

OFFICE OF THE PRINCIPAL, INDUSTRIAL TRAINING INSTITUTE, BHEDEN

At/Po-SunaLarambha, PS-Bheden, Dist-Bargarh, Pin-768104

TENDER CALL NOTICE No. 437 , Dt. 27/07/2018

The Office of Principal, Govt. ITI Bheden invites sealed **Tenders in two separate covers (Technical Bid and Financial Bid)** for supply of Tools/Equipment/Machineries of reputed make for Electrician & Fitter Trades as per items list given package wise in annexures below from Registered Manufacturers/Authorized dealers/ firms who are registered with Central or State Governments for manufacturing/supply of Goods. The proof of registration from the appropriate authority May be enclosed along with the bid. The firms should have valid tax clearance/GST Registration/ Pan Card/Latest 3B GSTR Return file statement .The suppliers may bid package wise for one or more than one package. All the bidders are required to submit EMD of Rs- 5000/-(Rupees Five Thousand Only) in the shape of Demand draft in favour of "The Principal Govt. ITI Bheden" payable at SBI, Bargarh. No interest is payable on EMD. The cost of tender document is Rs.500/ + 18% GST (Rs 90) = Rs 590 (Non-refundable) for Items under Electrician trade and similarly Rs 590 /- (Non-refundable) for Items under Fitter trade (Rs 1180 For those applying for both fitter and electrician trades) and it is to be submitted in shape of Demand Draft drawn in favour of "The Principal , Govt. ITI , Bheden" payable at SBI, Bargarh. The Tender cost fee and the EMD amount should be submitted separately in separate demand draft. The Bidders may download the Tender Documents directly from the WEBSITE available at www.govtitibheden.co.in . **Firms applying for the tender process should be in readiness to deliver the goods at institute workshop within 30 days of placing purchase order to them.** In case of any bid amendment and clarification, responsibility lies with the bidders to collect the same from the website/institute office and the purchaser shall have no responsibility for any delay/ omission on part of the bidder. The Purchaser reserves the right to cancel the bidding process or increase/reduce the item quantities or modify the conditions at any time prior to the award of contract, without indicating any reason and without incurring any liability to the bidders.

Time Schedule:

a) Date of commencement of bid: 27.07.2018

b) Last date and time for Receipt of bids: 19.08.2018 up to 5.00 PM (By Speed Post/Registered Post only)

c) Time and date of opening of Tender/bid: 20.08.2018 at 11 AM

Place of Receipt and Opening of Tender and Address for Communication

The Principal, Govt. ITI BHEDEN, At/Po-SunaLarambha, PS-Bheden, Dist-Bargarh, Pin-768104

Sd/-
Principal
ITI Bheden

Memo 438 / Dt 27.07.18

Copy to institute notice board for general information to public.

Sd/-
Principal
ITI Bheden

Memo 439 (6) / Dt 27.07.18

All members of local purchase committee for information and they are requested to be present on the above date and time during opening of quotations.

Sd/-
Principal
ITI Bheden

Memo 440 / Dt 27.07.18

Copy submitted to DTET/ Collector office / DIC Office with a request to display it on their notice board for wide information to public.

Sd/-
Principal
ITI Bheden

Memo 441 / Dt. 27.07.18

Copy to Sri B. R. Darjee, Trade I/c Electrician , Sri G.Suna Trade I/c Fitter , Sri D.Neti Storekeeper for information. Sri B.R.Darjee is also requested to upload the same in institute website for wider circulation of information.

Sd/-
Principal
ITI Bheden

Section II: General Terms and Conditions

GENERAL TERMS & CONDITIONS OF CONTRACT FOR SUPPLY, INSTALLATION AND DEMONSTRATION OF TOOLS/ EQUIPMENTS REQUIRED FOR FITTER / ELECTRICIAN TRADE AT GOVT. ITI BHEDEN, ODISHA.

1. Document Establishing Bidder's Eligibility & Qualification

The Bidders shall furnish as part of the Bid the following Documents establishing Bidder's eligibility and qualification to the Purchaser's satisfaction.

1.1. If The bidding firm is not directly the Manufacturer of the items then it must produce satisfactory documents that it is the Authorized Distributor / Dealer having valid license / certificates /documents for supply of the quoted item along with technical brochure/leaflet of quoted items (if applicable) along with copy of manufacturers industry Registration certificate/ GST Reg Certificate.

1.2 Higher Preference shall be given (at the discretion of purchaser) to Bidders having ISI / ISO or equivalent Quality certification for quoted instruments and equipment. And the items shall necessarily be of reputed national/international make preferably from ISO Certified manufacturers. However, the Purchaser reserves the right to consider the items where ISI/ISO or equivalent certification products is not applicable/available among the bidders.

1.3 The Bidder whether manufacturer/ distributor/ dealer must have experience of supply and installation of the similar items in reputed Government Institutions / Public Undertakings / reputed Private Institutions within India during last preceding 03(Three) years reckoned from the date of bid opening and the details must be submitted along with documentary proof.

1.4 The Bidders shall have to produce document in support of their service associates nearest to institute.

1.5 Bidder shall have to provide demonstration of Supplied machinery to Purchaser within 15 days of delivery.

1.6 The Bidder shall quote items of only one reputed Brand/model with all associated accessories(if any) in complete to perform functionality of Equipment where ever necessary.

1.7 Manufacturer has to submit copy of Tax Registration Certificate issued from Competent authority.

1.8 In case No bidder satisfies the terms and conditions of this bid, then the purchaser at its discretion may decide to relax some of the criteria.

1.9 The material shall be delivered at ITI Bheden within 30 (thirty) days from the date of issue of Purchase Order. The goods on delivery will be physically verified by the Consignee Principal of ITI through local Technical Experts of this Institute/other institutes and it shall be responsibility of the suppliers to arrange demonstration on functioning of individual Goods wherever required.

Penalty shall be imposed for late delivery.

Tender shall remain valid for a period of not less than 60 days after deadline date specified for submission.

Purchaser may be asked to supply sample of items for physical verification by technical team in relation to quality/performance and specification of required materials before award of contract/purchase order.

If The Item/Quality fails on required quality, it shall be outrightly rejected.

2. Document Establishing Goods Eligibility

The Items offered against the schedule of requirement, should be in accordance with the stipulated specifications and should be "genuine product" of one reputed national/international brand/model. Documents establishing genuineness of product belonging to quoted brand may have to be submitted whenever required.

2.1 The details of brand and the model of quoted items may be accompanied with bids in the form of literature, pamphlets, manuals etc. Detailed description of items with essential technical and performance characteristics may also be furnished.

2.2 Satisfactory performance certificate for machineries may be required if necessary.

2.3 The quantity shown in the bid can be increased or decreased to any extent depending upon the actual requirement. Emblem/genuine sticker of manufacturing company should be engraved on each item.

3. Technical Bid (COVER - A)

The following document should be submitted in cover-A.

3.1 Earnest Money Deposit and Bid Purchase cost (In separate Demand Draft).

3.2 Technical details of the materials.

3.3 Copy of the manufacturing license/ import license/ Authorized Distributor/ Dealer certificates

Or Copy of the authorization from the Manufacturing Company in case of Authorized Distributor /Dealer as attached in Annexure

3.4 VAT/ST/GST clearance certificate along with tax payment return file up to date .

3.5 Performance/ Market standing certificate as attached in Annexure, establishing that the Bidders have executed supply of similar items as mentioned in Schedule of Requirement of hardware and software to different Govt. Organizations/ Government PSUs / reputed Private Institutions.(proof of documents) Annexure

3.6 Copy of the PAN Card.

3.7 Detail name, address, telephone no. fax, e-mail of the firm and of the Director/ Managing Director/ Proprietor of the firm (As per Annexure IV).

3.8 Address, Telephone No., e-mail, Fax of the Branch Office/ Contact Person/ Liasoning Office in Odisha.

3.9 Power of Attorney/ Authorization to a person for liasoning and monitoring the business on behalf of the manufacturer / bidder but not entitled to raise the bills.

3.10 Document(if available) to establish the recognition of the manufacturing unit in respect of ISO or equivalent certification will be preferred

3.11 The original bid document signed & sealed by authorized person in each page as a token of acceptance of all terms and conditions of the tender with original receipt.

3.12 Documentary evidence establishing that the items to be supplied by the Bidders shall confirm to the Bidding Document.

3.13 Any deviation/addition in the specification of the item including standard accessories / optional accessories in complete for functionality of hardware should be marked in bold letters.

4. Price Bid (COVER – B)

4.1 The hard copy of price bid giving the rates for various instruments & equipment and other items should be submitted along with sealed soft copy of price bid in Excel format through CD in separate sealed cover hereinafter called Cover B (Price Bid).

Price Bid (Cover - B) of those bidders shall be opened who qualify in Technical Bid (Cover – A).

4.2 The price of each item shall be quoted as per the prescribed Price Schedule Format at Annexure along with price break up. The total price quoted against each item shall include all kinds of custom/excise Duty, Tax, Packing, Transporting, Handling charges, Insurance charges or any other levy up to destination of installation including commissioning/ testing/ training at Designated laboratory rooms or store room of ITI Bheden. The bidders are required to submit the individual price of each item as indicated in the schedule of requirements. Only GST amount is to be mentioned separately for each item but rest all kind of charges including transportation/etc has to be included in the unit price.

4.3 Each quoted item and all accessories should cover the warranty / guarantee for 2(two) years from the date of commissioning

4.4 The Cover B of the technically qualifying bidders shall be only opened at the Office of the “The Principal, Govt. ITI Bheden” on the either the same date or otherwise to be communicated to them after technical evaluation of Cover A by Phone/Email.

4.5 The cost of standard accessories shall be included in basic price and optional accessories shall have to be quoted separately.

4.6 The bidders are required to submit the list of the spare parts required (if any) for the materials as well as the list of the dealers/ Distributors of the spare parts nearest to ITI Bheden for its availability.

5. BID CONDITIONS

5.1 The quoted rate shall not vary with the quantum of order placed or destination point. The quantity indicated against each item in the annexures are tentative only and the purchaser may increase/decrease the quantity as per actual requirement.

5.2 A copy of the original all bid conditions and the schedules should be signed by the bidder at the bottom of each page with the office seal duly affixed and returned along with the bid. Bid schedule should be duly filled in with an index and page number

for the documents, enclosures & EMD etc. Paging must be done for all the documents submitted.

5.3 Bids should be type written or Computerized and every correction/ over writing in the bid should invariably be attested with signature of the bidder with date before submission of the bids to the authorities concerned. No revision of price upward or downward will be allowed once the bid is opened. However the purchaser shall have the right for considering the exchange rate of foreign currencies on verification of documents.

5.4 Language of Bid

The Bid prepared by the bidders and all correspondence and document relating to the bid exchanged by the Bidders and the Purchaser, shall be written in the English language.

Supporting document and printed literature furnished by the Bidders may be written in another language provided they are accompanied by an accurate translation of the relevant passages in the English language in which case, for purposes of interpretation of the Bid, the English translation shall govern.

5.5 Bid Price

- Corrections, if any, shall be made by crossing out, initialling, dating and re-writing.
- All duties, taxes, and any other levies payable on the items, job contract shall be included in the total price of each item
- GST/Any other tax in connection with the supply shall be shown separately.
- The rates quoted by the bidders shall be fixed for the duration of the contract and shall not be subject to adjustment on any account.
- The price shall be quoted in Indian Rupees only.

5.6 Copies of valid GST/any other Tax clearance Certificates applicable shall be furnished by the Bidders and the originals of the above certificates shall be produced to the purchaser before placement of notification of award.

5.7 EMD (Tender Security)

All bidders are required to submit EMD of Rs-5000/-(Rupees Five Thousand Only) in the shape of Demand draft drawn in favour of "The Principal , Govt. ITI , Bheden" payable at SBI, Bargarh. The EMD shall be in Indian Rupees.

NOTE: Non-submission of EMD or submission of less EMD than the desired one shall result in rejection of Bid. The EMD deposited against other Bids cannot be adjusted or considered for this Bid. No interest is payable on EMD. The tender security shall be returned to unsuccessful bidders on finalization of order. In the event of failure to execute the supply order or violation of terms/condition, the EMD shall be forfeited.

5.8 SUBMISSION OF BIDS

Bid should be submitted in two Bid system containing two parts as detailed below.

Sealed Cover-A: Technical Bid.

Sealed Cover-B: Price Bid (hardcopy & soft copy in CD/pen drive)

Both the sealed envelopes should then be put in one outer cover and each cover should have the following indication:

- Name of Package.: _____
- Bid regarding Supply of _____
- Name of the Firm _____

NOTE:

A. Bids submitted without following two Bid system procedures as mentioned above will be summarily rejected.

B. Please Note that prices should not be indicated in the Technical Bid. The Prequalification document including EMD as required in the Bid document should invariable be accompanied with the Technical Bid (Cover A). The outer envelope shall indicate the name and address of the bidders to enable the bid to be returned unopened in case it is declared " late". If the cover containing the outer envelope is not sealed and marked as required, Purchaser will assume no responsibility for the bid's misplacement or premature opening. The above procedure shall be adopted both for the Technical bid and price bid separately. Telex, cable, email or facsimile bids will be rejected.

5.9 Deadline for Submission of Bids

Bids must be received by the Purchaser at the address specified not later than the time and date specified in the Invitation of Bids.

The Purchaser may, at its discretion, extend this deadline for submission of bids by amending the bid document, in which case all previous rights and obligations of the purchasers and bidders will remain same till the extended date.

5.10 BID OPENING

The Purchaser will open all bids, in the presence of bidder's representatives who choose to attend at 20.08.2018 at 11.00 AM at the Office of the "The Principal , Govt. ITI Bheden"

The bidder's representatives who are present shall sign a register evidencing their attendance.

5.11 Performance Security

- i. Within 15 days after the Supplier's receipt of Notification of purchase Award, the Supplier shall furnish Performance Security to the Purchaser as enclosed at **Annexure** for an amount of 5% of the contract value, valid up to 60 days after the date of completion of Performance obligations including warranty obligations.
- ii. The proceeds of the performance security shall be payable to the Purchaser as compensation for any loss resulting from the Supplier's failure to complete its obligations under the Contract.

The Performance Security shall be denominated in Indian Rupees and shall be in one of the following forms

A Bank guarantee or irrevocable Letter of Credit, issued by a nationalized/ scheduled bank located in India or a bank located abroad acceptable to the Purchaser, in the form provided in the bidding documents or another form acceptable to the Purchaser; or

A cashier's check, certified check, or demand draft. The performance security will be discharged by the Purchaser and returned to the Supplier not later than 30 days following the date of completion of the Supplier's performance obligations, including any warranty obligations.

Evaluation of Quotations

The Purchaser will evaluate and compare the quotations determined to be substantially responsive i.e. which

- (a) are properly signed ; and
- (b) Conform to the terms and conditions, and specifications.

The Quotations would be evaluated separately for each item.

Award of contract

The Purchaser will award the contract to the bidder whose quotation has been determined to be substantially responsive and who has offered the lowest evaluated quotation price.

Notwithstanding the above, The purchaser reserves the right to accept the offer which may not be lowest submitted price based on better quality or brand / service conditions or on due recommendation of technical committee .

The Purchaser reserves the right to accept or reject any bid and to annul the bidding process and reject all the bids without assigning any reason thereof at any time prior to award of Contract, without thereby incurring any liability to the affected Bidders or Bidders on the grounds of such action of the purchaser. The purchaser will also have the right to place purchase orders package wise/item wise to different firms.

In case No bidder qualifies as per qualifying criteria and standards, purchaser may at his discretion relax one or more qualifying criteria.

The bidder whose bid is accepted will be notified of the award of contract by the Purchaser prior to expiration of the quotation validity period. The terms of the accepted offer shall be incorporated in the purchase order.

Payment Terms

Full payment shall be made after receipt of original bills /stock entry certificate after satisfactory supply, installation, demonstration & training of the goods along with submission of warranty obligation within due date of delivery.

Normal commercial warranty/ guarantee shall be applicable to the supplied goods.

We look forward to receiving your quotations and thank you for your interest in this project

FORMAT OF TENDER
Package- ELECTRICIAN / FITTER

Sl. No.	Description of Goods with Specifications	Amount (Per Unit Price) A	% of GST	Tax Amount B	Any other charges (Transportation or handling/packing/any other tax/levy etc) C	Total Amount per unit in Rs (A+B+C)	Total amount In Words (A+B+C)

The above prices quoted against each item shall be per unit price.

We agree to supply the above goods in accordance with the technical specifications as per the Amount mentioned in the above table within the period specified in the Invitation for Tender.

We also confirm that the normal commercial warrantee/guarantee of atleast 12 months shall apply to the offered goods.

We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf will engage in bribery.

Signature of Supplier

TENDER SECURITY FORM

Whereas¹ (*hereinafter called "the Tender"*) has submitted its TENDER dated..... (*Date of submission of TENDER*) for the supply of..... (*Name and/or description of the goods*) (*hereinafter called "the TENDER"*).

KNOW ALL PEOPLE by these presents that WE..... (*Name of bank*) of..... (*Name of country*), having our registered office at..... (*Address of bank*) (*hereinafter called "the Bank"*), are bound unto (*name of Purchaser*) (*hereinafter called "the Purchaser"*) in the sum of _____ for which payment well and truly to be made to the said Purchaser, the Bank binds itself, its successors, and assigns by these presents. Sealed with the Common Seal of the said Bank this ____ day of _____ 20__.

THE CONDITIONS of this obligation are:

- 1. If the Tender
 - (a) Withdraws its TENDER during the period of TENDER validity specified by the Tender on the TENDER Form or
 - (b) Does not accept the correction of errors in accordance with the Tender; or
- 2. If the Tender, having been notified of the acceptance of its TENDER by the Purchaser during the period of TENDER validity:
 - (a) Fails or refuses to execute the Contract Form if required; or
 - (b) Fails or refuses to furnish the performance security, in accordance with the Instruction to Tenders;

We undertake to pay the Purchaser up to the above amount upon receipt of its first written demand, without the Purchaser having to substantiate its demand, provided that in its demand the Purchaser will note that the amount claimed by it is due to it, owing to the occurrence of one or both of the two conditions, specifying the occurred condition or conditions.

This guarantee will remain in force up to and including Thirty (30) days after the period of the TENDER validity, and any demand in respect thereof should reach the Bank not later than the above date.

.....
(Signature of the Bank)

Note: The bank guarantee [submitted by Indian Tender] should be executed on stamp paper in accordance with stamp Act. The stamp paper should be in the name of executing bank.

¹ Name of Tender

PERFORMANCE SECURITY FORM

To

The Principal,
Govt. ITI Bheden.

WHEREAS..... (Name of Supplier) hereinafter called "the Supplier" has undertaken, in pursuance of Contract (Notification of Award) No..... ted,..... 20...to supply..... (Description of Goods and Services) hereinaftercalled "the Contract".

AND WHEREAS it has been stipulated by you in the said Contract that the Supplier shall furnish youwith a Bank Guarantee by a recognized bank for the sum specified therein as security for compliance with theSupplier's performance obligations in accordance with the Contract.

AND WHEREAS we have agreed to give the Supplier a Guarantee:

THEREFORE WE hereby affirm that we are Guarantors and responsible to you, on behalf of the Supplier, up to a total of (Amount of the Guarantee in Words and Figures) and we undertake to pay you, upon your first written demand declaring the Supplier to be in default under the Contract and without cavil or argument, any sum or sums within the limit of (Amount of Guarantee) as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

This guarantee is valid until theday of.....20.....

Signature and Seal of Guarantors

.....
.....
Date20....
Address:
.....
.....
.....

Note: The Bank Guarantee [submitted by Indian Supplier] should be executed on stamp paper in accordance with stamp paper act. The stamp paper should be in the name of executing bank.

MANUFACTURES' AUTHORISATION FORM

No. _____/

Date _____

To

The Principal,
Govt. ITI Bheden

REF: BID NOTICE No. _____/Dt. _____

Dear Sir,

We _____ who are established and
reputable manufacturers/ authorized distributors/ dealers of _____
having office at _____

(Address of office) hereby authorize M/s. _____ (Name and
address of Agent) to submit a bid and sign the contract with you against the above bid.

No company or firm or individual other than M/s. _____ are
authorized to bid and conclude the contract in regard to this business against this specific IFB.

We hereby extend our full guaranty and warranty as per general conditions of contract for
the goods and services offered by the above firm against this bid.

Yours faithfully,

(Signature for and on behalf of manufacturers/authorized distributors/ dealers)

Note: 1. This letter of authority should be on the letterhead of the manufacturers/authorized distributors/ dealers and should be signed by a person, competent and having the power of attorney to bind the manufacturers/authorized distributors/ dealers. It should be included by the Bidders in its bid.

2. Attach copy of Manufacturers Industry Registration Certificate & copy of Sales Tax registration Certificate issued from competent authority.

LIST OF TOOLS, EQUIPMENTS & MACHINERY REQUIRED FOR **FITTER TRADE**

SL .	NAME OF THE TOOLS,EQUIPMENTS AND MACHINERY WITH SPECIFICATION	3
1	2	3
A : TRAINEES TOOL KIT:-		
1	Steel Rule 150 mm with metric graduation	
2	Try Square 150 mm blade	
3	Caliper inside 150 mm spring	
4	Caliper 150 mm hermaphdite	
5	Caliper outside 150 mm spring	
6	Divider 150 mm Spring	
7	Straight Scriber 150 mm	
8	Centre punch 10 mm and Length 120 mm	
9	Screw Driver 150 mm insulated flat type	
10	Chisel cold flat 20 mm X 150 mm High carbon steel	
11	Hammer Ball peen 450 grams (1 lb) with handle	
12	Hammer Ball peen 220 gm (1/2 lb) with handle	
13	File flat 250 mm second cut	
14	File flat 250 mm Smooth	
15	File half round second cut 150 mm	
16	Hacksaw frame fixed 300 mm	
17	Safety Goggles	
18	Dot slot Punch 100 mm	
B: Instruments & General Shop Outfit		
20	Straight edge steel 300 mm or above	
21	Spirit Level metal Type - 2	
22	Stud Extractor EZY-Out Set of 8	
23	Combination set 300 mm	
24	Micrometer outside 0 – 25 mm	
25	Micrometer outside 25 – 50 mm	
26	Micrometer outside 50 –75 mm	
27	Micrometer inside with extension rods accuracy 0.01 with extension rods upto 150 mm	
28	Vernier caliper 150 mm	
29	Vernier height gauges 0-300 mm with LC 0.02 mm	
30	Vernier bevel protractor blade with acute angle attachment 300 mm	
31	Screw pitch gauge Metric 0.25 to 6 mm	
32	Marking Table (Mild Steel) 900X900X900 mm	
33	Universal scribing block 220 mm	
34	V-Block clamps 150X100X100 mm	
35	Angle plate 150X150 X 250 mm	
36	Punch letter set 3 mm	
37	Punch number set 3 mm	

38	Portable hand drill (Electric) 0 to 13 mm capacity	
39	Drill twist straight shank 3 mm to 12 mm by 0.5 mm H.S.S	
40	Drill twist straight shank 8 mm to 20 mm by 0.5 mm H.S.S	
41	Taps and dies complete set in box with-worth.	
42	Taps and dies complete set 5,6,8,10 & 12 mm set of 5	
43	File knife edge smooth 150 mm	
44	File feather edge smooth 15 mm	
45	File triangular smooth 200 mm	
46	File round second cut 200 mm	
47	File square second cut 250 mm	
48	Feeler gauge Thickness 0.05 mm to 0.3 mm by 0.05 and 0.4 mm to 1 mm by 0.1 mm-13 leaves	
49	File triangular second cut 200mm	
50	File flat Second cut 300 mm	
51	File flat bastard 200 mm	
52	File flat bastard 300 mm	
53	File Swiss type needle set of 12, Length 150 mm	
54	File half round second cut 250 mm	
55	File half round bastard 250 mm	
56	File round bastard 250 mm	
57	File hand second cut 150 mm	
58	File Card 3" X 5" size, brass or steel wire	
59	Oil can 250 ml	
60	Pliers combination insulated 150 mm	
61	wooden handle forged soldering Iron copper bit 230V, 250W, 350 gm.	
62	Blow lamp 0.5liter	
63	Spanner adjustable 150 mm	
64	Interchangeable ratchet socket set with 12 mm driver, sized 10-32 mm set of 18 socket & attachments.	
65	Glass magnifying 75 mm	
66	Clamp "C" 100 mm	
67	Clamp "C" 200 mm	
68	Hand Reamer set taper (Taper pin straight flute)	
69	Machine Reamer parallel (Helical flute) 12 - 16mm set of 5	
70	Scraper flat 150 mm.	
71	Scraper triangular 150 mm	
72	Scraper half round 150 mm	
73	Chisel cold cross cut & diamond point 9 mm X 150 mm	
74	Chisel cold flat 9 mm X 100 mm	

75	Chisel cold round noze 9mm X 100 mm	
76	Drill Chunk with Key 12 mm	
77	Pipe vice 100 mm	
78	Adjustable Pipe tap set BSP with cover pipe size 1" or 3/4"	
79	Wheel dresser Star/Dresser with Holder Length 150 mm, diamond point	
80	Machine vice Swivel Base 100 mm	
81	Machine Vice Swivel Base 125 mm	
82	Sleeve Drill Morse No. 3-4, 4-5	
83	Vice bench 150 mm	
84	Fire extinguisher CO2 type, 3 kg capacity	
85	Fire Buckets	
86	Machine Vice 100 mm	
87	Wing compass 254 mm or 30 mm	
88	Torque wrench standard/Rachet type (14 to 68 Nm)	
89	Power tools for fastening Capacity 10-18mm	
90	Different Profile gauges (Plate type) - For demonstration Metric standard	
91	Knurling tool (Diamond, straight & Diagonal)	
92	Indexable boring bar with inserts 1" shank	
93	Machine maintenance manual for Lathe, Pedestal grinder, Drill machine, Power saw	
94	Temperature gauge Range 0 - 150°C	
95	Dowel pin (straight) Dia. -1" Length -4" (Mat: Stainless Steel)	
96	Standard Tap screws M3, M4, M5, M6, M8, M10, M12 M14, M16	
97	Lapping plate Dia. -6"	
98	Medium carbon Heat treated alloy steel Metric Studs and bolts along with nuts (for display) of standard length (May be manufactured in-house) M6, M8, M10, M12, M14, M16 (Standard)	
99	Caps screws M6, M8, M10, M12	
100	Drill gauges Letter drill gauge (A to Z), Number drill gauge (1 to 60), Metric drill gauge (1.5mm to 12.5mm, 30 holes)	
101	Cast Iron Globe Valve (Flanged type) 150NB, Class# Flange:ANSI125-B16.1150	
102	C.I. Sluice / Gate valve (flanged type) 150NB, Class# Flange:ANSI125-B16.1150	
103	Stop cock 25NB (2-way, Threaded end)	

104	Slip- on Forged steel Flange 150NB, ANSI-B16.5, Class#150	
105	Bolt & Nut with washer M20x2.5x90Long (part thread -Hex. Head)	
106	Pipe threading die with handle Ratchet type Die head of 1/2" , 3/4" and 1"	
107	Jigs & Fixture (sample)-For demonstration	
108	M. S . Shaft Bright M.S. round bar 80mm, 600mm long, Stepped 0mm on 300mm one end	
109	Pulle ys (for V-belt or Flat belt) to fit on 50mm dia. Shaft with key slot	
110	Steel keys to fit with keyslot of shaft & pulley	
111	Dam aged old spur gear to fit 50mm dia. Shaft	
112	V-belt and Flat belt to fit on pulley	
113	Pack ing gasket PTFE gasket roll small size	
114	Washer, clutch, keys, jib, cotter & circlip minimum 25mm size, carbon steel material	
115	Hollow punch Straight Shank Hollow Punch Sets 5-12mm	
116	Drill Drift (May be manufactured in-house) 200mm hardened and black finish	
117	Bearing different types each type of diameter 25mm (min.)	
118	Lifting sling 8mm Nominal Dia. Single leg sling	
119	Bearing extractor Universal gear puller 2 or 3 jaws adjustable	
120	Pulle y extractor Universal gear puller 2 or 3 jaws adjustable	
C: Tools for Allied Trade- Sheet Metal Work		
1	Trammel 300 mm	
2	Pocker	
3	Prik punch 100 mm	
4	Mallet dia 100 mmX 150 mm	
5	Aviation Snips straight Cut 300 mm	
6	Flatt headed hammers with handle	
7	Planishing Hammer	
8	Snip bent Left cut 250 mm	
9	Stake hatchet with Leg. 300X200X20 mm	
10	Stake grooving 100 X 100 x 300 mm	
D : Modified list of tools for the 3rd and 4th semester for fitter trade.		
1	Slip Gauge as Johnson Metric set of 87 Pieces Set	
2	Gauge snap Go and Not Go 25 to 50mm by 5 mm (Set of 6pcs)	

3	Gauge plug single ended 5 to 55 by 5mm (Set of 11 pcs)	
4	Dial test Indicator on stand 0.01 mm Least count	
5	Sine bar 125 mm	
6	Dial vernier caliper 0-300 mm LC 0.05 mm(Universal types)	
7	Depth micrometer 0-25 mm accuracy 0.01mm with standard set of extension rods upto 200 mm	
8	Digital micrometer outside 0-25 mm LC 0.01 mm	
9	Comparators Gauge- LC 0.01 mm	
10	Digital vernier caliper 0-200 mm L.C. 0.001 mm	
11	Vernier Bevel Protector range 360 deg, LC : 5 min(150mm blade)	

E:GENERAL SHOP OUTFIT

12	Carbide Wear Block. 1 mm - 2 mm	
13	Lathe tools H.S.S. tipped test	
14	Lathe tools bit 6 mm X 75 mm HSS/Cabride	
15	Lathe tools bit 8mm X 75 mm HSS/Cabride	
16	Lathe tools bit 10 mm X 75 mm	
17	Arm Strong type tool bit holder Right Hand	
18	Arm strong type tool bit holder Left Hand	
19	Arm Strong type tool bit holder straight	
20	Stillson Wrenches 250 mm	
21	Pipe cutter wheel type 6 mm to 25 mm	
22	Pipe bender spool type with stand manually operated up to 25 mm cold bending	
23	Adjustable pipe chain tonge to take pipes up to 300 mm	
24	Adjustable spanner 380 mm long	

F:General Machinery Installations –

1	Pillar Type Drilling Machine sensitive 0-20 mm cap. with swivel table motorised with chuck & key	
2	Drilling machine bench sensitive 0-12 mm cap motorized with chuck and key	
3	D.E. pedestal grinding machine with wheels rough and smooth 2 H.P. 3 phase 415 V, 1500 rpm, 250 Dia wheel	

G:Allied Trade in welding

1	Transformer welding set - continuous welding current, with all accessories and electrode holder 60% Duty Cycle with Standard Accessories 300 A, OCV 60 - 100 V,	
2	Welder cable Able to carry 300 amps. With flexible rubber cover	
3	Lugs for cable	

4	Earth clamps.	
5	Arc welding table (all metal top) with positioner 1200 X 1200 X 750 mm	
6	Oxy - acetylene gas welding set equipment with hoses, Oxygen & Acetylene cylinders, regulator and other accessories	
7	Gas welding table with positioner with Fire Bricks 900 X 600 X 750 mm	
8	Welding torch tips of different sizes for Oxy - acetylene gas welding	
9	Gas lighter.	
10	Trolley for gas cylinders.	
11	Chipping hammer.	
12	Gloves (Leather)	
13	Leather apron.	
14	Spindle key for cylinder valve.	
15	Welding torches. Nozzles no. 1, 2, & 3	
16	Welding goggles	
17	Welding helmet with coloured flame retardent glass	
18	Tip cleaner	

LIST OF TOOLS & EQUIPMENTS
TRADE: ELECTRICIAN TRADE

A. TRAINEES TOOL KIT

<i>Sl. No.</i>	<i>Name of the items</i>	<i>Specification</i>	
1	Measuring Steel Tape	5 meter	
2	Screw Driver	4 mm X 150 mm, Diamond Head	
3	Electrician Screw Driver thin stem insulated handle	4 mm X 250 mm	
4	Electrician Knife double bladed	100 mm`	

B. SHOP TOOLS AND EQUIPMENTS

(i) List of Tools & Accessories			
15	C- Clamp	200 mm	
16		100 mm	
19	Blow lamp Brass	0.5 ltr	
20	Chisel Cold	25 mm X 200 mm	
21	Chisel firmer with wooden handle	6 mm X 200 mm	
24	Bradawl		
26	Pully Puller with 3 legs	300 mm	
27	Bearing Puller (Inside)	200 mm	
28	Bearing Puller (Outside)	200 mm	
29	Pipe vice Cast Iron with hardened jaw open type	100 mm	
30	Scissors blade,SS	200 mm	
32	Crimping Tool	1.5 sq mm to 16 sq mm	
33		16 sq mm to 95 sq mm	
36	Hammer Extractor type	250 gram	
39	Try Square	150 mm blade	
42	Divider Calliper	150 mm spring type	
45	Pliers round nose insulated	100 mm	
49	Drill hand brace	0-100 mm	
53	Gauge, wire imperial-Stainless steel marked in SWG & mm	Wire gauge Metric	
54	File flat	200 mm 2nd cut with handle	
55	File half round	200 mm 2nd cut with handle	
56	File round	200 mm 2nd cut with handle	
57	File flat rough	150 mm with handle	
58	File flat bastard	250 mm with handle	
59	File flat smooth	250 mm with handle	
60	File Rasp, half round bastard	200 mm with handle	
63	Hand Vice	50 mm jaw	
64	Table Vice	100 mm jaw	
66	Contactor & auxiliary contacts (Raw Material)	3 Phase, 415 Volt, 25 Amp, 2 NO & 2NC	

67	Contactor & auxiliary contacts (Raw Material)	3 Phase, 415 Volt, 32 Amp, 2 NO & 2NC	
68	Limit Switch, Liver Operated (Raw Material)	2A, 500V, 2 contacts	
69	Rotary Switch (Raw Material)	16 A, 440 V	
70	Relay- a. Cut out Relays	16 A, 440 V	
71	b. Reverse current Relays	16 A, 440 V	
72	c. Over current Relays	16 A, 440 V	
73	d. Under voltage Relays	360 V-440 V	
74	Pin Type, shackle type, egg type & suspension type insulators including hardware fitting (Raw Material)		
75	Hydrometer		
78	Load Bank (Lamp / heater Type)	6 KW,3 Phase	
79	Brake Test arrangement with two spring balance	0 to 25 kg	
80	Laboratory Type Induction Coil	1000 W	
81	Out Side Micrometer	0-25 mm least count 0.01 mm	
83	Series Test Lamp	230 V, 60 W	
84	Knife Switch DPDT fitted with fuse terminals (Raw Material)	16 Amp	
85	Knife Switch TPDT fitted with fuse terminals (Raw Material)	16 Amp/440 V	
86	Miniature Breaker (Raw Material)	16 Amp	
87	Earth Plate	60 cm X 60 cm X 3.15 mm copper plate	
88		60 cm X 60 cm X 3.15 mm GI plate	
89	Earth Electrode	Primary electrode-2100X28X3.25 mm	
90		Secondary Copper Strip-20X5 mm	
91	MCCB	100 Amp, Triple pole	
92	ELCB	25 Amp, Double Pole & 25 Amp. double pole, I Δ n 30 mA	
93	RCCB	25 Amp, Double Pole & 25 Amp. double pole, I Δ n 30 mA	
94	Fuses	HRC	
95		Glass type	
96		Rewire type	
97	Rheostat (Sliding Type)	0 -25 Ohm, 2 Amp	
98		0 -300 Ohm, 2 Amp	
99		0- 1 Ohm, 10 Amp	
100		0- 10 Ohm, 5 Amp	
101	Capacitor	Electrolytic	
102		Ceramic	
103		Polyster film	

104		Variable	
105		Dual run	
106	Various Electronic components	Resistors, Diode, Transistor,UJT, FET,SCR,DIAC,TRAIC,IGBT, Small Transformer Etc.	
107	Various Lamps	Halogen, Incandescent lamp, Fluorescent Tube,HP Mercury Vapour Lamp, High Pressure Sodium Vapour Lamp , Low Pressure sodium Vapour Lamp, LED	
108	Plug Socket,Piano Switch,Lamp Holder	230V, 5A	
109	Cables: Twisted Pair,Non-Metallic Sheathed Cable,Underground Feeder Cable,Ribbon Cable,Metallic Sheathed Cable,Multi-Conductor Cable,Coaxial Cable,Direct-Buried Cable	1 Mtr. Each	
110	Bus bar With brackets	1 Mtr. Each	
111	Rubber mat	2'X4'X1'	
112	Electrician Helmet	Yellow Colour	
113	RCC Pole With accessories (MS angle iron,'C' clamp, stay insulator etc.) and materials	6 Mtr.	
114	Safety Belt	Standard Quality	
(ii) List of Equipment			
115	Ohm Meter; Series Type & Shunt Type, Portable Box type	50/2000 Ohm Analog	
116	Digital Multi Meter	DC 200 mv-1000 V, 0-10A & AC 200 mv-750 V, 0-10A, Resistance 0-20 Mega Ohm & 3 1/2 Digit	
117	A.C. Voltmeter M.I. 0 –500V A.C, analog, portable box type housed in Bakelite Case	Multi range 75V-150V-300V-600V	
118	Milli Voltmeter centre zero analog, portable box type housed in Bakelite Case	100 – 0 – 100 m volt	
119	Ammeter MC Analog, portable box type housed in Bakelite Case	0-500 mA	
	Ammeter MC Analog, portable box type housed in Bakelite Case	0-5 A	
	Ammeter MC Analog, portable box type housed in Bakelite Case	0- 25 A	

120	A.C. Ammeter M.I. Analog, portable box type housed in Bakelite Case	0-1 A	
	A.C. Ammeter M.I. Analog, portable box type housed in Bakelite Case	0-5 A	
	A.C. Ammeter M.I. Analog, portable box type housed in Bakelite Case	0-25 A	
7	Kilo Wattmeter Analog, portable box type housed in Bakelite Case	0-1.5-3 KW, Pressure coil rating-240/440V, Current rating-5A/10A analog	
8	Digital Wattmeter	230 v, 1KW, 50Hz	
123	A.C. Energy Meter	Single phase 10 amp., 240V induction type	
124	A.C. Energy Meter	Three Phase 15 amp, 440V induction type	
125	Power Factor Meter Digital	440 V, 20 A, Three Phase portable box type	
126	Frequency Meter	45 to 55 Hz	
127	Magnetic Flux meter	0-500 tesla	
128	Lux meter	lux meter LCD read out 0.05 to 7000 lumens with battery.	
129	Tachometer	Analog Type - 10000 RPM	
130	Tachometer	Digital Photo Sensor Type - 10000 RPM	
132	Megger	Analog - 500 V	
133	3- point D.C. Starter	For 2.5 KW DC motor	
134	4- point D.C. Starter	For 2.5 KW DC motor	
135	Wheat Stone Bridge with galvanometer and battery		
136	Single Phase Variable Auto Transformer	0 - 270 V, 10Amp (Air cooled)	
137	Phase Sequence Indicator	3 Phase, 415 V	
138	Growler	230 V, 50 Hz, Single Phase, Adjustable jaws, Testing armature with ampere meter and testing probes.	
139	a. Resistance type starter	For A.C Motors of 2 to 5 H.P.	
140	b. Direct on line Starter		

141	c. Star Delta Starter- Manual		
142	d. Star Delta Starter – Semi automatic		
143	e. Star Delta Starter – Fully automatic		
144	f. Star Delta Starter - Soft starter		
145	g. Auto Transformer type		
146	Oscilloscope Dual Trace	20 MHz	
151	Temperature controlled Soldering Iron	50 Watt, 230 Volt	
152	Discrete Component Trainer	Discrete Component (for diode and transistor circuit) with regulated power supply +5,0- 5 V,+12 ,0-12 V	
153	Linear I.C. Trainer	Linear I.C. Trainer with regulated power supply 1.2V to 15V PIC socket 16pin and 20 pin with bread board	
154	Digital I.C. Trainer	Digital I.C. Trainer 7 segment display and bread board	
164	Oil Testing Kit	Oil Testing Kit 230 V, single phase 50 Hz 60 VA output 0-60 KV Variable	
167	DC Power Supply	0 - 30 V, 5 A	
168	Battery Charger	0 - 6 - 9 - 12 - 24 - 48 V, 30amp	
169	Current Transformer	415 V, 50Hz, CT Ratio 25 / 5 A, 5VA	
170	Potential Transformer	415 V, 50Hz, PT Ratio, 440V/110V, 10VA	
C. Shop Machinery			

175	D.C. Shunt Generator with control panel	D.C. Shunt Generator with control panel, 2.5 KW, 220V & 3phase Squirrel cage Induction Motor, 5HP, 440V with control panel & star delta starter	
177	D.C. Compound Generator with control panel including fitted rheostat, voltmeter, ammeter and breaker	D.C. Compound Generator with control panel including fitted rheostat, voltmeter, ammeter and breaker, 2.5 KW, 220V & 3phase Squirrel cage Induction Motor, 5HP, 440V, with control panel & star delta starter	
178	DC Series Motor coupled with spring balance load	2.5 KW, 220 Volts	
179	DC Shunt Motor	2.5 KW, 220 V	
180	DC compound Motor with starter and switch	2.5 KW, 220 volts	
181	Motor Generator(DC to AC) set consisting of - Shunt Motor with starting compensator and switch directly coupled to AC generator with exciter and switch board mounted with regulator, breaker, ammeter, voltmeter frequency meter, knife blade switch and fuses etc. Set complete with cast iron bed plate, fixing bolts, foundation bolts and flexible coupling.	Shunt Motor rating : 5 HP, 440V AC Generator rating : 3-Phase, 4 wire, 3.5 KVA, 400/230 Volts, 0.8 pf, 50cycles	
182	AC Squirrel Cage Motor with star delta starter and triple pole iron clad switch fuse with Mechanical Load.	5 HP, 3-Phase, 415 V, 50 Hz	
185	Synchronous motor with accessories like starter, excitation arrangements.	3 Phase, 3 HP, 440V, 50Hz, 4 Pole	
188	Single phase Transformer, core type, air cooled	1 KVA, 240/415 V, 50 Hz	
189	Three phase transformer, shell type oil cooled with Delta/ Star	3 KVA, 415/240 V, 50 Hz	
191	Diesel Generator Set with change over switch, over current breaker and water/ air-cooled with armature, star-delta connections AC 3 phase	7.5 KVA, 415 volt or higher rating	
193	Pillar Electric Drill Machine Motorized	12-20 mm Capacity, 1HP, 440V, 3 phase, Induction Motor with DOL starter, Bench Type	

194	Motorised Bench Grinder	1 HP. 3 phase, 440V with DOL starter, Double side with smooth and rough wheel with Tool Base	
195	A.C. Series type Motor	1 HP, 240 V, 50 Hz	
198	Ceiling fan coil Winding Machine	250V, 50 Hz, 1- Φ , with speed control	
199	Primary current injection set	220V, 50 Hz, 1- Φ , output current - 200 A (min) with timer	
200	Stepper Motor with Digital Controller		
201	Shaded Pole Motor	Fractional HP, 240 V, 50 Hz	
210	Fire Extinguisher CO2	2 KG	
211	Fire Buckets	Standard size	
212	Ladder aluminium made	14 feet	