
8. Resistors 1K - 4 Nos.
9. Resistors 2.2K - 1 No.
10. Resistors 3.3K - 1 No.
11. Resistors 4.7K - 1 No.
12. Sand paper '00' - 1 No.
13. SPST switch 6A, 250V - As required
14. Toggle switch 1amp - 2 Nos.
15. Two pole MCB, 230V, 10A - 1 No.

Note: All tools and equipment should be kept ready to perform the job as per syllabus of the trade.



DIRECTORATE GENERAL OF TRAINING (DGT)
ALL INDIA TRADE TEST, MAINS JULY 2026
CRAFTSMEN TRAINING SCHEME (CTS)
TRADE PRACTICAL EXAMINATION

TRADE: MECHANIC MOTOR VEHICLE (NSQF), 1st YEAR
SUBJECT: TRADE PRACTICAL
PAPER CODE: 26/07/C/A-1/2

Date: 07/07/2026
TRADE CODE: 502

Bill of Materials

Tools and Instruments Required

1. Dial indicator with magnetic stand
2. Digital multimeter
3. Feeler gauge
4. Socket spanner set
5. Straight edge
6. Trainees tool kit
7. Tray

Equipment and Machineries Required

1. Air compressor
2. Multi cylinder diesel engine
3. Multi cylinder engine
4. Temperature gauge
5. Vehicle (LMV)

Materials Required

1. Banian cloth - as required
2. Cotton waste - as required
3. Diesel/Kerosene - as required
4. Engine oil - as required
5. Gasket - as required
6. Head gasket - as required
7. Insulation tape - as required
8. Lube oil SAE 20W40 - as required
9. Petrol/Diesel - as required
10. Radiator coolant - as required
11. Soap oil - as required
12. Thermostat valve - as required
13. Wheel chocks - as required

Note: All tools and equipment should be kept ready to perform the job as per syllabus of the trade.



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DIRECTORATE GENERAL OF TRAINING (DGT)
ALL INDIA TRADE TEST, MAINS JULY 2026
CRAFTSMEN TRAINING SCHEME (CTS)
TRADE PRACTICAL EXAMINATION

TRADE: MECHANIC DIESEL (NSQF)
SUBJECT: TRADE PRACTICAL
PAPER CODE: 26/07/C/A-1/1

Date: 07/07/2026
TRADE CODE: 515

Bill of Materials

Tools/Instruments Required:

1. Dial indicator with magnetic stand
2. Feeler gauge
3. Socket spanner set
4. Straight edge
5. Trainees tool kit

Equipment and Machineries Required:

1. Air compressor
2. Multi-cylinder diesel engine
3. Radiator
4. Water jet washer

Materials Required:

1. Banian cloth – as required
2. Cotton waste – as required
3. Descaling solution – as required
4. Diesel/Kerosene – as required
5. Lube oil SAE 20W 40 – as required
6. Oil pump service kit – as required
7. Radiator coolant – as required
8. Radiator pressure cap – as required
9. Soap oil – as required
10. Tray – as required

Note: All tools and equipment should be kept ready to perform the job as per syllabus of the trade.



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DIRECTORATE GENERAL OF TRAINING (DGT)
ALL INDIA TRADE TEST, MAINS JULY 2026
CRAFTSMEN TRAINING SCHEME (CTS)
TRADE PRACTICAL EXAMINATION

TRADE: WELDER (NSQF)
SUBJECT: TRADE PRACTICAL
PAPER CODE: 26/07/C/A-1/1

Date: 07/07/2026
TRADE CODE: 969

Bill of Materials

1. Aluminium sheet 150 x 50 x 3 mm thick - 2 Nos.
2. Aluminium filler wire – As required
3. Argon gas cylinder - 2 Nos. (As required)
4. Tungsten electrode
5. GTAW plant
6. MS Plate 180 x 50 x 10 mm - 3 Nos.
7. MS Electrode - As required
8. CO₂ gas - As required
9. MS Wire spool - As required
10. GMAW plant
11. SMAW plant

Note: All tools and equipment should be kept ready to perform the job as per syllabus of the trade.



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DIRECTORATE GENERAL OF TRAINING (DGT)
ALL INDIA TRADE TEST, MAINS JULY 2026
CRAFTSMEN TRAINING SCHEME (CTS)
TRADE PRACTICAL EXAMINATION

TRADE: COMPUTER OPERATOR AND PROGRAMMING ASSISTANT
(NSQF)
SUBJECT: TRADE PRACTICAL
PAPER CODE: 26/07/C/A-1/1

Date: 06/07/2026
TRADE CODE: 421

Bill of Materials

1. MICROSOFT POWERPOINT 2019/Latest
2. MICROSOFT EXCEL 2019/Latest
3. MySQL Latest Version
4. Notepad/ any text editor
5. Web Browser
6. JAVA JDK LATEST VERSION
7. ANY TEXT EDITOR
8. PYTHON VER 3.10.5 OR LATEST

Note: All tools and equipment should be kept ready to perform the job as per syllabus of the trade.



DIRECTORATE GENERAL OF TRAINING (DGT)
ALL INDIA TRADE TEST, MAINS JULY 2026
CRAFTSMEN TRAINING SCHEME (CTS)
TRADE PRACTICAL EXAMINATION

TRADE: ELECTRONICS MECHANIC (NSQF), 1st YEAR
SUBJECT: TRADE PRACTICAL
PAPER CODE: 26/07/C/A-1/2

Date: 06/07/2026
TRADE CODE: 446

Bill of Materials

Tools / Equipment / Instruments / Materials as required:

1. 14 pin IC base – 2 Nos.
2. Ammeter, (0 – 300mA, MC) – 1 No.
3. Analog / Digital IC tester
4. Assorted analog ICs such as Op-Amp and timer ICs (IC 741, LM 324 IC 555) – 1 No.(each)
5. Breadboard – 1 No.
6. Continuity tester
7. Data sheet of ICs used
8. Different type of fuses
9. Digital multimeter with probes
10. Hookup wire – as required
11. IC-7404, 7408 – 1 No.(each)
12. LED 5mm (Red) – 4 Nos.
13. Logic probe
14. Lug board / PCB – 1 No.
15. Miniature toggles switch SPDT – 2 Nos.
16. Patch cords – as required
17. PVC wire (1.5 sq.mm)
18. PVC wire (2.5 sq.mm)
19. Regulated DC power supply (0-30V/2A)
20. Resistor 330Ω $\frac{1}{4}$ W/CR25 – 4 Nos.
21. Resistor 470Ω $\frac{1}{2}$ W – 1 No.
22. Rosin cored solder
23. Soldering iron (25W/230V)
24. Trainees tool kit
25. Voltmeter, (0 – 10V, MC) – 1 No.
26. Voltmeter, (0 – 30V, MC) – 2 Nos.
27. Wire stripper
28. Zener diode 5.6V – 1 No.

Note: All tools and equipment should be kept ready to perform the job as per syllabus of the trade.



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DIRECTORATE GENERAL OF TRAINING (DGT)
ALL INDIA TRADE TEST, MAINS JULY 2026
CRAFTSMEN TRAINING SCHEME (CTS)
TRADE PRACTICAL EXAMINATION

TRADE: MECHANIC MOTOR VEHICLE (NSQF), 1st YEAR
SUBJECT: TRADE PRACTICAL
PAPER CODE: 26/07/C/A-1/2

Date: 06/07/2026
TRADE CODE: 502

Bill of Materials

Tools and Instruments Required

1. Digital multimeter
2. Hydro meter
3. Injector cleaning kit
4. Plastic mallet
5. Socket spanner set
6. Trainees tool kit
7. Tray

Equipment and Machineries Required

1. Air compressor
2. Injector tester (Hand operated)
3. Injector tester rig
4. Lead acid battery (12 V)
5. Multi cylinder diesel engine
6. Work bench with vice

Materials Required

1. Banian cloth - as required
2. Cotton rag - as required
3. Cotton waste - as required
4. Diesel - as required
5. Distilled water with battery acid - as required
6. Injector service kit - as required
7. Soap oil - as required

Note: All tools and equipment should be kept ready to perform the job as per syllabus of the trade.



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DIRECTORATE GENERAL OF TRAINING (DGT)
ALL INDIA TRADE TEST, MAINS JULY 2026
CRAFTSMEN TRAINING SCHEME (CTS)
TRADE PRACTICAL EXAMINATION

TRADE: WELDER (NSQF)
SUBJECT: TRADE PRACTICAL
PAPER CODE: 26/07/C/A-1/1

Date: 06/07/2026
TRADE CODE: 969

Bill of Materials

1. SS Sheet 150 x 50 x 2 mm thick - 2 Nos.
2. SS filler wire – As required
3. Argon gas cylinder - 2 Nos. (As required)
4. Tungsten electrode – As required
5. GTAW plant
6. MS Plate 180 x 50 x 12 mm - 3 Nos.
7. MS Wire spool, CO₂ gas - As required
8. MS Electrode - As required
9. GMAW plant
10. SMAW plant

Note: All tools and equipment should be kept ready to perform the job as per syllabus of the trade.



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DIRECTORATE GENERAL OF TRAINING (DGT)
ALL INDIA TRADE TEST, MAINS JULY 2026
CRAFTSMEN TRAINING SCHEME (CTS)
TRADE PRACTICAL EXAMINATION

TRADE: MECHANIC DIESEL (NSQF)
SUBJECT: TRADE PRACTICAL
PAPER CODE: 26/07/C/A-1/1

Date: 06/07/2026
TRADE CODE: 515

Bill of Materials

Tools/Instruments Required:

1. Circlip plier
2. Dial gauge
3. Filter wrench
4. Hydrometer
5. Multimeter
6. Plastic hammer/Mallet
7. Socket spanner set
8. Tachometer
9. Torque wrench
10. Trainees tool kit

Equipment and Machineries Required:

1. Air compressor
2. Battery charger
3. Compression gauge
4. Fuel injector tester (Hand operated)
5. Lead acid battery 12V
6. Multi-cylinder diesel engine
7. Work bench with vice

Materials Required:

1. Anti-corrosive solution – as required
2. Banian cloth – as required
3. Cleaning brush – as required
4. Cotton cloth – as required
5. Cotton waste – as required



Materials Required:

6. Cylinder head gasket – as required
7. Diesel/Kerosene – as required
8. Distilled water – as required
9. Emery sheet – as required
10. Engine oil 20W 40 – as required
11. Fuel filter – as required
12. Oil filter – as required
13. Soap oil – as required
14. Tray – as required
15. Turbocharger service kit – as required
16. Vaseline or petroleum jelly – as required

Note: All tools and equipment should be kept ready to perform the job as per syllabus of the trade.



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DIRECTORATE GENERAL OF TRAINING (DGT)
ALL INDIA TRADE TEST, MAINS JULY 2026
CRAFTSMEN TRAINING SCHEME (CTS)
TRADE PRACTICAL EXAMINATION

TRADE: FITTER (NSQF), 1st YEAR
SUBJECT: TRADE PRACTICAL
PAPER CODE: 26/07/C/A-1/2

Date: 06/07/2026
TRADE CODE: 453

Bill of Materials

Fe310 - 75 ISF 8 x 75 mm - 1 No.

Note: All tools and equipment should be kept ready to perform the job as per syllabus of the trade.



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DIRECTORATE GENERAL OF TRAINING (DGT)
ALL INDIA TRADE TEST, MAINS JULY 2026
CRAFTSMEN TRAINING SCHEME (CTS)
TRADE PRACTICAL EXAMINATION

TRADE: ELECTRICIAN (NSQF), 1st YEAR
SUBJECT: TRADE PRACTICAL
PAPER CODE: 26/07/C/A-1/2

Date: 06/07/2026
TRADE CODE: 442

Bill of Materials

Name of the tools, instruments and equipments with specification

1. Autotransformer 270V, 1KVA - 1 No.
2. Ball peen hammer 250gms - 1 No.
3. Bradawl 150mm - 1 No.
4. Combination Plier 150mm - 1 No.
5. Connector/Screw driver 100mm - 1 No.
6. Digital multimeter - 1 No.
7. Electrician Knife - 1 No.
8. Electrician trainees tool kit - 1 No.
9. Gimlet 5mm dia. 200mm - 1 No.
10. Hacksaw frame with blade 300mm - 1 No.
11. Hand drilling machine 6mm capacity - 1 No.
12. Mallet 75mm dia. head with handle - 1 No.
13. Megger 500 Volt - 1 No.
14. MI Ammeter 0 to 10A - 1 No.
15. MI Ammeter 0 to 5A - 1 No.
16. MI Voltmeter 0 to 150V - 1 No.
17. MI Voltmeter 0 to 300V - 1 No.
18. Neon Tester - 1 No.
19. Power factor meter 250V, 10A, 0.5 lag to 0.5 lead - 1 No.
20. Screw driver 150mm - 1 No.
21. Screw driver 200mm - 1 No.
22. Side cutting plier 150mm - 1 No.
23. Single phase Transformer 115/230V, 1KVA - 1 No.
24. Single phase Variable lamp load 1.25kW - 1 No.
25. Try square 150mm - 1 No.
26. Wattmeter 250V, 5A/10A - 2 Nos.
27. Wire Stripper - 1 No.



Name of the materials with specification

1. 12mm screws - As required
2. 20mm saddles - 30 Nos.
3. 20mm screws - As required
4. 25mm screws - As required
5. 3 PIN socket 16A, 250V - 2 Nos.
6. 3 PIN socket 16A, 250V with switch - 2 Nos.
7. Copper wire 14 SWG - 10m
8. Flush mounting 250V 16A One way switch - 2 Nos.
9. Flush mounting 250V 6A One way switch - 2 Nos.
10. Insulation tape - 1 No.
11. Kit Kat fuse 16A surface mounting 250V - 2 Nos.
12. PVC bend 20mm - 1 No.
13. PVC conduit pipe 20mm dia - 11m
14. PVC copper cable 1.5 Sq.mm - 40m
15. PVC copper cable 2.5 Sq.mm - 40m
16. PVC Copper wire 1.5 sq.mm - 10 Meter
17. PVC gang box three way 16A, 240V - 2 Nos.
18. PVC gang box three way 6A, 240V - 2 Nos.
19. PVC insulated copper wire 1.5 Sq.mm - 10 meter
20. PVC three way junction box 20mm - 3 Nos.
21. Terminal plate 16A, 6 way
22. Test lamp 40 watt, 220 volt - 1 No.
23. Two Pole MCB, 240V, 10A - 2 Nos.

Note: All tools and equipment should be kept ready to perform the job as per syllabus of the trade.



**BILL OF MATERIAL REQUIRED FOR EACH TRAINEE FOR THE FOLLOWING TRADES DURING
THE ALL INDIA TRADE TEST OF ANNUAL PATTERN EXAMINATION UNDER CRAFTSMAN
TRAINING SCHEME & DUAL SYSTEM MODE TO BE HELD IN THE MONTH OF JULY -2026**

Year-2

**2ND YEAR BILL OF MATERIAL FOR AITT PRACTICAL EXAMINATION UNDER CTS & DST (YEARLY PATTERN) TO BE
HELD IN THE MONTH OF JULY -2026.**

TECHNICIAN MECHATRONICS

1. Pneumatic trainer kit – 1 no.
2. 3/2 directional control roller valve – 1 no.
3. 5/2 directional control with pilot actuated valve – 1 no.
4. 3/2 directional control valve push button – 1 no.
5. Compressor – 1no

ATTENDANT OPERATOR CHEMICAL PLANT

(BOM For 20 trainees)

1. Filter Cloths [8picess] – (Made from materials like polyester, nylon or cotton. Filter cloths are used to capture solid and allow liquid to pass through). R
2. Calcium carbonate – 5kg, Cotton – 5 kg
3. Distilled Water – 5 liter ,Cotton – 5kg
4. Distilled Water –10 liter, infusion set – 02, Violet color – 50ml

INFORMATION & COMMUNICATION TECHNOLOGY SYSTEM MAINTENANCE

1. Windows Server OS, Server/ Desktop PC, LAN setup
2. Switch, PC, Router, Cables, Network simulator (optional)
3. Ubuntu Server ISO, PC, Terminal access, LAN setup
4. Router, Switch, PC, DNS tools
5. IP camera, LAN cable, switch/ router, PC

INSTRUMENT MECHANIC

1. LVDT Trainer
2. Various Tachometers
3. Dead Weight Tester
4. Magnetic Flowmeter
5. Digital Tachometer
6. Deflecting & Rotating vane Flowmeter



7. Hydraulic Actuator
8. Thermocouple
9. Milli voltmeter

MECHANIC AGRICULTURE MACHINERY

1. Disc harrows - 01
2. Cotton waste – As required
3. Cultivator
4. Trainees tool kit
5. Spare parts as per requirement
6. Oil cane
7. Grease gun

TECHNICIAN ELECTRONICS SYSTEM DESIGN & REPAIR

1. 8051 Trainer Kit
2. Computer
3. Smart Parking Trainer Kit

TEXTILE WET PROCESSING TECHNICIAN

1. Cotton Fabric
2. Sodium hydroxide
3. Sodium hydrosulfite
4. PH paper
5. Washing detergent and liquid solution
6. Vat dye stuff
7. TRO

WIREMAN

1. Assorted UTP, STP cables
2. Assorted OFC connectors
3. Assorted OFC cables
4. RJ 45 co axial cable and connector
5. Cable connector plug RJ 11 coaxial cable
6. M10 cover with LAN board Assembly.
7. PVC sheathed aluminum cable 1.5 mm sq. 250 grade
8. Flush type two-way switch 6A, 250V
9. Flush type one-way switch 6A, 250V
10. Batten lamp holder
11. Bulb 40W, 250V
12. Intermediate switch 6A/250V



13. ICDP switch 16A/250V
14. Super enameled copper wire
15. Empire sleeve 1mm, 2mm
16. Air Dry varnish
17. Resin Core solder 16 SWG
18. Smooth emery paper
19. Fabric based fiber sheet – 3mm and 6mm

INFORMATION TECHNOLOGY

1. Network Switch.
2. Ethernet Cable (Cat 6/Cat 5e) with connector.
3. TCP/IP Networking Software.
4. Python software with Python IDE.
5. Code editor.
6. Web browser.
7. Computer with internet connection.

ARCHITECTURAL DRAUGHTSMAN

1. Auto cad
2. Answer sheet (Drawing Sheet)
3. Drawing Board

CENTRAL AC PLANT MECHANIC

1. Brazing rod, Refrigerant R-22
2. Psychometric chart

DRAUGHTSMAN CIVIL

1. Drawing Sheets – 24 NOS.

(Bill of materials for 24 Trainees)

DRAUGHTSMAN MECHANICAL

1. Desktop
2. Auto Cad software

INSTRUMENT MECHANIC (CHEMICAL PLANT)

1. Thermocouple (Different types)
2. Multimeter
3. Pressure gauge



4. Dead weight Tester
5. Air plunge Indicator

(Bill of materials for 20 Trainees)

LABORATORY ASSISTANT (CHEMICAL PLANT)

1. Filter paper
2. Benzene – 500ml
3. Coconut oil – 500 ml

LIFT AND ESCALATOR MECHANIC

1. PPE –As Required
2. Elevator car/Cabin-1no.
3. Cleaning Cloth / Wipes- As needed
4. Oil Dispenser (for rail oil)- 1 per rail
5. Grease- As required

MACHINIST

1. M. S. Block-50 x 50 x 25 mm

MECHANIC ELECTRIC VEHICLE

1. Battery cable
2. Gel for battery terminal
3. Insulation tape
4. Emery sheet
5. Cotton waste
6. Grease
7. Lubricant
8. Cleaning brush

MAINTENANCE MECHANIC (CHEMICAL PLANT)

1. Cotton waste-1 kg
2. Petrol-1litre
3. Surf-200 gm
4. Silicon Grease-500 gm
5. Emery paper-5 nos
6. Mobil-2 litre

(Bill of materials for 20 Trainees)



CNC MACHINING TECHNICIAN

1. Aluminum ROUND BAR- DIA 50X110 mm 01 no

SURVEYOR

1. Drawing sheet A3-One for Each
2. Pencil HB
3. Eraser
4. Set of scale
5. Cello Tape

TOOL & DIE MAKER (Press Tool, Jigs & Fixture)

1. Ms Round Bar- Dia 40x70 Mm 01 No

TURNER

1. Task I: Fe 310: ISR $\Phi 55 \times 105$ mm

PAINTER GENERAL

1. Paint(any)- as reqd.
2. MS Flat 50 x 5 x 100 mm- 1 piece.
3. Paint: Black Colour.
4. Primer - as reqd.

OPERATOR ADVANCED MACHINE TOOL

1. Aluminium solid round bar: $\Phi 50 \times 110$ mm

MECHANIC MACHINE TOOL MAINTENANCE

1. MS flat 50 x 2- 152 mm- 2pieces

ELECTRICAL POWER DISTRIBUTION

1. Push button green/red/green - 1 each
2. Indicator lamp with holder - 5 Nos.
3. Overload relay 0-15A, 415V - 1 No.
4. MCB 3 Pole 25A , 415V - 1 No.
5. Race ways - 2 meter
6. Wire clips - 4 Nos.



7. 1.5 sq.mm copper cable 650V - as reqd. (red, black, yellow, blue, green)
8. Terminal connectors - as reqd.
9. Wire ferrule - as reqd.
10. Grommets - as reqd.
11. Lug/thimble - as reqd.
12. Cable binding straps and buttons - as reqd.
13. Nylon cable ties - 10 Nos.
14. Assorted size bolt and nut - as reqd

MECHANIC MINING MACHINERY

1. Hydraulic Oil
2. Lubricating Oil
3. Grease
4. O-rings and Seals
5. Thread Seal Tape
6. Gasket Sealant
7. Gear oil
8. Cleaning Solvent/Kerosene

REFRIGERATION AND AIR CONDITIONING TECHNICIAN

1. Refrigerant Gas
2. Nitrogen Gas
3. Terminal Lugs
4. Cable Ties
5. Contact Cleaner Spray
6. Electrical Insulation Tape
7. Hydrochloric Acid (Diluted 5–10%)
8. Baking Soda / Sodium Bicarbonate (Neutralization)
9. Rubber Hose Pipe
10. Teflon Tape

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



Year-1

1ST YEAR BILL OF MATERIAL FOR AITT PRACTICAL EXAMINATION UNDER CTS & DST (YEARLY PATTERN) TO BE HELD IN THE MONTH OF JULY -2026.

DRESS MAKING

1. Poplin cloth-50cm
2. Voil / Rubia-1mtr
3. Matching thread-2nos
4. Hooks-6nos
5. Brown paper-1no
6. Tool kit

MECHANIC ELECTRIC VEHICLE

1. Solder
2. Flux
3. Lug socket
4. Jumper wire
6. Insulation tape
7. Fusible link
8. Cotton waste
9. Emery paper

SEWING TECHNOLOGY

1. Poplin cloth-50cm
2. Voil / Rubia-1mtr
3. Matching thread-2nos
4. Hooks-6nos
5. Brown paper-1no
6. Tool kit

ARCHITECTURAL DRAUGHTSMAN

1. Auto cad
2. Answer sheet (Drawing Sheet)
3. Drawing board

CENTRAL AC PLANT MECHANIC

1. Brazing rod, Refrigerant R-22



COMPUTER HARDWARE AND NETWORK MAINTENANCE

1. Computer Running Windows 8/10
2. Microsoft Office Software
3. Motherboard
4. Processor
5. Heat sink
6. CPU Cooling fan
7. RAM, HDD, CD/DVD Drive
8. SMPS, Connector Cables, Computer Case
9. Windows OS 8/10
10. RJ-45 Connector, I/O Connector, Crimping Tool, UTP Cable, LAN Cable Tester

DRAUGHTSMAN CIVIL

1. Drawing Sheets – 24 NOS
2. Chain Surveying Instruments – 01 Sets (Chain, Arrows, Tapes, Ranging Rod, Pegs, Plumb-bob, Cross Staff, Optical Square, Prism Square)

(Bill of materials for 24 Trainees)

ELECTRICAL POWER DISTRIBUTION

1. Resistors 2K, 1 Watt - 3 Nos.
2. Connecting leads - as reqd.
3. Switch 6A 250V - 2 Nos
4. Resistors, carbon composition 62K Ω - 1 No. 1/4 W, $\pm$ 5%
5. 33K Ω - 1 No.
6. 22K Ω - 1 No.
7. Resistors, carbon composition
8. 220 Ω - 1 No.
9. 1/2 W, $\pm$ 5%
10. 330 Ω - 1 No.
11. 470 Ω - 1 No.
12. Choke (tube light) 40 W, 0.43 A, 250 V - 1 No.
13. I.C.D.P. switch - 16 amps, 250 volts - 1 No.
14. Wire wound resistor 500 Ω /0.5A - 1 No.
15. Electrolytic capacitor 8 μ Fd/400V - 1 No.
16. Lamp BC - 100W 240V - 6 Nos.

FOUNDRYMAN

1. Aluminum -20 kg
2. Moulding Sand
3. Bentonite



4. Petrol/ diesel/ kerosene- 3 Ltr
5. Cotton waste
6. Degasser Tablet

INFORMATION & COMMUNICATION TECHNOLOGY SYSTEM MAINTENANCE

1. Breadboard, 7805/7812 IC, capacitor, resistors, wires, multimeter, regulated power supply
2. Diodes (1N4007), Capacitor (1000 μ F), Transformer, Breadboard, Load resistor, Multimeter
3. Logic gate ICs (7400, 7402, 7404), Breadboard, Power supply, LED/Logic probe
4. Desktop PC, RAM (DDR3/DDR4), Anti-static wrists trap, Screw drivers
5. PC with MS Excel

INDUSTRIAL PAINTER

1. Metal primer
2. Thinner
3. Putty
4. Emery paper
5. Brush
6. Hardener

INSTRUMENT MECHANIC

1. Digital Multimeter
2. Digital LCR Meter
3. Capacitors (10 μ f, 100 μ f, 1000 μ f)
4. Commonly used hand tools, wires, power supplies as per requirements.
5. Different types of Transformers
6. Different types of Logic Gate ICs and Digital trainer kit
7. Discrete Trainer Kit
8. Transistors (FET, MOSFET)
9. Transistor tester
10. Ammeter & Voltmeter

LIFT & ESCALATOR MECHANIC

1. Pvc board- 8" * 10" (as required)
2. Sp switch, 6 amp socket, two way switch, battery holder-as required
3. Rheostat-0 to 1 amp



4. Crimping lug-16amp (as required)
5. Connecting wire - 1.5mm sq. (20meter)

MACHINIST

1. M. S. rod - dia-40 x 60 mm

MARINE ENGINE FITTER

1. Four stroke running diesel engine
2. Cotton waste
3. Coolant
4. Gasket

MECHANIC AGRICULTURE MACHINERY

1. Engine assembly
2. Cotton waste- As required
3. Battery
4. Trainees tool kit
5. Spare parts as per requirement
6. Hydrometer
7. Grease gun
8. Cylinder bore dial gauge
9. Kerosene as per required

PLASTIC PROCESSING OPERATOR

1. HDPE Blow Grade Material, 250 ml beverage Bottle mould
2. Drawing Sheet, Pencil

TECHNICIAN MECHATRONICS

1. Resistor 470 ohm = 1no.
2. Resistor 10 Kilo ohm = 2 nos
3. LED Red 5mm = 01 no.
4. 2N3904 Transistors =2 nos.

TECHNICIAN ELECTRONICS SYSTEM DESIGN & REPAIR

1. Resistors of different values
2. Secondary Battery
3. IC 7400
4. IC 7402
5. Hydrometer



MECHANIC TRACTOR

1. Multipurpose Grease
2. Cleaning Solvent/Kerosene
3. Thread Locking Compound
4. Clutch Lining Rivets
5. New Clutch Facing Material
6. Tyre Mounting Lubricant
7. Puncture Repair Kit

TEXTILE WET PROCESSING TECHNICIAN

1. Cotton Fabric
2. Sodium hydroxide
3. Sodium carbonate
4. Acetic acid
5. P H paper
6. MS flat (92x45x5 mm)

WIREMAN

1. 1.5 mm sq. PVC copper wire
2. Intermediate switch 6A, 250V
3. Flush type two-way switch 6A, 250V
4. PVC pipe 19mm size
5. PVC switch board 4" x4"
6. PVC L, T
7. MCB 2 pole 2
8. DC power supply for running DC motor

CARPENTER/WOOD WORK TECHNICIAN

- | | |
|--|---------|
| 1. Hard wood 75 x 50 x 260 (Sal wood) | 02 Nos. |
| 2. Sand paper No.100 and No.120 (each 1) | 02 Nos. |

WELDER PIPE/ STRUCTURAL/ GMAW>AW

1. MS pipe diameter Φ 50x6 -76 - 2 pieces
2. CCMS filler wire diameter 1.6mm
3. 50 ISF 10 - 152 -2 pieces



DRAUGHTSMAN MECHANICAL

1. Drawing sheet, Pencil
2. Eraser, Sharpener
3. Drawing Instrument box

INSTRUMENT MECHANIC (CHEMICAL PLANT)

1. Copper Sulphate-500gm
2. Distilled Water-10ltr
3. Battery (6v-12v)-10 nos
4. Connecting wires with Alligator Clips-20 wires
5. Copper Electrodes-20 strips
6. Copper wire 1.5mmsq- 10 mtr
7. Emery Paper-10 sheets
8. Voltmeter
9. Ammeter
10. Rheostat
11. Inductor, Capacitor and Inductor
12. Bread board
13. CRO

(Bill of materials for 20 Trainees)

FIRE TECHNOLOGY AND INDUSTRIAL SAFETY MANAGEMENT

1. Different types of fire extinguishers (water, foam, CO₂, dry chemical, etc.)
2. Fire tray
3. Wood
4. LPG gas with Cylinder
5. Ethanol, heptane, or cooking oil

INDUSTRIAL ROBOTICS AND DIGITAL MANUFACTURING TECHNICIAN

1. Industrial Robot cell
2. Mounted tool on robot
3. Teach pendant

INFORMATION TECHNOLOGY

1. MS Excel
2. Diode- 1N4007
3. Connecting Wire



4. Digital multimeter
5. Step down transformer-230/12 volt
6. Breadboard
7. Computer with internet connection.

ATTENDANT OPERATOR CHEMICAL PLANT

1. Pendulum Thread – 01 No.
2. Hacksaw Blade – as req.
3. M.S Plat – 72 * 72 * 10 mm- 2 pieces,
4. Cotton – as req.
5. Sand Paper(Rough and Smooth) – 2 Pcs,

LABORATORY ASSISTANT (CHEMICAL PLANT)

1. Resistance Thermometer
2. Wire-20 M,100 Watt Bulb-3,Voltmere,Ammeter
3. NaOH, Dilute HCl, Indicator, Distilled Water

MANUFACTURING PROCESS CONTROL AND AUTOMATION

1. Notebook and pen
2. Connected components Workbench software for pc

MASON(BUILDING CONSTRUCTOR)

1. Measuring tape 30 Mtr.
2. Brick
3. Trowel
4. Cement
5. Sand
6. Try square
7. Plumb bob
8. Level spirit
9. Tray
10. Bucket
11. Drum
12. Hose pipe.
13. Lime powder

MAINTENANCE MECHANIC (CHEMICAL PLANT)

1. Cold-pressed coconut oil-500 ml
2. Sodium hydroxide -500 ml



3. Red litmus paper -1 pkt
4. Sodium chloride-500 gm
5. Filter paper-1 pkt
6. LPG gas fillup-1 cylinder

(Bill of materials for 20 Trainees)

PLUMBER

1. $\frac{1}{2}$ " Diameter G.I Pipe 5.5 meter , $\frac{1}{2}$ " G.I Tee -3, $\frac{1}{2}$ " G.I Elbow -3, $\frac{1}{2}$ " G.I socket - 3, $\frac{1}{2}$ " bibcock-3, Teflon as required
2. Cotton waste as required
3. $\frac{1}{2}$ " UPVC Pipe 300 mm , $\frac{1}{2}$ " UPVC socket -01, Solvent cement, cotton waste , emery paper as required

CNC MACHINING TECHNICIAN

1. MS ROUND ϕ 55 MM X 155 MM – 1 No.

MECHANIC AUTO BODY REPAIR

1. 12 v battery
2. Auto fuse
3. Test lamp
4. Cabel wire
5. Fuible link
6. Circuit breaker
7. Insulation tape
8. Fuse

STONE MINING MACHINE OPERATOR

GI FLAT of

1. Length - 50 mm
2. Width - 50 mm
3. Thickness - 5 mm

STONE PROCESSING MACHINE OPERATOR

Marble stone of

1. 60*50 (l*b) mm
2. Drilling machine
3. 6 mm drill bit



SURVEYOR

1. Drawing sheet A3-One for Each
2. Pencil HB
3. Eraser
4. Set of scale
5. Cello Tape

TOOL & DIE MAKER (Press Tool, Jigs & Fixture)

1. MS Round Bar- DIA. 35mm X100mm

WAREHOUSE TECHNICIAN

1. Hand Pallet Truck
2. Chain Slings
3. Polyester Ropes
4. Two-way Radio/Mobile Communication Device
5. Safety Helmet
6. Safety Shoes
7. High-Visibility Jacket/Vest
8. Hand Gloves

COSMETOLOGY

1. Wax, Prewax lotion & Post wax lotion.
2. Dettol, Spa salt & Pedicure & manicure kit.
3. i. Concealer, ii. Kajol, iii. Foundation, iv. Lipliner, v. Eyeliner, vi. Lipstick, vii. Eyebrow, viii. Highlighter, ix. Compact, x. Blusher.

IN PLANT LOGISTICS ASSISTANT

1. Hand Pallet Truck
2. Chain Slings
3. Polyester Ropes
4. Two-way Radio/Mobile Communication Device
5. Safety Helmet
6. Safety Shoes
7. High-Visibility Jacket/Vest
8. Hand Gloves



FOOD PRODUCTION GENERAL

1. Different Spices
2. Fish
3. Carrot-250gm., Bins-250 gm., Cauliflower-1 piece, Patato-500gm, Different Color Capsicums-200gm, Peas-100gm, Cucumber-250gm, Onion-500gm, Banana-3 piece., Beat, Brocoli,
4. Cottage chesse-500, Curd-250ml, Sunf-25gm, Paneer-250gm.
5. Corn Flour
6. Tomato and Chilli Sauce.
7. Breadcrumb Powder

BAKER AND CONFECTIONER

1. Refined Flour
2. Sugar
3. Butter
4. Egg
5. Baking Soda
6. Breadcrumb powder
7. Different fruits

DESKTOP PUBLISHING OPERATOR

1. Personal Computer
2. CPU
3. Document Papers

IoT TECHNICIAN SMART CITY

1. Resistor, capacitor, Diode, Transistor, Inductor, Zener Diode(Different values)
2. Transformer
3. Arduino Uno Board
4. Buzzer
5. Jumper wire

SMARTPHONE TECHNICIAN CUM APP TESTER

1. Smartphone
2. Digital Multimeter



3. Tablet
4. Personal Computer
5. Soldering and desoldering Station

IoT TECHNICIAN SMART HEALTHCARE

1. Arduino Uno Board
2. DMM
3. Jumper wire
4. LED
5. Different types of Transistors
6. SWG
7. Micrometer
9. Personal Computer

HORTICULTURE

1. Budding knife, Polythine strip, Rose plant
2. Grafting knife, Polythine strip, mango plant
3. Apple, colours, Ascends, Citric acid, Potassium met bisulphate, Steel bowel, Mosquito net, and 1 cup sugar
4. Potato chips-potato, Chili powder, Chat masala , Oil

FOOD & BEVERAGES SERVICES ASSISTANT

1. Aluminum Tray
2. Tray Cover Linen
3. Bud Wash
4. AP Spoon
5. Knife
6. Fork
7. Cruet Set



8. Different service equipments
9. Monkey Dish with Dame to cover

IoT TECHNICIAN SMART AGRICULTURE

1. Carbon Resistors different values
2. Wires of different diameter
3. 8051 Microcontroller Trainer
4. Arduino Board
5. Push Button Switch

ADDITIVE MANUFACTURING TECHNICIAN THREE D PRINTING

1. Wire Filament
2. Design Software

TURNER

1. Fe 310: ISR Φ 40-110mm

SHEET METAL WORKER

1. Steel Sheet: ISSH 450 x 350 x 0.61

PAINTER (GENERAL)

1. White chart.
2. Graph sheet.
3. Water colours & any other colour.
4. Desktop with Paint Software.

OPERATOR ADVANCED MACHINE TOOL

1. GI Sheet: ISSH 50 x 48 x 1.2- 4 pieces

MECHANIC MACHINE TOOL MAINTENANCE

1. MS Round Solid bar: Φ 30 x 100 mm

MECHANIC AUTO BODY PAINTING

1. Sanding paper - as reqd.
2. Sanding disc - as reqd.



3. ED coating material - as reqd.
4. Soap oil - as reqd.
5. Primer - as reqd.

MECHANIC MINING MACHINERY

1. MS Plate 150 x 50 x 2 mm- 2pieces
2. Cleaning solvent/Kerosene
3. Lubricating oil
4. Grease

PUMP OPERATOR CUM MECHANIC

1. Grease
2. Cleaning solvent/kerosene
3. Oxygen gas
4. Acetylene gas

REFRIGERATION AND AIR CONDITIONING TECHNICIAN

1. Refrigerant Gas
2. Copper Tubing
3. Brazing Rod
4. Flux
5. Insulation Tape
6. PVC Wire
7. Filter Drier
8. Cable Ties
9. PVC Copper Wire (1.5 sq.mm)
10. Terminal Lugs
11. Ferrules

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



BILL OF MATERIAL REQUIRED FOR EACH TRAINEE FOR THE FOLLOWING TRADE DURING THE ALL INDIA TRADE TEST OF ANNUAL PATTERN EXAMINATION UNDER CRAFTSMAN TRAINING SCHEME & DUAL SYSTEM MODE TO BE HELD IN THE MONTH OF JULY -2026

Year-1

SOLAR TECHNICIAN

- | | |
|-----------------------------------|--------|
| 1. Connecting cables | as req |
| 2. One-way switches | 1no |
| 3. Incandescent lamp- 100W | 1no |
| 4. MC 4 connectors | as req |
| 5. DC cables and connecting wires | as req |

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

