कार्यालय:-प्रादेशिक स्टाफ प्रशिक्षण एवं शोध केन्द्र, (व्यावसायिक शिक्षा एवं कौशल विकास विभाग, उ०प्र०) परिसर-राजकीय औधोगिक प्रशिक्षण संस्थान, अलीगंज, लखनऊ।

(टेण्डर संख्या-T.E.- 03/2014.)

अल्पकालीन निविदा

महामिहम राज्यपाल महोदय, उ०प्र० की ओर से निदेशक(प्राविधिक), प्रादेशिक स्टाफ प्रशिक्षण एवं शोध केन्द्र, अलीगंज, लखनऊ द्वारा केन्द्र के विभिन्न व्यवसाय (फिटर, विधुत एवं मैकेनिक आर०ए०सी०) के साज—सज्जा (टूल्स,उपकरण,मशीनरी एव फर्नीचर आदि) की आपूर्ति हेतु सील बन्द अल्पकालीन निविदायें आमंत्रित की जाती है। निविदाकर्ता को तकनीकी संस्थानों, राजकीय औधोगिक प्रशिक्षण संस्थानों सहित आपूर्ति का कम से कम 10 (दस) वर्षों का अनुभव आवश्यक है। अल्पकालीन निविदा की अन्य शर्ते, विवरण, धरोहर राशि एवं सामग्री सूची आदि निविदा प्रपत्र में अंकित है। निविदा के विवरण निम्नवत हैं जो कि विभागीय वेबसाइट — <u>www.vppup.in</u> पर भी उपलब्ध है।

1— टेण्डर प्रपत्र शुल्क — रूपये 1,000 / — एवं रूपये 50 / — डाक शुल्क अतिरिक्त।

2— अर्नेस्ट मनी — रूपये 5,50,000 / — निदेशक (प्राविधिक), प्रादेशिक स्टाफ प्रशिक्षण एवं शोध केन्द्र, लखनऊ के पक्ष किसी भी

राष्ट्रीयकृत बैंक से डीमाण्ड ड्राफ्ट/एफ०डी०आर० के रूप

में।

3—टेण्डर बिक्री की अन्तिम तिथि एवं समय — दिनांकः 03—03—2014(पूर्वान्ह 11 बजे से अपरान्ह 4:00

तक)।

4—टेण्डर जमा की अन्तिम तिथि एवं समय – दिनांकः 04—03—2014 पूर्वान्ह 11:00 बजे तक।

5—टेण्डर खोलने की तिथि एवं समय — दिनांकः 04—03—2014 11:30 बजे पूर्वान्ह।

(तकनीकी बिड)

6—टेण्डर खोलने की तिथि एवं समय — दिनांकः 04—03—2014 04:00 बजे अपरान्ह (वित्तीय बिड)

7—वेबसाइट का नाम— www.vppup.in

अधोहस्ताक्षरी को बिना कारण बताये निविदा के समस्त अथवा किसी अंश को निरस्त या संशोधित करने का अधिकार सुरक्षित होगा। निविदा प्रपत्र / विवरण वेबसाइट <u>www.vppup.in</u> पर भी उपलब्ध है, से भी डाउनलोड किया जा सकता है। ऐसी स्थिति में निविदा शुल्क बैंक ड्राफ्ट निविदा के टेक्नीकल ऑफर के साथ संलग्न करना अनिवार्य होगा।

निदेशक(प्राविधिक) प्रादेशिक स्टाफ प्रशिक्षण एवं शोध केन्द्र, अलीगंज, लखनऊ

State Staff Training & Research Center

(Vocational Education and Skill Development Deptt., U.P.,)

GITI campus, Aliganj, Lucknow

SHORT TERM-TENDER

Tender Notice No.T.E.- 03/2014.

Supply of Tools/equipment, Machinery and Furniture for for Different Trades.(Fitter, Electrician and Mech. R.A.C.)

:OFFICE ADDRESS:

State Staff Training & Research Center GITI CAMPUS, ALIGANJ, LUCKNOW UTTAR PREDESH PH:0522-2329110, E-mail-sstrclko@gmail.com

GENERAL INSTRUCTION:-

The tendering firms are required to purchase the tender document by payment of tender fee **Rs** 100**0/-**. Tender form can be obtained by post also by making a payment of **Rs.50/- extra for postal charges**. The payment of tender fee (Including the postal charges wherever applicable) can be made by **Bank draft or by cash**. It is clarified that no other mode of payment shall be acceptable. The bank draft should be made payable to **Director (Technical)**, **State Staff Training & Research Center**, **Aliganj**, **Luknow**, payable at Lucknow and should be crossed. In case the tenderer is desirous to get tender documents by post, and then he should send a self addressed envelope of size – 12" x 10" along with the request for tender form as cited above.

The tendering firms are required to quote only top most original brands for each individual item in at least three original similar brands like Taparia, JK, Everest, Jhilani, Gadore, Pye, Focus, Mitoyo, Precise, L&T, LG, Samsung, Voltas, Crompton, Bajaj. No any local Brands (not original) will be accepted. Quantity of items may be increased or decreased as per rules. All pages of the submitted documents in the tender/Bid will be signed with stamp by the Proprietor/Authorized person and paging will be mentioned in first page like Index.

(1) <u>Documents to be submitted (Technical Bid):-</u>

The tendering firms are required to submit the following required documents by under given sequence with mentioning documents name in top of documents first page, failing which their tender will be ignored.

- (a) A Photocopy of Tender purchasing receipt.
- (b) Details of EMD.
- (c) The proof of being a registered firm with **Govt. Dept.** indicating their VAT No. by submitting such certificate.
- (d) The proof of having minimum ten years experience of supplying of tools/ equipment and machinery, to technical institutes including GITIs.
- (e) Manufacturing/Dealer/Sub Dealer certificate of the quoted machinery Items.
- (f) The firm should submit leaflet/literature indicating the name of the manufacturing organization, Make/Brand etc.
- (g) The tenderer has to give a affidavit that he is not black listed by any Govt. Organization/ Undertaking/ other organizations.
- (h) Copy of **PAN No. issued by Income Tax Department** to tendering firm.
- (i) Copy of balance sheet of last three financial year shall be enclosed. Average turn over of last three years should not be less than 1.00 cr, in the case of supply of Tools/equipment, machinery and furniture.

(2) <u>Tender / Bid Price :-</u>

- (a) The contract shall be for the full quantity as described. Corrections, if any shall be made by crossing and rewriting with signature and date.
- (b) All duties taxes for destination freight charges, installation charges, insurance and other levies payable on the tools /equipments, machinery and furniture shall be included in the total price.
- (c) Sales Tax in connection with the sale shall be shown separately. **Any firm showing rates inclusive** of VAT, its offer will be summarily rejected.
- (d) The rates quoted by the bidder shall be fixed for the duration of the contract and shall not be subject to adjustment on any account.
- (e) The prices shall be quoted in Indian Rupees only.
- (f) The Fixed Deposit / NSC / Bank Guarantee of Nationalized Bank for earnest money Rs. 5.50 Lakhs in favour of Director (Technical), State Staff Training & Research Center, Aliganj, Luknow as mentioned in the tender should be enclosed with the offer otherwise the offer against tender shall be rejected. The earnest money will be refunded in case offer is not accepted. The earnest money should be enclosed in a separated envelope super scribing the amount of earnest money on the top right corner of the envelope. This envelope should be placed inside the envelope in which the technical offer is sent.

3. <u>Each Bidder shall submit only one Tender/Bid in two parts :-</u>

- (a) Financial Bid
- (b) Technical Bid

4. **MODE OF FILLING TENDER :-**

- The firm should submit the offer indicating the brand name with the specification and rate. It should be clearly cited that the rate quoted is of which Brand. The firm should as far as possible attached the pamphlet/ leaflet of item / items being quoted. It should be ensured that specification given in the offer and in the leaflet and the literature should tally with each other. Only if the items with Brand name or make specified in the given list are not available the rates of the ISI/ISO marked or equivalent marked items with brand name should be quoted.
- 2- The firm has to submit their offer in the two separate sealed envelopes.
- (a) First Envelope (termed as technical offer) containing detail technical specification /Model/Brand/Make of the items along with Documents / Papers of formalities and earnest money. (Excluding Rates.) in prescribed format for Technical Bid.
- (b) **Second Envelope** (termed as financial offer) containing rates in words and figures of each item indicating Brand name with the specification should be quoted. as per format **in prescribed format for Financial Bid.**

- 3- If there are any discounts in rates it should be quoted after deducting the discount. Rates should be given in words and figures both. There should not be any cutting or overwriting.
- 4- The envelope should be of thick paper and must be properly sealed with sealing wax along with stamp. It is clarified that the unsealed envelope will not be entertained.
- 5- If any tenderer does not follow the instruction regarding filling up technical and financial offer, such offer will be summarily rejected and no correspondence will be done.
- 6 Only those items which are available on the ready stock should be quoted since the supply is to be made immediately.

NOTE :-

Both the envelope should be super scribed clearly as "Technical Offer" and "Financial Offer" and both the envelopes will be kept in one cover indicating tender no. and date of opening. The outer cover (main envelope) should also be sealed properly as cited above. The cover indicating technical offer will be opened before the representatives of the firm on the date of opening of tender and the financial offer will be opened later if there technical offer is accepted.

5. <u>VALIDITY OF TENDER / BID :-</u>

Tender/Bid shall remain valid for a period not less than 90 days after the dead line date specified for submission.

6. **EVALUATION OF TENDER / BID :-**

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

- (a) Are properly signed and
- (b) Confirm to the terms and conditions, and specifications.

The Tender/Bid would be evaluate separately for each item. Any type of Taxes shall not be taken into account in evaluation.

7. <u>Award of Contract :-</u>

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

- (a) Notwithstanding the above, the Purchaser reserves the right to accept or reject any Tender/Bid and to cancel the bidding process and reject all Tender/Bid at any time prior to the award of contract.
- (b) The bidder whose bid is accepted will be notified of the award of contract by the **Purchaser** prior to expiration of the Tender/Bid validity period. The terms of the accepted offer shall be incorporated in the purchase order.
- (c) If suppliers fail to supply as per order their E.M.D. will be forfeited.

8. *PROCEDURE :-*

- (a) You or your representative may be present at the time of opening of the tender along with your authority letter.
- (b) You have to deposit 10% of security deposit of the total value of the order placed. It should be in the form of (a) Fixed Deposit receipt of any Nationalized Bank. (b) National Saving Certificate (NSC) (c) Bank Guarantee of Nationalized Bank pledged to the Director (Technical), State Staff Training & Research Center, Aliganj, Luknow and is refundable to you after 6 month of the satisfactory supply of the material for which you have to produce the clearance to the Institute. The supply contract agreement will be signed on Rs. 100/non judicial stamp paper between bider and purchaser.
- **9.** Payment shall be made as soon as possible after satisfactory delivery of the goods.
- **10.** Normal commercial Warranty/ Guarantee shall be applicable to the supplied goods.
- **11.** The details of items are shown in Annexure .
- 12. You are requested to submit your Tender/bid latest by 11.00 A.M. on 04-03-2014.
- 13. The **Tender Technical Bid** will be opened in presence of Purchase committee on 04-03-2014 at 11:30 A.M. and **Financial Bid** will be opened on the same day at 04:00 P.M..
- 14. In case of supply of Tools/equipments and Machinery which is required to be installed at site Tenderer has to quote rates accordingly for complete work.

REMARKS:-

The jurisdiction for the purpose of litigation arising if any will be civil court, Lucknow (U.P.)

We look forward to receive your **Tender/Bid** and thank you for your interest in this Project.

Delivery Period :- 15 Daysfrom the date of order.

Place of Delivery:- State Staff Training & Research Center, Campus: Government Industrial

Training Institute, Aliganj, Lucknow (U.P.)

Website name:- www.vppup.in Email.ID- sstrclko@gmail.com

PH:0522-2329110

Enclosure Annexure (Format of Tender/Bid)

(Purchaser)

Director(Technical)
State Staff Training & Research Center,
Campus: Government Industrial Training Institute,
Aliganj, Lucknow (U.P.)

Format for Technical Bid

S. No.	Name of Items	Brand/Make/ Model/ Specification	Other Remarks

FORMAT OF FINANCIAL TENDER/BID

		- 1/ 1				_	
SI.	Description of	Brand/Make/	Quantity	Unit Rate	Trade	1	Гotal
No.	tools/equipments	Model/		(in Indian	Tax/VAT/Other		
	, machinery and	Specification/		Rs.)	Taxes		
	furniture			In Figure	in Figure	In	In
						Fig	Words

We agree to supply the above goods in accordance with the technical specifications within the period specified in the invitation for **Tender/Bid.**

We also confirm that the normal commercial warranty/guaranty of 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.

Signatur	e of Supplier
Name	
Address	
Tel. No	
Fax. No	Fmail-

(A) Hand Tools & Equipment

		Dwg:=-1/9.5.1.4		Unit Rate	Trade	To	otal
SI. No.	Description of tools/equipments	Brand/Make/ Model/ Specification	Quantity	(in Indian Rs.)	in Figure	In Fig	In Words
1	Try Square 10 cm blade		42 nos.				
	out side caliper 15 cm spring		5 no.s				
	Inside caliper 15 cm spring		5 no.s				
	Caliper 15 cm Hermaphrodite		11 nos.				
	Divider 15 cm spring		1 1nos.				
	Straight scriber 15 cm		42 nos.				
	Screw Driver 15 cm		10 nos.				
8	Chisel cold Flat 12 mm		11nos.				
9	Hammer ball pane 0.45 kg with handle		31 nos.				
10	hammer ball pane 0.22 kg with handle		20 nos.				
11	Wording File 15 cm smooth		08 nos.				
12	File Flat 25 cm 2 nd cut		42 nos.				
	File Flat 25 cm 2 nd cut smooth.		27 nos.				
	File half round 15 cm 2 nd cut		16 nos.				
	Hacksaw frame fixed 30 cm.		42 nos.				
	Safety goggels		42 nos.	1	1	†	1
	Dot punch 10 cm x100 mm long(Approx)		20 nos.				
	Knife edge file 15 cm smooth		08 nos.				
	File cant saw 15 cm smooth		08 nos.				
	File feather edge 15cm smooth		08nos.				
	File triangular 15cm smooth		06 nos.				
	File round 20cm 2nd cut		16 nos.				
	file square 25cm 2nd cut		08 nos.				
	Feelar gauge 10 blade		02 sets				
	File Triangular 20cm 2nd cut		12nos.				
	File swiss type needle set of 12		04 set				
27	File half round 25 cm 2nd cut		06 nos.				
28	File round 30 cm bastered		08 nos.				
29	File card		12 nos.				
30	Stone oil 15cmX5cmX2.5cm		08 nos.				
31	Stone carborandum 15cmx5cmx5cmx4		04 nos.				
32	Oil cane 0-25 ltrs		02 nos.				
33	Pliers combination 15 cm		04 nos.				
34	Spanner Metric - worth D.E set of 10 pcs		12 set				
35	Interchangeable ratchet socket set with a 12mm driver		02 sets				
36	Box spanner set 6-25 mm set of 8 with tommy bar		02 sets				
37	Clamp toolmaker 5cm and 7.5 cm set of 2		04 nos.				
38	Clamp"C" 5 cm		04 nos.				
39	Clamp"C" 10 cm		04 nos.				
40	Spanner adjustable 15cm		04nos.				
41	Hand Reamer adjustable cover max 9,12,18mm-set of 3		01 set				
42	Hand Reamer taper 4-9 mm set of 6 or 4-7mm set of 4		02 set				
	Reamer parallel 12-16 mm set of 5		02 set				
	Scraper flat 15 cm		12 nos.				
	Scraper 3 corner 15 cm		12 nos.				
	Spanner adjustable 15 cm		04 set				
	scraper half round 15 cm		12 nos.				
	Chisel cold 9mm crosscut and 9mm diamond		12 each				
	Chisel cold 19 mm flat		12 nos.				
	Chisel 9 mm round nose		12 nos.				
	Extractor stud EZY out		04 nos.				
	Set of combination 30 cm		04 nos.				
	Out side Micrometer 0-25 mm		06 nos.				
	Out Side Micrometer 25-50 mm with 25 mm test piece		06 nos.				
	Out side Micrometer 50-75 mm with 50 mm test piece		04 nos.				
56	Vernier Micro meter in side 25-50 mm		02 no	<u> </u>	<u> </u>		<u> </u>

		1	1	ı	1
_	Vernier Caliper 20cm	06 nos.			
_	Vernier Height gauge 30 cm	02 nos.			
	Vernier bevel protactor	02 no			
_	Screw pitch gauge	02 no			
	Wire gauge matric standard	02 no			
	Drill twist T/S 6mm to 25mm x 1.5	02 set			
	Drill chuck 12 mm	02 no			
64	Wheel dressor (1 for 4 unit)	01 no			
	Machine vice 10cm	02 no			
	Machine vice 15 cm	02 no			
	Sleeve Drill moarse 0-1,1-2,2-3	02 set			
	Bench vice 12 cm jaws	40 nos.			
	Leg vice 10 cm Jaw	04 nos.			
	Fire Extingusher	04 nos.			
	Fire buckets	04 nos.			
	Wing Compass 25.4 cm or 30cm	04 nos.			
	Hand hammer 01 kg with handle	04 nos.			
	Radius gauges (Assorted)	20 nos.			
	Dial test indicator 0,01 mm with magnatic base	02 nos.			
	Lathe tools HSS Tipped set	04 nos.			
	Lathe Tool Bit HSS 6 mm,8mm,10mmX100mm	20 each			
	Borign and counter shinking tool	04 nos.			
_	Arm strong type bit holder RH	04 nos.			
_	Arm Strong type bet holder Lh	04 nos.			
_	Arm strong type bit holder straight	04 nos.			
	Engeneers try Square (knife wedge) 150 mm Blade	02 nos.			
	Rule steel 30 cm to read matric	08 nos.			
\vdash	Rule steel 60 cm	08 nos.			
_	Straight edge 45 cm steel	04 nos.			
_	Surface plate 45X45cm ci/granite	04 nos.			
_	Marking table 91X91X122cm	01 no			
_	Universal scribing block 22 cm	04 nos.			
	V-block pair 7cm and 15cm with clamps	04 nos.			
	Square adjustable 15 cm blade	04 nos.			
	Angle plate 10X20 cm	04 nos.			
	Sprit level 15 cm metal	02 no			
	Letter punch 3mm set	02 no			
_	Number punch set 3mm	02 no			
	Portable hand drill (electric) 0 to 6 mm Twist drill s/s 1.5 mm to 12 mm by 1/2 mm	04 nos. 02 set			
-		02 set 02 set			
	Twist drill s/s 8mm to 15 mm by 1/2mm Tap and dies complete set in box B.A	02 set 02 no			
	Tap and dies complete set in box B.A Tap and dies complete set in box widthworth	02 no			
	Taps and dies complete set in box widthworth Taps and dies complete set in box 3-18 mm set of 10	02 nos.			
	•				
	First aid box	02 no			
-	Flat tong 300mm	04 nos.			
	Roung tong 300,,	02 nos.			
_	Straight snips 250/300 mm	06 nos.			
-	Soider bit/soldering iron hatchet type 250g	04 nos.			
-	Anvil 50 kg	02 nos.			
	Swage block Trammel	01 no 02 nos.			
_	Hand groover 4mm,5mm	2 nos. each			
	Portable forge with hand blower 450 mm	2 nos. each 1 nos.			
	Leather gloves	4 pairs			
-	Leather apron	4 pairs			
	Asbestos gloves	4 nos			
	Gas cuting torch with defferent noses	4 pairs 1no.			
	Safty charts and posters	as req.			
	Bend snips 250/300mm	06 nos.		<u> </u>	
	Punch Hollow 6mm to 19 mm set of 5	2nos			
	Punch Round 3mm to 4 mm set of 2	2nos			
_	File square 15 cm 2 nd cut	04 nos.			
كثث	THE SQUARE IS CHIZ CUL	U4 11US.		l	l

420	. nd			
	File square 25 cm 2 nd cut	04 nos.		
121	File flat 30 cm 2 nd cut	06 nos.		
122	File half round 25 cm bastard	04 nos.		
123	Vice grip pliers	02 nos.		
124	Blow lamp 0.55 liters	02 nos.		
	Adjustable pipes tape set BSP with Die set cover pipe size			
	15,20,25,32,38,50mm	01 no.		
126	Reamer parallel 12-16 mm set of 5	01 no.		
_	Micrometer in side 25-50 mm	01 no.		
	Drill twist T/S 6 mm to 25 mm x 1.5	01 set		-
	Pipe wrench 40 cm	01 no.		+
	Pipe wrench 30 cm	01 no.		
	Pipe vice 100 mm	02 nos.		+
-	·			-
_	Gauge slip as johnson metric set	01 set		
-	Carbide wear block 01 mm- 02 mm	02 each		
134	Gauge snaps Go and No Go 25 to 50 mm by 5 mm set of 06			
	pcs.	01 set		
135	Gauge pluge single ended 05 to 55 by 5mm set of 1 1 pcs.			
		01 set		
	Gauge Telescopic up to 150 mm	01 no.		
	Sine bar 125 mm	01 no.		
	Sine bar 250 mm	01 no.		
139	Counter Boring and Counter sinking tool	02 nos.		
140	Pipe cutter 6 mm to 50 mm wheel type	01 no.		
141	Adjustable Spanner 38 cm long	01 no.		
142	Dial Vernier Caliper 0-200mm LC 00.05 MM(Universal type)			
		01 no.		
143	Vernier Micrometer	01 no.		
	Depth Micrometer 0-100 mm, 0.01 mm	01 no.		
	Vernier Caliper 150mm LC 0.02MM	01 NO.		
	Comparators Stand With Dial Indicator LC 0.01 mm	01 no.		
	Surface Roughness comparison plates N1-N12 Grade	01 no.		
	Digital Vernier Caliper 20 cm	01 no.		
	Digital Outside Micrometer 0-25 mm	01 no.		-
	Digital Dial Test Indicator	01 no.		+
	Brinell Hardness Tester	02 no.		
				+
	T-Squares as per the number of trainees	60		
153	Set- Squares sets and french curves sets as per the numbers	60		
454	of trainess			
	Mini-Drafters as per the numbers of trainess	60		-
	Geometrical box for Engineering Drawing	2		
156	Models and charts for Engineering Drawing as per	1		
	requrements			
157	Wall charts, Transparencies and DVDs related to the trade for	As		
<u></u>	Fitter	required		
-	Video Camera with Stand	01 no.		
	Wall Clock	2 no.		
160	Wall charts, Transparencies and DVDs related to the trade for	As		
	Fitter	required		
161	First aid box.	1		
162	Wooden/Fibre Rule	40 nos.		
163	Plier insulated 150 mm	40 nos.		
164	Plier side cutting 150 mm	40 nos.		
	Screw driver 100 mm	40 nos.		
	Screw driver 150 mm	40 nos.		
	Electrician connector, screw driver 100 mm insulated handle	40 nos.		
	thin stem			
168	Heavy duty screw driver 200 mm	40 nos.		
	Electrician screw driver 250 mm insulated handle thin stem	40 nos.	 	+
103	Lieut Salew arred 250 mm moduled manufe tilli stem	70 1103.		
170	Punch centre 150 mm x 9 mm	40 nos.	+	+
	Knife double bladed Electrician	40 nos.	+ +	+
			+	
11/2	Neon Tester	40 nos.		

173 Pula stool 200 mm	40 700	<u> </u>
173 Rule steel 300 mm	40 nos.	
174 Saw tenon 250 mm	40 nos.	
175 Hammer, cross peen 115 grams with handle	40 nos.	
176 Hammer, ball peen 0.75 kg. with handle	40 nos.	
177 Firmer Chisel wood 12 mm	40 nos.	
178 Gimlet 6 mm	40 nos.	
179 Bradwal	40 nos.	
180 Scriber 150 mm x Ø4 mm (Knurled centre position)	40 nos.	
181 Pincer 150 mm	40 nos.	
182 Wire stipper 20 cm	40 nos.	
183 C. Clamp 200 mm, 150 mm and 100 mm	04 nos.	
184 Spanner 150mm adjustable 15 degree	04 nos.	
185 Blow lamp 0.5 litre	04 nos.	
186 Melting pot	02 nos.	
187 Ladle	04 nos.	
188 Chisel cold firmer 25 mm x 200 mm		
	04 nos.	
189 Chisel 25 mm x 6 mm	08 nos.	
190 Drill Machine hand 0 to 6 mm capacity	02 nos.	
191 Electric Drill Machine Portable 6 mm capacity	02 nos.	
192 Pillar electric drill machine 12 mm capacity	02 nos.	
193 Allen key	02 sets	
194 Oil can 0.12 litre	04 nos.	
195 Grease gun	02 nos.	
196 Outside Micrometer 0 to 25 mm	02 nos.	
197 Bench grinder motorized	02 nos.	
198 Rawl plug tool and bit	04 sets	
199 Pulley puller 3 legs (250 mm) adjustable	02 nos.	
200 Bearing puller 3 legs (120 mm)/flexible	02 nos.	
201 Hydrometer	04 sets	
202 Thermometer 0 to 100°C	02 nos.	
203 Scissors blade 150 mm	08 nos.	
204 Crimping tool	02 sets	
205 Chisel cold flat 12 mm.	02 nos.	
206 Mallet hard wood 0.50 kg	05 nos.	
207 Hammer Exeter type 0.40kg	12 nos.	
208 Crimping tools heavy duty	10 nos.	
209 Hacksaw frame 200 mm, 300 mm adjustable		
	12 nos.	
210 Try Square 150 mm blade	06 nos.	
211 Driver 150 mm, outside and Inside Caliper	04 nos.	
212 Plier flat nose 100mm	08 nos.	
213 Plier round nose 150 mm	08 nos.	
214 Plier long nose 150 mm	06 nos.	
215 Tweezers 100 mm	08 nos.	
216 Snip straight 150	06 nos.	
217 Snip bent 150 mm	06 nos.	
218 Spanner D.E. metric standard set (4.7 mm to 20 mm)	06 nos.	
219 Drill hand brace 0 to 100 mm	06 nos.	
220 Drill S.S. Twist Block 2 mm, 5 mm 6 mm set of 3	06 nos.	
221 Plane, smoothing cutters, 50 mm	06 nos.	
222 Gauge, wire imperial	06 nos.	
223 File Flat 200 mm 2 nd cut	12 nos.	
224 File half round 200 mm 2 nd cut	08 nos.	
		
File round 200 mm 2 nd cut	06 no.	
226 File flat 150 mm rough	12 nos.	
227 File flat 250 mm bastard	08 nos.	
228 File flat 250 mm Smooth	08 nos.	
229 Iron, soldering 25 watt, 65 watt, 125 watt each	08 nos.	
230 Copper bit soldering iron 0.25kg	08 nos.	
231 Desoldering gun	08nos.	
232 Vice hand 50 mm jaw	08nos.	
233 Vice table 100mm jaw	12nos.	
234 Pipe cutter to cut pipes upto 5 cm dia	06nos.	
235 Pipe cutter to cut pipes above 5 cm dia	05nos.	
=551. The catter to cat pipes above 5 cm did	051103.	

23 Stock and olies conduit (12 mm to 30 mm)	226	Stock and die set for 20 mm to 50 mm G.I. pipe	09nos.		
238 Multi meter 0 to 100 M Ohms, 2.5 to 500 voit	_	· · · · · · · · · · · · · · · · · · ·			
230 Digital Multi meter (3 1,27 digits)		·			
240 A.C. Voltmeter Centre zero 100-0-100 m volt 02nos.	_	· · · · · · · · · · · · · · · · · · ·			
214 Mil Voltmeter M. J. G. SOUV A. C. J. 250-SOUV 27 nos.					
232 D.C. Milliammeter 0.500 ma, digital + anulog	-				
243 D.C. Ammeter M.C. 0-1A					
2424 Ammeter MC 0-15 - 25A 02nos.					
245 Ammeter MC 0-15 - 25A	_		02nos.		
226					
247 A.C. Ammeter M.I. G. 15- 25A, O-10-20 A(digital)			02nos.		
248 KW. Meter O-1-3 KW			02nos.		
249 Single phase power factor meter, 0-30A, 230V, (Analog +	247	A.C. Ammeter M.I. 0-15 -25A, 0-10-20 A(digital)	02nos.		
Digital	248	K.W. Meter 0-1-3 Kw	03nos.		
250 Frequency meter (Analog + Digital) 02nos.	249	Single phase power factor meter, 0-30A, 230V, (Analog +	02nos.		
251 Tacho meter with stop watch (Analeg + Digital) 0.2nos.		Digital)			
252 Current transformer Primary 0-10-20, secondary - 5A	250	Frequency meter (Analog + Digital)	02nos.		
253 Potential transformer 0-230-400V/110V	251	Tacho meter with stop watch (Analog + Digital)	03nos.		
253 Potential transformer 0-230-400V/110V	252	Current transformer Primary 0-10-20, secondary - 5A	04nos		
254 Growler (Internal + external)					
255 Tong tester/Clamp meter 0-100 Amp.AC(multi range analog digital) digital)		·		+	
A digital	-	·		+	
256 Megger 500 volts + Farth megger 0-30 Ohm 03no.each			USITU.EdCIT		
257 Wheat stone bridge complete with galvanometer and battery 03nos.			02na aash		
258 Relays - Over current, under voltage, etc. 3 volt, 10 amp. 03nos.					
259 Brake test arrangement with two spring balance of 0 to 25 kg. rating 260 DC power supply 0 - 250 volt, 5 amp. 261 Voltage stabilizer input - 150 - 230 volt AC, Output 220 volt 20 anos. 261 Voltage stabilizer input - 150 - 230 volt AC, Output 220 volt 20 anos. 262 AC - 1 kVA 262 Rheostat 0-10 ohm-5Amp, 0-100 ohm-5Amp, 0-250 ohm-14 24 anos. 24 anos. 25 anos. 25 anos. 26 anos. 27 anos. 28 anos.	257	wheat stone bridge complete with galvanometer and battery	usnos.		
259 Brake test arrangement with two spring balance of 0 to 25 kg. rating 260 DC power supply 0 - 250 volt, 5 amp. 261 Voltage stabilizer input - 150 - 230 volt AC, Output 220 volt 20 anos. 261 Voltage stabilizer input - 150 - 230 volt AC, Output 220 volt 20 anos. 262 AC - 1 kVA 262 Rheostat 0-10 ohm-5Amp, 0-100 ohm-5Amp, 0-250 ohm-14 24 anos. 24 anos. 25 anos. 25 anos. 26 anos. 27 anos. 28 anos.	250		02		
rating	258	Relays - Over current, under voltage, etc. 3 volt, 10 amp.	U3nos.		
rating					
260 DC power supply 0 - 250 volt, 5 amp. 03nos. 03nos. 03nos.	259		03nos.		
Voltage stabilizer Input -150 - 230 volt AC, Output 220 volt		5			
AC - 1 KVA AC - 1					
262 Rheostat 0-10 ohm- 5Amp, 0-100 ohm-5Amp, 0-250 ohm-1Amp., 0-300 ohm-3A 14nos. 14nos. 14nos. 21 os. 253 Flux meter 2 nos. 264 Laboratory type induction coil 6 volt to 800-10,000 volt 1 no. 253 -point D.C. starters 220 V, D.C., 3 kW 2 nos. 2 nos. 266 4-point D.C. starters 220 V, D.C., 3 kW 2 nos. 2 nos. 267 Phase sequence meter 04nos. 2 nos. 268 Transformer single phase, 1 KVA, 230/115-50-24-12 Volts, 50 cycles core types, air cooled 3 nos. 2 nos. <td< td=""><td></td><td></td><td>03nos.</td><td></td><td></td></td<>			03nos.		
1Amp., 0-300 ohm-3A					
2 nos.		• • • • • • • • • • • • • • • • • • • •	14nos.		
264 Laboratory type induction coil 6 volt to 800-10,000 volt 1 no. 265 3-point D.C. starters 220 V, D.C., 3 KW 2 nos. 266 4-point D.C. starters 220 V, D.C., 3 KW 2 nos. 267 Phase sequence meter 04nos. 268 Transformer single phase, 1 KVA, 230/115-50-24-12 Volts, 50 cycles core types, air cooled 3 nos. 269 Transformer three phase, 5KVA, 440/230Volts, 50 cycles, Delta/Star, Shell type Oil cooled 2 nos. 270 Variable auto transformer 0-250V, 8 Amps. 2 nos. 271 Bath impregnating 02nos. 272 Oven stoving 02nos. 273 Oil testing kit 1 no. 274 Battery charger with variable output 1 KW 1 no. 275 Hygrometer 1 no. 276 Solar Cooker 6no. 277 Fire extinguisher 04nos. 278 Fire buckets 08nos. 279 Lux meter 1 no. 281 Domestic Appliances:- Electric Hot Plate 1500 watt, 220 volt with temperature control 2 nos. 282 Electric Kettle - 1750 watt, 230 volt 2 nos. 284					
265 3-point D.C. starters 220 V, D.C., 3 KW 2 nos. 266 4-point D.C. starters 220 V, D.C., 3 KW 2 nos. 267 Phase sequence meter 04nos. 268 Transformer single phase, 1 KVA, 230/115-50-24-12 Volts, 50 cycles, orcycles core types, air cooled 2 nos. 269 Transformer three phase, 5KVA, 440/230Volts, 50 cycles, Delta/Star, Shell type Oil cooled 2 nos. 270 Variable auto transformer 0-250V, 8 Amps. 2 nos. 271 Bath impregnating 02nos. 272 Voen stowing 02nos. 273 Oil testing kit 1 no. 274 Battery charger with variable output 1 KW 1 no. 275 Hygrometer 1 no. 50 solar Cooker 6no. 77 Fire extinguisher 04nos. 278 Fire buckets 08nos. 279 Lux meter 1 no. 280 Altimeter 1 no. 281 Domestic Appliances:- Electric Hot Plate 1500 watt, 220 volt with temperature control 2 nos. 282 Electric Kettle - 1750 watt, 230 volt 2 nos. 284 Immersion Heater? 750@1000@1500 WATT& 230 Volt <td>263</td> <td>Flux meter</td> <td>2 nos.</td> <td></td> <td></td>	263	Flux meter	2 nos.		
266 4-point D.C. starters 220 V, D.C., 3 KW 2 nos. 267 Phase sequence meter 04nos. 268 Transformer single phase, 1 KVA, 230/115-50-24-12 Volts, 50 cycles core types, air cooled 2 nos. 269 Transformer three phase, 5KVA, 440/230Volts, 50 cycles, Delta/Star, Shell type Oil cooled 2 nos. 270 Variable auto transformer 0-250V, 8 Amps. 2 nos. 271 Bath impregnating 02nos. 272 Oven stoving 02nos. 273 Oil testing kit 1 no. 274 Battery charger with variable output 1 KW 1 no. 275 Hygrometer 1 no. 276 Solar Cooker 6no. 277 Fire extinguisher 04nos. 278 Fire buckets 08nos. 279 Lux meter 1 no. 281 Domestic Appliances:- Electric Hot Plate 1500 watt, 220 volt with temperature control 2 nos. 282 Electric Kettle - 1750 watt, 230 volt with temperature control 2 nos. 284 Immersion Heater7 750@1000@1500 WATT& 230 Volt Geyser 25 litre, 230 volt (Storage type) 1 no.					
267 Phase sequence meter 04nos. 268 Transformer single phase, 1 KVA, 230/115-50-24-12 Volts, 50 cycles core types, air cooled 3 nos. 269 Transformer three phase, 5KVA, 440/230Volts, 50 cycles, Delta/Star, Shell type Oil cooled 2 nos. 270 Variable auto transformer 0-250V, 8 Amps. 2 nos. 271 Bath impregnating 02nos. 272 Oven stoving 02nos. 273 Oil testing kit 1 no. 274 Battery charger with variable output 1 KW 1 no. 275 Hygrometer 1 no. 276 Solar Cooker 6no. 277 Fire extinguisher 04nos. 278 Fire buckets 08nos. 279 Lux meter 1 no. 280 Altimeter 1 no. 281 Domestic Appliances:- Electric Hot Plate 1500 watt, 220 volt with temperature control 2 nos. 282 Electric Kettle - 1750 watt, 230 volt 2 nos. 284 Immersion Heater7 750@1000@1500 WATT& 230 Volt 2 nos. 285 Geyser 25 litre, 230 volt (Storage type) 1 no.	265	3-point D.C. starters 220 V, D.C., 3 KW	2 nos.		
268 Transformer single phase, 1 KVA, 230/115-50-24-12 Volts, 50 cycles core types, air cooled 3 nos. 2 nos. 269 Transformer three phase, 5KVA, 440/230Volts, 50 cycles, Delta/Star, Shell type Oil cooled 2 nos. 2 nos. 270 Variable auto transformer 0-250V, 8 Amps. 2 nos. 2 nos. 271 Bath impregnating 02nos. 2 nos. 272 Oven stoving 02nos. 2 nos. 273 Oil testing kit 1 no. 2 nos. 274 Battery charger with variable output 1 KW 1 no. 2 nos. 275 Hygrometer 1 no. 2 nos. 276 Solar Cooker 6 no. 2 nos. 277 Fire extinguisher 04nos. 2 nos. 278 Fire buckets 08nos. 2 nos. 279 Lux meter 1 no. 2 nos. 280 Altimeter 1 no. 2 nos. 281 Domestic Appliances:- Electric Hot Plate 1500 watt, 220 volt with temperature control 2 nos. 2 nos. 282 Electric Kettle - 1750 watt, 230 volt with temperature control 2 nos. 2 nos. 284 Immersion He	266	4-point D.C. starters 220 V, D.C., 3 KW	2 nos.		
cycles core types, air cooled 2 nos. 269 Transformer three phase, 5KVA, 440/230Volts, 50 cycles, Delta/Star, Shell type Oil cooled 2 nos. 270 Variable auto transformer 0-250V, 8 Amps. 2 nos. 271 Bath impregnating 02nos. 272 Oven stoving 02nos. 273 Oil testing kit 1 no. 274 Battery charger with variable output 1 KW 1 no. 275 Hygrometer 1 no. 276 Solar Cooker 6no. 277 Fire extinguisher 04nos. 278 Fire buckets 08nos. 279 Lux meter 1 no. 280 Altimeter 1 no. 281 Domestic Appliances:- Electric Hot Plate 1500 watt, 220 volt with temperature control 2 nos. 282 Electric Kettle - 1750 watt, 230 volt 2 nos. 284 Immersion Heater 7750@1000@1500 WATT& 230 Volt 2 nos. 285 Geyser 25 litre, 230 volt (Storage type) 1 no.	267	Phase sequence meter	04nos.		
269 Transformer three phase, 5KVA, 440/230Volts, 50 cycles, Delta/Star, Shell type Oil cooled 2 nos. 270 Variable auto transformer 0-250V, 8 Amps. 2 nos. 271 Bath impregnating 02nos. 272 Oven stoving 02nos. 273 Oil testing kit 1 no. 274 Battery charger with variable output 1 KW 1 no. 275 Hygrometer 1 no. 276 Solar Cooker 6no. 277 Fire extinguisher 04nos. 278 Fire buckets 08nos. 279 Lux meter 1 no. 280 Altimeter 1 no. 281 Domestic Appliances:- Electric Hot Plate 1500 watt, 220 volt with temperature control 2 nos. 282 Electric Kettle - 1750 watt, 230 volt 2 nos. 283 Electric Iron- 1200 watts, 230 volt with temperature control 2 nos. 284 Immersion Heater7 750@1000@1500 WATT& 230 Volt 2 nos. 285 Geyser 25 litre, 230 volt 1 no.	268	Transformer single phase, 1 KVA, 230/115-50-24-12 Volts, 50	3 nos.		
Delta/Star, Shell type Oil cooled		cycles core types, air cooled			
270 Variable auto transformer 0-250V, 8 Amps. 2 nos. 271 Bath impregnating 02nos. 272 Oven stoving 02nos. 273 Oil testing kit 1 no. 274 Battery charger with variable output 1 KW 1 no. 275 Hygrometer 1 no. 276 Solar Cooker 6no. 277 Fire extinguisher 04nos. 278 Fire buckets 08nos. 279 Lux meter 1 no. 280 Altimeter 1 no. 281 Domestic Appliances:- Electric Hot Plate 1500 watt, 220 volt with temperature control 2 nos. 282 Electric Kettle - 1750 watt, 230 volt 2 nos. 283 Electric Iron- 1200 watts, 230 volt with temmperature control 2 nos. 284 Immersion Heater 7750@1000@1500 WATT& 230 Volt 2 nos. 285 Geyser 25 litre, 230 volt 1 no.	269	Transformer three phase, 5KVA, 440/230Volts, 50 cycles,	2 nos.		
270 Variable auto transformer 0-250V, 8 Amps. 2 nos. 271 Bath impregnating 02nos. 272 Oven stoving 02nos. 273 Oil testing kit 1 no. 274 Battery charger with variable output 1 KW 1 no. 275 Hygrometer 1 no. 276 Solar Cooker 6no. 277 Fire extinguisher 04nos. 278 Fire buckets 08nos. 279 Lux meter 1 no. 280 Altimeter 1 no. 281 Domestic Appliances:- Electric Hot Plate 1500 watt, 220 volt with temperature control 2 nos. 282 Electric Kettle - 1750 watt, 230 volt 2 nos. 283 Electric Iron- 1200 watts, 230 volt with temmperature control 2 nos. 284 Immersion Heater 7750@1000@1500 WATT& 230 Volt 2 nos. 285 Geyser 25 litre, 230 volt 1 no.		Delta/Star, Shell type Oil cooled			
271 Bath impregnating 02nos. 272 Oven stoving 02nos. 273 Oil testing kit 1 no. 274 Battery charger with variable output 1 KW 1 no. 275 Hygrometer 1 no. 276 Solar Cooker 6no. 277 Fire extinguisher 04nos. 278 Fire buckets 08nos. 279 Lux meter 1 no. 280 Altimeter 1 no. 281 Domestic Appliances:- Electric Hot Plate 1500 watt, 220 volt with temperature control 2 nos. 282 Electric Kettle - 1750 watt, 230 volt 2 nos. 283 Electric Iron- 1200 watts, 230 volt with temmperature control 2 nos. 284 Immersion Heater7 750@1000@1500 WATT& 230 Volt Geyser 25 litre, 230 volt (Storage type) 1 no.	270		2 nos	+	
272 Oven stoving 02nos. 273 Oil testing kit 1 no. 274 Battery charger with variable output 1 KW 1 no. 275 Hygrometer 1 no. 276 Solar Cooker 6no. 277 Fire extinguisher 04nos. 278 Fire buckets 08nos. 279 Lux meter 1 no. 280 Altimeter 1 no. 281 Domestic Appliances:- Electric Hot Plate 1500 watt, 220 volt with temperature control 2 nos. 282 Electric Kettle - 1750 watt, 230 volt 2 nos. 283 Electric Iron- 1200 watts, 230 volt with temmperature control 2 nos. 284 Immersion Heater7 750@1000@1500 WATT& 230 Volt Geyser 25 litre, 230 volt (Storage type) 1 no.				+	
273 Oil testing kit 1 no. 274 Battery charger with variable output 1 KW 1 no. 275 Hygrometer 1 no. 276 Solar Cooker 6no. 277 Fire extinguisher 04nos. 278 Fire buckets 08nos. 279 Lux meter 1 no. 280 Altimeter 1 no. 281 Domestic Appliances:- Electric Hot Plate 1500 watt, 220 volt with temperature control 2 nos. 282 Electric Kettle - 1750 watt, 230 volt 2 nos. 283 Electric Iron- 1200 watts, 230 volt with temperature control 2 nos. 284 Immersion Heater7 750@1000@1500 WATT& 230 Volt Geyser 25 litre, 230 volt 2 nos. 285 Geyser 25 litre, 230 volt (Storage type) 1 no.				+	
274 Battery charger with variable output 1 KW 1 no. 275 Hygrometer 1 no. 276 Solar Cooker 6no. 277 Fire extinguisher 04nos. 278 Fire buckets 08nos. 279 Lux meter 1 no. 280 Altimeter 1 no. 281 Domestic Appliances:- Electric Hot Plate 1500 watt, 220 volt with temperature control 2 nos. 282 Electric Kettle - 1750 watt, 230 volt 2 nos. 283 Electric Iron- 1200 watts, 230 volt with temmperature control 2 nos. 284 Immersion Heater7 750@1000@1500 WATT& 230 Volt Geyser 25 litre, 230 volt 2 nos. 285 Geyser 25 litre, 230 volt (Storage type) 1 no.					
275 Hygrometer 1 no. 9 276 Solar Cooker 6no. 9 277 Fire extinguisher 04nos. 9 278 Fire buckets 08nos. 9 279 Lux meter 1 no. 9 280 Altimeter 1 no. 9 281 Domestic Appliances:- Electric Hot Plate 1500 watt, 220 volt with temperature control 2 nos. 9 282 Electric Kettle - 1750 watt, 230 volt 2 nos. 9 283 Electric Iron- 1200 watts, 230 volt with temmperature control 2 nos. 9 284 Immersion Heater 7750@1000@1500 WATT& 230 Volt Geyser 25 litre, 230 volt 2 nos. 9 285 Geyser 25 litre, 230 volt (Storage type) 1 no. 9				+ +	
276 Solar Cooker 6no. 90.				+	
277 Fire extinguisher 04nos. 9 278 Fire buckets 08nos. 9 279 Lux meter 1 no. 9 280 Altimeter 1 no. 9 281 Domestic Appliances:- Electric Hot Plate 1500 watt, 220 volt with temperature control 2 nos. 9 282 Electric Kettle - 1750 watt, 230 volt 2 nos. 9 283 Electric Iron- 1200 watts, 230 volt with temmperature control 2 nos. 9 284 Immersion Heater 7750@1000@1500 WATT& 230 Volt 2 nos. 9 285 Geyser 25 litre, 230 volt 1 no. 9				+	
278 Fire buckets 08nos. 279 Lux meter 1 no. 280 Altimeter 1 no. 281 Domestic Appliances:- Electric Hot Plate 1500 watt, 220 volt with temperature control 2 nos. 282 Electric Kettle - 1750 watt, 230 volt 2 nos. 283 Electric Iron- 1200 watts, 230 volt with temmperature control 2 nos. 284 Immersion Heater7 750@1000@1500 WATT& 230 Volt Geyser 25 litre, 230 volt 2 nos. 285 Geyser 25 litre, 230 volt 1 no.	-			+	
279 Lux meter 1 no. 280 Altimeter 1 no. 281 Domestic Appliances:- Electric Hot Plate 1500 watt, 220 volt with temperature control 2 nos. 282 Electric Kettle - 1750 watt, 230 volt 2 nos. 283 Electric Iron- 1200 watts, 230 volt with temmperature control 2 nos. 284 Immersion Heater7 750@1000@1500 WATT& 230 Volt Geyser 25 litre, 230 volt 2 nos. 285 Geyser 25 litre, 230 volt 1 no.				+ +	
280 Altimeter 1 no. 2 nos. 281 Domestic Appliances:- Electric Hot Plate 1500 watt, 220 volt with temperature control 2 nos. 2 nos. 282 Electric Kettle - 1750 watt, 230 volt 2 nos. 2 nos. 283 Electric Iron- 1200 watts, 230 volt with temmperature control 2 nos. 2 nos. 284 Immersion Heater7 750@1000@1500 WATT& 230 Volt Geyser 25 litre, 230 volt 2 nos. 2 nos. 285 Geyser 25 litre, 230 volt (Storage type) 1 no. 1 no.	_			+ +	
Domestic Appliances:- Electric Hot Plate 1500 watt, 220 volt with temperature control 282 Electric Kettle - 1750 watt, 230 volt 283 Electric Iron- 1200 watts, 230 volt with temmperature control 284 Immersion Heater7 750@1000@1500 WATT& 230 Volt Geyser 25 litre, 230 volt 285 Geyser 25 litre, 230 volt (Storage type) 2 nos.	_			-	
with temperature control 282 Electric Kettle - 1750 watt, 230 volt 283 Electric Iron- 1200 watts, 230 volt with temmperature control 284 Immersion Heater7 750@1000@1500 WATT& 230 Volt Geyser 25 litre, 230 volt 285 Geyser 25 litre, 230 volt(Storage type) 1 no.	$\overline{}$			-	
282 Electric Kettle - 1750 watt, 230 volt 2 nos. 283 Electric Iron- 1200 watts, 230 volt with temmperature control 2 nos. 284 Immersion Heater7 750@1000@1500 WATT& 230 Volt 2 nos. Geyser 25 litre, 230 volt 1 no. 285 Geyser 25 litre, 230 volt(Storage type) 1 no.	781		2 nos.		
283 Electric Iron- 1200 watts, 230 volt with temmperature control 2 nos. 284 Immersion Heater7 750@1000@1500 WATT& 230 Volt 2 nos. Geyser 25 litre, 230 volt 1 no. 285 Geyser 25 litre, 230 volt(Storage type) 1 no.	202			+	
284 Immersion Heater7 750@1000@1500 WATT& 230 Volt 2 nos.				+	
Geyser 25 litre, 230 volt 1 no. 285 Geyser 25 litre, 230 volt (Storage type) 1 no.	283	Electric Iron- 1200 watts, 230 volt with temmperature control	2 nos.		
Geyser 25 litre, 230 volt 1 no. 285 Geyser 25 litre, 230 volt (Storage type) 1 no.			_		
285 Geyser 25 litre, 230 volt(Storage type) 1 no.	284		2 nos.		
286 Microwave Oven 20 Lt. convection 2 no.					
	286	Microwave Oven 20 Lt. convection	2 no.		

207	Washing Machine 6.2 kg automatic	1 nc	ı		<u> </u>
	Washing Machine 6.2 kg automatic Mixer/Grinder	1 no.	+	+	
		2 no 2 no.	+	+	
	Hair dryer			_	
290	Cut Out, reverse current, over load, under voltage relays	1 no each			
291	Starter for 3 phase, 400 volt, 50 cycles, 2 to H.P.,A.C. motors	1 no each			
	Direct on line starter Star delta starter with manual, semi&				
	auto and automatic Auto transformer type starter				
292	Fan AC 230 volt 1200 mm.	2 nos			
293	P.L.C.Trainer kit 6/4 input-output micro type	1no			
294	8051 micro controlled kit with simple application	1no			
-	Frequency meter(Digital)	1no			
-	Synchronous scope meter	2nos.			
-	Tachometer digital	2nos			
	Air Conditioner 1.5 Ton (OPTIONAL)	04nos.			
	Wall charts, Transparencies and DVDs related to the trade for	4nos.			
200	Electrician				
_	Document Camera / Visualiser	01 no.			
	wall clocks	02 nos			
	Flaring tool set, single type for tube 4.7to 16 mm OD	10Sets			
303	Swaging tool, punch type, set of size, for tube 4.7 to16 mm OD.	4 Sets			
304	Swaging tool, screw type, with adapter set of size for tube 4.7 to 16 mm OD	4 Sets			
305	Bending spring external type, for copper tube 3 to 6 mm. Dia	4 Sets			
306	Pipe cutter miniature for copper tube 3 to 16 mm. Dia	10 Sets		1	
	Pipe cutter with build in reamer and space cutter , for copper	8Nos.			
200	tube 3 to 32 mm. Dia				
	Pinch off tool, for copper tube 6 to 18 mm.dia	8 Nos.			
	Ratchet spanner of 6.4 mm. sq. reversible	8 Nos.			
	Capillary plug gauge	4 Nos			
	Pinch off pliers/crimping pliers tool 6-18 mm.dia	4 Nos.			
	Piercing pliers 6-18 mm. & piercing valves both with access fittings	8Nos.each			
313	Spanner, double ended 4.7 mm to 16 mm.	6 sets			
	Spanner, double ended 19 mm to 31.8 mm.	2 set			
215	Ring spanner, off set 4.7 mm to 16 mm.	6 Sets			
	Ring spanner, off set 19 mm to 31.8 mm.	2 set			
-	Box spanner size 6.4 to 10 mm.	4 sets			
	Wrench adjustable length 150 mm.	8 Nos			
	Wrench adjustable length 200 mm.	8 Nos.			
	Wrench adjustable length 225 mm.	4 Nos.			
	Pipe wrench size150 mm.	4 Nos.	- 	+	
	Pipe wrench size 250 mm.	4 Nos.	+	+	
	Torque wrench 300 mm. 12.7 mm. square drive right and left	2 set	+	+	
323	hand	2 561			
324	Valve key –T, handle – 4.7 & 6.4 mm. sq.	8 sets			
-	Socket set, ratchet, reversible 12.7 mm. square drive with	4 sets			
226	extension, 4.7 to 31.2 mm.	2 Set		+	
326	Socket set, ratchet, reversible, 1/2 square drive with	2 Set	1		
	extension, 3/16 to		1		
22-	11/4 BSW & SR			+	
327	Pressure gauge, diameter 63 mm. with recalibration set		1		
	screw, scale 0 to		1		
	35 kg/sq.cm.	12 Nos.			
328	Compound gauge, diameter 63 mm. with recalibration set	12 Nos	1		
	screw, scale		1		
L	vacuum 76 mm. pressure 15 kg/sq.cm.			<u></u>	
329	Serviceman thermometer in metal case(-30 to+30 Deg. C)	4 Nos.			
L				<u></u>	

330	Sling psychrometer mounted on aluminum back scale (-50 Deg. c. to +50 Deg. C).	4 Nos.		
221	Gas leak detector for halogen gas	4 Nos.		-
	Lapping plate 250x200 mm.	3 No.		-
	Punch hole for cutting gasket, 4.7 to 16 mm. dia	4Nos.		
	Scissor, gasket cutting stainless steel, length 25 mm.	4 Nos.		
	L –Allen key set, size 1.5 to 6.4 mm.	4 sets		
	T –Allen key set, size 5/32 & 1/8	4 sets		
337	Screw driver, plastic handle, 6 mm. tip length 100,150mm.	10 each		
338	Screw driver, plastic handle, 10 mm. tip length 200.250mm.	10each		
339	Philips screw driver- complete set in leather case	4 sets		
340	Screw driver, plastic handle,3 mm. tip length 100 and	4 sets		
	150mm. insulated			
341	Pliers combination insulated, length 200 mm.	6 nos.		
	Pliers long nose, length 200mm.	4 Nos.		
_	Pliers flat nose, length 150mm.	4 Nos.		
	Hammer ball peen 450 gms.	4 Nos.		
-	Hammer ball peen 220 gms.	4 Nos.		
	Hammer nylon 300 gms.	4 Nos.		
_	Tape, measuring 10 m graduation in mm.	2 No.		
	Tape, measuring 2 m graduation in mm.	4 Nos.		
	Chisel flat length 150 mm.	6 Nos.		
	Hack-saw tubular metal frame adjustable	8 Nos.		-
-	Centre punch length 100 mm.	8 Nos.		
	Oil can pressure type – 1 liter	4 Nos.		
	File, flat medium double cut, length 200 mm. File, half round medium, double cut length 200 mm	8 Nos. 8 Nos.		+
	File, half round, fine double cut, length 150 mm.	8 Nos.		
	File, round, fine, double cut, length 150 mm.	8 Nos.		
	File flat, fine double cut, length 150 mm.	8 Nos.		
	File square, fine double cut, length 150 mm.	8 Nos.		
	Soldering Iron exchangeable copper tip 65 watts.	10 Nos.		
	Pipe bending tool, lever type with degree indicator, for tube	4 Sets		
	OD 6.4 to 16 mm.			
	Puller 3 legged, with flexible arm 120 mm.	2 No.		
362	Puller 2 legged, with flexible arm 300 mm.	2 No.		
363	Hand blower portable complete 1/10 HP motor & other attachments.	2 No.		
364	Snipper sheet metal straight nose 200 mm.	2 No.		
365	Vernier Caliper length 250 mm.	3 No.		
_	Micrometer, outside measurement 0-25 mm.	4 Nos.		†
	Vernier height gauge 250 mm.	2 No.		
	Bench vice 75 mm. jaw	4 Nos.		
	Bench vice 120 mm. jaw	4 Nos.		
	Electrical drill portable with chuck and key, capacity 6.4 mm.	4 Nos.		
371	Gas cylinder truck two wheel type	2 No.		
	Line tester 500 volt. Heavy duty	8 Nos.		
373	Tong-tester 0-10-30 amps. 0-500 volts (Clamp on Multimeter)	8 Nos.		
374	Voltmeter AC/DC portable, precision grade teak wood case, leather belt, 0 to 5 amp.	10 Nos.		
375	Ammeter AC/DC portable, precision grade teak wood case, leather belt, o to 5 amp.	10 Nos.		
376	Ammeter AC/DC portable, precision grade teak wood case, leather belt, o to 30 amp.	10Nos.		
277	•	2 Nos		
3//	Megger- 1000 Volt.	2 Nos		

378 Variac input 230 volt output 400 volt. amp. portable complete with meters and controls. 379 Wattmeter, multi range up to 1 KW 380 Wattmeter, multi range up to 5 KW 2 Nos 2 Nos	
and controls. 379 Wattmeter, multi range up to 1 KW 2Nos	
379 Wattmeter, multi range up to 1 KW 2Nos	
575 Waterneter, materialize up to 1 kW	
1380 Wattmeter_multi_range_un_to_5_KW	
381 Multimeter – Analog type 5 Nos.	
382 Multimeter – Digital type 7 Nos.	
383 Tachometer digital, multi range 0 to 3000 rpm. Portable, 2Nos	
small size in leather case	
384 Transistor tester 2Nos	
385 R.L.C. Bridge 2 Nos	
386 Stop watch 2 Nos	
387 Hand grinder small 1 No.	
388 Filler, gauge 0.05 mm1 mm. 2 Set	
389 Wire gauge metric and Whitworth 2 Set	
390 Refrigerant cylinder capacity 2.5 Kg. 2 Nos.	
391 Refrigerant cylinder capacity 20 Kg. 4 Nos.	
392 Refrigerant cylinder capacity 05 Kg. 4 Nos.	
393 Anemometer (Vane type) 2 No.	
394 Scraper, triangular blade removable 60 mm. 2 Nos.	
395 Descaling pump set with stainless steel impeller and housing 2 No.	
complete with	
motor 1 HP and accessories.	
396 Pressure testing tank with lighting arrangement, pressure 1 No.	
gauge (0 to 35	
kg/sq.cm.) double stage	
I was a great fact that a specially	
398 Micron vacuum gauge capable of reading up to 20 microns 4Nos.	
399 Sensor thermometer (digital) 4Nos.	
400 Fin straightener/ fin comb 2Nos.	
401 Hc refrigerant cylinders/ disposable containers 4Nos.	
402 134a refrigerant cylinders 4Nos. 4Nos.	
403 Fire extinguisher powder type 4Nos.	
404 Two way manifold with gauges 2Nos.	
405 Four way manifold with gauges 2Nos.	
406 Schraeder valve core removal tool 1Nos. 407 Hermetic compressors (1/6hp.) 4 Nos.	
408 Hermetic compressors (1/2hp.) 4 Nos.	
409 Semi-hermetic compressor (1/2hp.) 2 Nos.	
410 Rotary compressors 1 TR 4 Nos.	
411 Spirit level precision metallic 200 mm. 1 No.	
412 Anemometer dial type 1-10,000 meter/min. 1 No.	
413 Dial type manometer 0-10,000 meter/minutes 1 No.	
414 Hermetic compressor 1.5 TR (AC) 1No.	
415 Hygrometer 1 No.	
416 Hydrometer 1 No. 417 Wall Clock 02 no.	
<u> </u>	
R.A.C	
419 First aid box. 1	

(B) Machinery

	(B) Machinery			Unit Rate Trade Total			
SI. No.	Description of Machinery	Brand/Make/ Model/ Specification	Quantity	Unit Rate (in Indian Rs.)	Trade in Figure	In Fig	In Words
1	Lathe General purpose all geared type Centre Height 150mm between centres 1000 mm with all accessories and attachment		04 nos.				
2	Drilling machine pillar type 0-20mm capacity		04 nos.				
3	Pedustal Grinder Double Ended type		03 nos.				
-	Power Saw machine		02 no				
	Fly Press 4T Capacity Arc welding transformer single fase 200 Aamps (with cable		01 no 2 nos.				
U	electrode holder and all other accessaries)		2 1103.				
7	Oxy acetylene gas welding plant with all accessaries		1no.				
8	CNC Trainer Lathe machine: FANUC/SINUMERC base machine is directly linked to P.C., Center height - 100 mm (min.), distance between center - 200 mm (Min.), Swing over carriage- 60 mm (min.), Longitudianal travel - 300 mm (min), Spindle Speed with back gear - 40 to 2000 RPM, with linear and circular interpolation, minimum 8 tool offset with turret.		01 no.				
9	Inverter 1 KVA input 12 volt DC, output 220 volt AC with 12 battery		02nos.				
10	Electrical machine trainer:- Suitable for demonstrating the comstruction and functioning of different types of DC machines and AC machines (single phase and three phase). Should be completed with friction brake dynamo miter, magnatic break, instrument panel and power supply units		01 per institute				
11	Motor generator (AC TO DC) consisting of: Motor induction squirrel cage, 7 HP 400 Volts, 50 cyles, 3- Phase with star delta starter and switch directly coupled to DC shunt generator 5KW 400 Volts, and switch board mounted with regulator, air circuit breaker, ammeter, voltmeter knife blade switches and fuses, set complete with case iron and plate, fixing bolts, foundation bolts and flexible coupling.		02 no.				
	Motor generator (DC TO AC) consisting of: Motor shunt 5HP, 440 Volts with starting compensator and switch directly coupled to generator AC .3.5 KVA , 400/230 Volts, 3-phase, 4 wire, 0.8 PF 50 cycles with exciter and 1 switch board mounted with regulator, circuit breaker, ammeter, voltmeter, Synchronous scope meter frequency meter, knike blade switch and fuses etc. Set complete with cast iron bed plate, fixing bolts, foundation bolts and flexible		04nos.				
13	Used DC generators-series, shunt and compound type for overhauling practice		1 no.				
14	DC shunt generator, 2.5 KW, 220 V with control panel		1 no.				
	D.C. compound generator, 2.5 KW 250 V, with control panel including field rheostat, voltmeter, ammeter and circuit breaker		1 no.				
	Motor series DC 220 volt , 0.5 to 2 HP , coupled with mechanical load		1 no.				
17	Motor shunt DC 220 volt , 2 to 3 HP, coupled with magnetic break		2 nos.				
_	Motor DC compound wound 220 volt 2 to 3 HP with starter and switch		2 nos.				
19	A.C.B. 5KVA		1 no.				
20	Components of SWH and solar cookers for assembling and dismantling		As required				
	Different makes of solar lighting systems		6 nos.				
	Components of solar lighting systems		As required				
23	Cut model of D.C. compound motor		1 no. each				

24 Motor AC squirrel cage, 3 phas 400 volt, 50 cycles, 2 to 3 HP with star delist attare and triple pole inon dad switch fuse. 25 Motor AC phase & wound slip ring type 5 HP 400 volts, 3 & hans, 50 cycles with starter and switch mechanical load. 26 Motor AC sprise by pace 30 V, 50 cycles, 1/4 HP with mechanical load. 27 Motor AC single phase 230 V, 50 cycles, 1/4 HP capacitor hype with starter switch 1 HP with starter 1 no with switch 1 HP with switch 1 HP with starter 1 no with switch 1 HP with switch 1 NP with switch 1 no with switch 1 HP with switch 1 no with switch 1 HP with switch 1 no with switch 1 HP with switch 1 no with microcontroller 1 no with with microcontroller 1 no with microcontroller 1 no with microcon	with star delta starter and triple pole iron clad switch fuse. 25 Motor AC, phase & wound slip ring type 5 HP 400 volts, 3 & phase, 50 cycles with starter and switch phase, 50 cycles with starter and switch nechanical load. 26 Motor AC sense type 230 V, 50 cycles, 1/4 HP with nechanical load. 27 Motor AC single phase 230 V, 50 cycles, 1/4 HP capacitor type with starter switch 1 HP and type with starter switch 2 HP and type and 2 HP a					
phase, 50 cycles with starter and switch 1 no. mechanical load. 1 no	Dhase, 50 cycles with starter and switch	24		2 nos		
26 Motor AC series type 230 V, 50 cycles, 1/4 HP with mechanical load mechanical load Motor AC single phase 230 V, 50 cycles, 1/4 HP capacitor year with starter switch 1 HP with starter 1 HP with starte	26 Motor AC series type 230 V, 50 cycles, 1/4 HP with mechanical load. 27 Motor AC single phase 230 V, 50 cycles, 1/4 HP capacitor type with starter switch 1 HP 28 Motor universal 230 volts, 50 cycles 1/4 Hpwith 29 Stepper motor with digital controller 20 Stepper motor with digital controller 20 Stepper motor with digital controller 20 Stepper motor with digital controller 21 no 22 No. 23 Stepper motor with digital controller 22 nos 30 Oscilloscope dual Trace, 30 MMHZ 31 no 32 Discrete component trainer 33 Discrete component trainer 34 Digital IC. Trainer 36 Digital IC. Trainer 37 Trainer 38 Stepper motor 39 Stepper motor feedback arrangment 30 Trainer 30 Oscilloscope dual Trace, 30 MMHZ 31 Trainer 32 Oscilloscope dual Trace, 30 MMHZ 33 Codive with microcontroller 34 Oscilloscope dual Trace, 30 MMHZ 35 Trainer 46 Oscilloscope dual Trace, 30 MMHZ 47 Evacuating & Trainer 48 Dial thermost of sylval small hydro power unit liset 49 Components of yipical small hydro power unit liset 40 Components of yipical small hydro power unit liset 40 Components of a typical water mill 41 Stepper motor 42 No. 43 Components of a sylval small hydro power unit liset 44 Oscilloscope dual Trace, 30 MmHz 45 Pedestal grinder, double ended wheel dia 200 mm, 3000 rpm. 2 No. 46 Oxy- Acetylene welding set complete with cylinders regulators welding torches with difference nozzles 47 Evacuating & refrigerant charging station comprising Rotary two stage vacuum pump and motor (with gas ballast & antisuck back) Manifold with gauges & valves and capable of pulling vacuum yo to SO micros of Hg and Hitted with weighing scale (up to 2 kg, in lieu of (b) above and with accuracy of +/- 1gram, for charging hydrocarbons. 48 Dial thermometer remote control, armored capillary dial 75 min. 50 Deg. C 49 Two stage rotary vacuum pump of capacity approx 60-100 trans, capacity and minumenter remote control, armored capillary dial 75 min. 50 Deg. C 40 Type Control max. Pressure. 10 kg/sq. cm cap. 45 liter, 40 Air compr	25		1no		
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28 Motor universal 230 volts, 50 cycles 1/4 Hpwith 1 no starter/switch. 29 Stepper motor with digital controller 2 nos 30 Oscilloscope dual Trace, 30 MMHZ 1 no 31 Function generator 1 no 32 Discrete component trainer 1 no 9 no	28 Motor universal 230 volts, 50 cycles 1/4 Hpwith starter/switch. 29 Stepper motor with digital controller 30 Oscilloscope dual Trace, 30 MMHZ 1 no	27	Motor AC single phase 230 V, 50 cycles, 1/4 HP capacitor	1 no		
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49 Two stage rotary vacuum pump of capacity approx 60-100 L/min., capable of evacuating to 50 microns of Hg and fitted with gas ballast, anti suck back valve and single phase motor. 2 Nos. 3 Nos. 2 Nos.	Two stage rotary vacuum pump of capacity approx 60-100 L/min., capable of evacuating to 50 microns of Hg and fitted with gas ballast, anti suck back valve and single phase motor. 2 Nos. Air compressor, two stage for oil-less dry air, with rust proof tank assembly, heater and control max. Pressure. 10 kg/sq. cm cap. 45 liter,		=			
L/min., capable of evacuating to 50 microns of Hg and fitted with gas ballast, anti suck back valve and single phase motor. 50 Air compressor, two stage for oil-less dry air, with rust proof tank assembly,	L/min., capable of evacuating to 50 microns of Hg and fitted with gas ballast, anti suck back valve and single phase motor. 2 Nos. Air compressor, two stage for oil-less dry air, with rust proof tank assembly, heater and control max. Pressure. 10 kg/sq. cm cap. 45 liter,					
with gas ballast, anti suck back valve and single phase motor. 2 Nos. Air compressor, two stage for oil-less dry air, with rust proof tank assembly,	with gas ballast, anti suck back valve and single phase motor. 2 Nos. Air compressor, two stage for oil-less dry air, with rust proof tank assembly, heater and control max. Pressure. 10 kg/sq. cm cap. 45 liter,	49				
valve and single phase motor. 50 Air compressor, two stage for oil-less dry air, with rust proof tank assembly,	valve and single phase motor. 50 Air compressor, two stage for oil-less dry air, with rust proof tank assembly, heater and control max. Pressure. 10 kg/sq. cm cap. 45 liter,					
50 Air compressor, two stage for oil-less dry air, with rust proof tank assembly,	50 Air compressor, two stage for oil-less dry air, with rust proof tank assembly, heater and control max. Pressure. 10 kg/sq. cm cap. 45 liter,		-	2 Nos.		
tank assembly,	tank assembly, heater and control max. Pressure. 10 kg/sq. cm cap. 45 liter,		valve and single phase motor.			
	heater and control max. Pressure. 10 kg/sq. cm cap. 45 liter,	50	Air compressor, two stage for oil-less dry air, with rust proof	2 No.		
			tank assembly,			
neater and control max. Pressure. 10 kg/sq. cm cap. 45 liter,	Motor 1 HP		heater and control max. Pressure. 10 kg/sq. cm cap. 45 liter,			
Motor 1 HP			Motor 1 HP			

- 4			 ,
51	Spray outfit, 'V' twin, with motor ½ HP. delivery up to 120	2 No.	
	liter free air		
	pressure up to 3 Kg/sq.cm. with spray gun and fitting.		
		2 N	
	Refrigerator, compression type 165 liter/170 liter	2 Nos.	
53	Refrigerator, compression type 300 liters double door,	2 Nos.	
	doubles compressor		
	system.		
54	Deep freezer 165 liter – 18 Deg. C., ¼ HP	1 No.	
55	Window air conditioning capacity 3000 k. cal/hr	2 Nos.	
56	Window air conditioning capacity 4500 k. cal/hr	2 Nos.	
57	Split air conditioning capacity 4500 k. cal/hr	2 NOS	
		2 Nos	
58	Split air conditioning capacity 4500 k. cal/hr	21103	
59	Bottle cooler, 110 liters, 1/6 HP.	1 No.	
	Water cooler instantaneous type	2 Nos.	
	Water cooler, storage type	2Nos.	
	Ice candy unit complete with stainless steel tank. Mould box.	2 Nos.	
02	Thermocole	2 1005.	
	insulated sun mica body, agitator compressor, motor etc.		
	Temperature, pressure refrigerant control gauges, motor,		
	pipe fitting etc. 3000 K Cal/hr. or working trainer model/		
	simulator.		
63	Prefab PUF insulated panel for cold room 6 x 4.5 x 8 cft.	1	
	maintaining temp.	comp lete	
	0 deg. to +5 deg. C. Condensing unit complete with semi	set.	
	sealed compressor duly mounted on base plate & charged R-	364	
	22 gas. Evaporator unit complete with expansion valve &		
	other accessories. Electrical control panel complete with		
	digital temperature & pressure indicator & other electrical		
	controls. Fabrication/ Erection/Insulation completed by		
	supplier.		
64	Air conditioning plant, Direct system with Air cooled	2Nos.	
	condenser, complete with all controls including humidity		
	control etc. capacity 15000 k.cal/hr.or		
	working trainer model/simulator. Alternatively, a packaged		
	Air-conditioner of similar capacity.		
65	Air-conditioner of similar capacity.		
65	Air-conditioner of similar capacity. Air conditioning plant, Indirect system with Water cooled	2 Nos	
65	Air-conditioner of similar capacity. Air conditioning plant, Indirect system with Water cooled condenser, chiller, Cooling Tower, complete with all controls	2 Nos	
65	Air-conditioner of similar capacity. Air conditioning plant, Indirect system with Water cooled condenser, chiller, Cooling Tower, complete with all controls including humidity control etc. capacity 15000 k.cal/hr.or	2 Nos	
65	Air-conditioner of similar capacity. Air conditioning plant, Indirect system with Water cooled condenser, chiller, Cooling Tower, complete with all controls	2 Nos	
65	Air-conditioner of similar capacity. Air conditioning plant, Indirect system with Water cooled condenser, chiller, Cooling Tower, complete with all controls including humidity control etc. capacity 15000 k.cal/hr.or	2 Nos	
	Air-conditioner of similar capacity. Air conditioning plant, Indirect system with Water cooled condenser, chiller, Cooling Tower, complete with all controls including humidity control etc. capacity 15000 k.cal/hr.or working trainer model/ simulator.	2 Nos	
	Air-conditioner of similar capacity. Air conditioning plant, Indirect system with Water cooled condenser, chiller, Cooling Tower, complete with all controls including humidity control etc. capacity 15000 k.cal/hr.or working trainer model/ simulator. Condensing unit with open type compressor air cooled		
	Air-conditioner of similar capacity. Air conditioning plant, Indirect system with Water cooled condenser, chiller, Cooling Tower, complete with all controls including humidity control etc. capacity 15000 k.cal/hr.or working trainer model/ simulator. Condensing unit with open type compressor air cooled condenser controls	2 Nos 2Nos.	
66	Air-conditioner of similar capacity. Air conditioning plant, Indirect system with Water cooled condenser, chiller, Cooling Tower, complete with all controls including humidity control etc. capacity 15000 k.cal/hr.or working trainer model/ simulator. Condensing unit with open type compressor air cooled condenser controls etc. capacity 3000 kcal./hr.		
66	Air-conditioner of similar capacity. Air conditioning plant, Indirect system with Water cooled condenser, chiller, Cooling Tower, complete with all controls including humidity control etc. capacity 15000 k.cal/hr.or working trainer model/ simulator. Condensing unit with open type compressor air cooled condenser controls etc. capacity 3000 kcal./hr. Condensing unit with open type compressor evaporative		
66	Air-conditioner of similar capacity. Air conditioning plant, Indirect system with Water cooled condenser, chiller, Cooling Tower, complete with all controls including humidity control etc. capacity 15000 k.cal/hr.or working trainer model/ simulator. Condensing unit with open type compressor air cooled condenser controls etc. capacity 3000 kcal./hr.		
66	Air-conditioner of similar capacity. Air conditioning plant, Indirect system with Water cooled condenser, chiller, Cooling Tower, complete with all controls including humidity control etc. capacity 15000 k.cal/hr.or working trainer model/ simulator. Condensing unit with open type compressor air cooled condenser controls etc. capacity 3000 kcal./hr. Condensing unit with open type compressor evaporative	2Nos.	
66	Air-conditioner of similar capacity. Air conditioning plant, Indirect system with Water cooled condenser, chiller, Cooling Tower, complete with all controls including humidity control etc. capacity 15000 k.cal/hr.or working trainer model/ simulator. Condensing unit with open type compressor air cooled condenser controls etc. capacity 3000 kcal./hr. Condensing unit with open type compressor evaporative condenser controls etc. capacity 3000 kcal./hr.	2Nos.	
66	Air-conditioner of similar capacity. Air conditioning plant, Indirect system with Water cooled condenser, chiller, Cooling Tower, complete with all controls including humidity control etc. capacity 15000 k.cal/hr.or working trainer model/ simulator. Condensing unit with open type compressor air cooled condenser controls etc. capacity 3000 kcal./hr. Condensing unit with open type compressor evaporative condenser controls etc. capacity 3000 kcal./hr. Reciprocating compressor with provision of capacity control	2Nos.	
66	Air-conditioner of similar capacity. Air conditioning plant, Indirect system with Water cooled condenser, chiller, Cooling Tower, complete with all controls including humidity control etc. capacity 15000 k.cal/hr.or working trainer model/ simulator. Condensing unit with open type compressor air cooled condenser controls etc. capacity 3000 kcal./hr. Condensing unit with open type compressor evaporative condenser controls etc. capacity 3000 kcal./hr.	2Nos.	
66 67 68	Air-conditioner of similar capacity. Air conditioning plant, Indirect system with Water cooled condenser, chiller, Cooling Tower, complete with all controls including humidity control etc. capacity 15000 k.cal/hr.or working trainer model/ simulator. Condensing unit with open type compressor air cooled condenser controls etc. capacity 3000 kcal./hr. Condensing unit with open type compressor evaporative condenser controls etc. capacity 3000 kcal./hr. Reciprocating compressor with provision of capacity control etc. for demonstration, capacity 9000 kcal./hr.	2Nos. 2Nos. 2Nos.	
66 67 68	Air-conditioner of similar capacity. Air conditioning plant, Indirect system with Water cooled condenser, chiller, Cooling Tower, complete with all controls including humidity control etc. capacity 15000 k.cal/hr.or working trainer model/ simulator. Condensing unit with open type compressor air cooled condenser controls etc. capacity 3000 kcal./hr. Condensing unit with open type compressor evaporative condenser controls etc. capacity 3000 kcal./hr. Reciprocating compressor with provision of capacity control	2Nos.	
66 67 68 69	Air-conditioner of similar capacity. Air conditioning plant, Indirect system with Water cooled condenser, chiller, Cooling Tower, complete with all controls including humidity control etc. capacity 15000 k.cal/hr.or working trainer model/ simulator. Condensing unit with open type compressor air cooled condenser controls etc. capacity 3000 kcal./hr. Condensing unit with open type compressor evaporative condenser controls etc. capacity 3000 kcal./hr. Reciprocating compressor with provision of capacity control etc. for demonstration, capacity 9000 kcal./hr. Recovery unit for 134a refrigerants with recovery cylinder.	2Nos. 2Nos. 2Nos.	
66 67 68 69	Air-conditioner of similar capacity. Air conditioning plant, Indirect system with Water cooled condenser, chiller, Cooling Tower, complete with all controls including humidity control etc. capacity 15000 k.cal/hr.or working trainer model/ simulator. Condensing unit with open type compressor air cooled condenser controls etc. capacity 3000 kcal./hr. Condensing unit with open type compressor evaporative condenser controls etc. capacity 3000 kcal./hr. Reciprocating compressor with provision of capacity control etc. for demonstration, capacity 9000 kcal./hr.	2Nos. 2Nos. 2Nos.	
66 67 68 69	Air-conditioner of similar capacity. Air conditioning plant, Indirect system with Water cooled condenser, chiller, Cooling Tower, complete with all controls including humidity control etc. capacity 15000 k.cal/hr.or working trainer model/ simulator. Condensing unit with open type compressor air cooled condenser controls etc. capacity 3000 kcal./hr. Condensing unit with open type compressor evaporative condenser controls etc. capacity 3000 kcal./hr. Reciprocating compressor with provision of capacity control etc. for demonstration, capacity 9000 kcal./hr. Recovery unit for 134a refrigerants with recovery cylinder.	2Nos. 2Nos. 2Nos.	
66 67 68 69	Air-conditioner of similar capacity. Air conditioning plant, Indirect system with Water cooled condenser, chiller, Cooling Tower, complete with all controls including humidity control etc. capacity 15000 k.cal/hr.or working trainer model/ simulator. Condensing unit with open type compressor air cooled condenser controls etc. capacity 3000 kcal./hr. Condensing unit with open type compressor evaporative condenser controls etc. capacity 3000 kcal./hr. Reciprocating compressor with provision of capacity control etc. for demonstration, capacity 9000 kcal./hr. Recovery unit for 134a refrigerants with recovery cylinder.	2Nos. 2Nos. 2Nos.	
66 67 68 69	Air-conditioner of similar capacity. Air conditioning plant, Indirect system with Water cooled condenser, chiller, Cooling Tower, complete with all controls including humidity control etc. capacity 15000 k.cal/hr.or working trainer model/ simulator. Condensing unit with open type compressor air cooled condenser controls etc. capacity 3000 kcal./hr. Condensing unit with open type compressor evaporative condenser controls etc. capacity 3000 kcal./hr. Reciprocating compressor with provision of capacity control etc. for demonstration, capacity 9000 kcal./hr. Recovery unit for 134a refrigerants with recovery cylinder.	2Nos. 2Nos. 2Nos. 2Nos. 2Nos.	
66 67 68 69 70	Air-conditioner of similar capacity. Air conditioning plant, Indirect system with Water cooled condenser, chiller, Cooling Tower, complete with all controls including humidity control etc. capacity 15000 k.cal/hr.or working trainer model/ simulator. Condensing unit with open type compressor air cooled condenser controls etc. capacity 3000 kcal./hr. Condensing unit with open type compressor evaporative condenser controls etc. capacity 3000 kcal./hr. Reciprocating compressor with provision of capacity control etc. for demonstration, capacity 9000 kcal./hr. Recovery unit for 134a refrigerants with recovery cylinder. Recovery unit for CFC refrigerants with recovery cylinder.	2Nos. 2Nos. 2Nos. 2Nos. 2Nos. 2Nos. 2Nos.	
66 67 68 69 70 71	Air-conditioner of similar capacity. Air conditioning plant, Indirect system with Water cooled condenser, chiller, Cooling Tower, complete with all controls including humidity control etc. capacity 15000 k.cal/hr.or working trainer model/ simulator. Condensing unit with open type compressor air cooled condenser controls etc. capacity 3000 kcal./hr. Condensing unit with open type compressor evaporative condenser controls etc. capacity 3000 kcal./hr. Reciprocating compressor with provision of capacity control etc. for demonstration, capacity 9000 kcal./hr. Recovery unit for 134a refrigerants with recovery cylinder.	2Nos. 2Nos. 2Nos. 2Nos. 2Nos.	

	Automatic Ice cube m/c capacity 5kg/hr	2Nos.	
75	Dry Nitrogen gas cylinder with drier unit and 2 stage pressure	2Nos.	
	regulator.		
76	Small Car A/C Kit with driving arrangements	2 Nos.	
77	Components of car AC systems wobble plate compressor with	1No.each	
	mounting brackets serpentine evaporator parallel flow		
	condenser hoses, tubes, receiver, expansion valve electrical		
	components & siring harness		
78	Small capacity shell and tube condenser	2Nos.	
79	Fan coil unit with water valves (2&3 way)	2Nos.	
80	Shell and tube, DX chillers (small)	2Nos.	
81	Circulating water pump (small)	2Nos.	
82	Pitot tube & inclined tube manometer	2Nos.	
83	Quick couplers, process tube adaptors for ¼", 3/8" tubes	4 pairs for	
		each tube	
84			
04	Split type AC 4500 kcal/hr. With indoor unit & outdoor units	2	
	and electronic remote control inverted control (EER mes)	2 nos	
85	cold storage plant complete with all controls and accessories		
65	including cooling tower and water treatment plant capacity		
	15000k.cal/hr. or working trainer model/simulator.	1 No.	
	13000k.Cal/III. Of Working trainer model/simulator.		
86	Visi cooler 270 Ltr.	1 No.	
87	Recycling unit (Optional)	1 No.	
	EER Machine i.e. VRV & VFD air conditioning system, small	4.11-	
	capacity.With inverter control system	1 No.	
89	A/C system with digital scroll compressor- twin/triple	1 No.	
	compressor	1 No.	
	complete with microprocessor control boards	compl ete	
90	Air Conditioner 1.5Ton (OPTIONAL)	10 nos.	

(C) Furniture

SI.		Brand/Make/		Unit Rate	Trade Tax/VAT	T	otal
No.	Description of Furniture	Model/	Quantity	(in Indian	in Figure	In Fig	In Words
		Specification		Rs.)	gare		111 110143
1	Steel cupboard with 8 pigeon Lockers		06 nos.	,			+
	Work bench 240X120X90cm		10 nos.				†
	Steel cupboard 180x90x45cm		08 nos.				
	Steel cupboard 120X60X45		08nos.			1	
	Whiteboard with magnetic duster 6'x4'		11 no				
6	Metal rack 182X182X45cm		02 no				
7	Arc welding table with positioner 100cmX75cmX70cm height		2 nos.				
8	Gas welding table with fire bricks		1 nos.				
9	Table for surface plate		02 nos.				
10	Drawing desk table as per the numbers of trainess		60				
11	Stool or chairs as per the numbers of trainees.		60				
12	One number of office table for Training officer		1				
13	One number of office chair for training officer		1				
-	Computers Table & Chairs		5				
15	White Board (folding) for display of study materials through OHP		1				
16	Drawing Board as per the numbers of trainess		60				
17	Cup board for keeping of Drawing Board, T-Squares, set- Squares sets, French curves sets and Mini -Drawing		2				
10	Cup board for keeping of Models and charts		2				+
	Office tables		2				+
	Office chairs		2			1	+
	Visitors Chairs		6			1	+
	Almirah small Size		2				
	Almirah big size		2				+
-	Chair for Trainer (armed) movable		09 no.				<u> </u>
	Table for Trainer (4 1/2ft X 2 1/2ft) with Drawer and		10 no.				
	cupboard						
26	Computer Table		11 no.				†
27	Class Room Chairs (armless)/ Dual desk may also be allowed		150/75				
28	Class Room Tables (3ft X 2ft) / Dual desk may also be allowed		100/50				
29	Steel Cupboard with 8 pigeon lockers		3				<u> </u>
	Work bench for fitters with two vices of 100 mm		4				†
31	Multi drawer tool rack trolley with minimum 4 drawers and 20 tool capacity		8				
32	Lockers with two drawers (standard size)		04nos.				<u> </u>
	Bench working 2.5 X 1.20 X 0.75 meters		08nos.				<u> </u>
	Almirah 2.5 X 1.20 X 0.5 Meters		02no.each				
	Metal rack 100 X 150 X45 cm		08nos.				
	Instructors table		1 no				1
	Instructor chair		2 nos				1
38	White marker board (Magnetic)		2 nos.				
39	Computer chair armed		06 nos.				
-	Drawing Board(2' X 1 1/2')		30 nos.				
-	Work bench 1000x600x800 mm.high		8Nos.				
-	Almirahs, 195x90x49 cm.		8Nos.				
-	Lockers of eight compartments		4Nos.				
	White board portable		2Nos.				
	Desk top table and two revolving chairs		2Set.				<u> </u>
46	Steel Cupboard with 8 pigeon lockers		3				

(D) Computers/Software/Hardware & I.T Items

	(D) Computers/Sort			Unit Rate	Trade		
		Brand/Make/		Ome nate	Tax/VAT	To	otal
SI.	Description of Computers/Software/Hardware & I.T Items	Model/	Quantity	(in Indian	in Figure	In Fig	In Words
No.	Description of computers/ software/ flatuware & i.f items	Specification	Qualitity	Rs.)	III I iguie	IIIIIg	III Words
		Specification		N3.)			
1	Software for Auto cad		1				
2	Printer small size		1				
3	Printer big size for printing of big size drawing		1				
4	Over Head slide projector 01 nos		1				
	Multimedia Computer system with all accessories with UPS		01 set				
5	(.5 KVA)						
6	LCD Projector Screen		05 no.				
7	Document Camera/ Visualiser		01 no.				
8	Smart Board / Inter Active Board		01 no.				
9	Video Camera with Stand		04 nos.				
10	Printer cum Scanner		03 nos.				
	Multimedia Computer System (Latest Version) with all		20 set				
11	accessories with UPS (650 VA)						
12	Document Camera / Visualiser		1				
13	Smart Board / Inter Active Board		1				
14	Laser Printer with scanner		1				
15	LCD Projector with latest configuration		10 nos.				
16	OHP with latest configuration		08 nos.				
17	Auto-Cad software - 2008 or latest (Mech.& Elect.)		4 nos.				
18	Scanner cum Printer with latest configuration		02 no.				
19	UPS		4 nos.				
20	Smart Board / Inter Active Board		01 no.				
21	LASER PRINTER		1 No.				
22	Bacnet / Lonwork / Web monitoring tool Software		1 No.				
23	CBT / simulating software on commercial refrigeration system		1 Set.				
	CBTs on Railway/Bus/Air-craft/ Marine A/Cs.		1 Set				
_	Interactive Board		1 No.			1	
	Internet Connectivity		1 No.			<u> </u>	
	Document Camera / Visualiser		1				
	Smart Board / Inter Active Board		1			1	
		I	•				

SSTARCs

List of Tools & Equipment for a batch of 20 Trainees

ELECTRICIAN - Module - TT - 1

TOOL KIT

CI.	Description of tools/equipments , machinery and	Consideration (84)		Unit Rate	Trade Tax/VAT	Total	
SI. No.	furniture	Specification/Model/ Brand/Make	Quantity	(in Indian Rs.)	in Figure	In Fig	In Words
1	Wooden/Fibre Rule		40 nos.				
2	Plier insulated 150 mm		40 nos.				
3	Plier side cutting 150 mm		40 nos.				
4	Screw driver 100 mm		40 nos.				
5	Screw driver 150 mm		40 nos.				
6	Electrician connector, screw driver 100 mm insulated handle thin stem		40 nos.				
7	Heavy duty screw driver 200 mm		40 nos.				
8	Electrician screw driver 250 mm insulated handle thin stem		40 nos.				
9	Punch centre 150 mm x 9 mm		40 nos.				
10	Knife double bladed Electrician		40 nos.				
11	Neon Tester		40 nos.				
12	Rule steel 300 mm		40 nos.				
13	Saw tenon 250 mm		40 nos.				
14	Hammer, cross peen 115 grams with handle		40 nos.				
15	Hammer, ball peen 0.75 kg. with handle		40 nos.				
16	Firmer Chisel wood 12 mm		40 nos.				
17	Gimlet 6 mm		40 nos.				
18	Bradwal		40 nos.				
19	Scriber 150 mm x Ø4 mm (Knurled centre position)		40 nos.				
20	Pincer 150 mm		40 nos.				
21	Wire stipper 20 cm		40 nos.				
	TOTAL						

SHOP TOOLS, INSTRUMENTS AND MACHINERY TOOL KIT

SI.	Description of tools/equipments, machinery and		Quantity	Unit	Rate	Trade	To	tal
No.	furniture	Specification/Model/				Tax/VAT		
		Brand/Make		(in	Indian	in Figure	In Fig	In
				Rs.)				Words
1	C. Clamp 200 mm, 150 mm and 100 mm		04 nos.					
2	Spanner 150mm adjustable 15 degree		04 nos.					
3	Blow lamp 0.5 litre		04 nos.					
4	Melting pot		02 nos.					
5	Ladle		04 nos.					
6	Chisel cold firmer 25 mm x 200 mm		04 nos.					
7	Chisel 25 mm x 6 mm		08 nos.					
8	Drill Machine hand 0 to 6 mm capacity		02 nos.					
9	Electric Drill Machine Portable 6 mm capacity		02 nos.					
10	Pillar electric drill machine 12 mm capacity		02 nos.					
11	Allen key		02 sets					
12	Oil can 0.12 litre		04 nos.					

13	Grease gun	02 nos.		
	Outside Micrometer 0 to 25 mm	02 nos.		
	Bench grinder motorized	02 nos.		
	Rawl plug tool and bit	04 sets		
	Pulley puller 3 legs (250 mm) adjustable	02 nos.		
	Bearing puller 3 legs (120 mm)/flexible	02 nos.		
	Hydrometer	04 sets		
	Thermometer 0 to 100°C	02 nos.		
	Scissors blade 150 mm	08 nos.		
	Crimping tool	02 sets		
	Chisel cold flat 12 mm.	02 nos.		
	Mallet hard wood 0.50 kg	05 nos.		
	Hammer Exeter type 0.40kg	12 nos.		
	Crimping tools heavy duty	10 nos.		
	Hacksaw frame 200 mm, 300 mm adjustable	12 nos.		
	Try Square 150 mm blade	06 nos.		
	Driver 150 mm, outside and Inside Caliper	04 nos.		
	Plier flat nose 100mm	08 nos.		
	Plier round nose 150 mm	08 nos.		
	Plier long nose 150 mm	06 nos.		
	Tweezers 100 mm	08 nos.		
34	Snip straight 150	06 nos.		
	Snip bent 150 mm	06 nos.		
	Spanner D.E. metric standard set (4.7 mm to 20	06 nos.		
	mm)			
37	Drill hand brace 0 to 100 mm	06 nos.		
38	Drill S.S. Twist Block 2 mm, 5 mm 6 mm set of 3	06 nos.		
39	Plane, smoothing cutters, 50 mm	06 nos.		
	Gauge, wire imperial	06 nos.		
41	File Flat 200 mm 2 nd cut	12 nos.		
42	File half round 200 mm 2 nd cut	08 nos.		
43	File round 200 mm 2 nd cut	06 no.		
	File flat 150 mm rough	12 nos.		
	File flat 250 mm bastard	08 nos.		
	File flat 250 mm Smooth	08 nos.		
	Iron, soldering 25 watt, 65 watt, 125 watt each	08 nos.		
	Copper bit soldering iron 0.25kg	08 nos.		
	Desoldering gun	08nos.		
	Vice hand 50 mm jaw	08nos.		
	Vice table 100mm jaw	12nos.		
	Pipe cutter to cut pipes upto 5 cm dia	06nos.		
	Pipe cutter to cut pipes above 5 cm dia	05nos.		
54	Stock and die set for 20 mm to 50 mm G.I. pipe	09nos.		
	Stock and dies conduit (12 mm to 30 mm)	05nos.		
	Multi meter 0 to 100 M Ohms, 2.5 to 500 volt	07nos.		
	Digital Multi meter (3 1/2 digits)	03nos.		
	A.C. Voltmeter centre zero 100-0-100 m volt	02nos.		
_	Mill Voltmeter M.I.O-500V A.C. 0-250-500V	07nos.		
_	D.C. Milliammeter 0-500 ma, digital + analog	03nos.		
	D.C Ammeter MC 0-1A	02nos.		
_	Ammeter MC 0-5 A	02nos.		
_	Ammeter MC 0-15 - 25A	02nos.		
		-		

64	A.C. Ammeter M.I. 0-5A, 0-500MA (digital)	02no	<u>, </u>	
	A.C. Ammeter M.I. 0-3A, 0-300MA (digital) A.C. Ammeter M.I. 0-15 -25A, 0-10-20 A(digital)	02no		
	K.W. Meter 0-1-3 Kw	03no		- -
	Single phase power factor meter, 0-30A, 230V,	03no 02no		
"	(Analog + Digital)	02110	·	
68	Frequency meter (Analog + Digital)	02no	S.	+ +
	Tacho meter with stop watch (Analog + Digital)	03no		
	1 , , , , ,			- - -
70	Current transformer Primary 0-10-20, secondary -	04no	S.	
71	5A Potential transformer 0-230-400V/110V	02 = 2	26	
_	Growler (Internal + external)	03 no 02no.e		+ +
	Tong tester/Clamp meter 0-100 Amp.AC(multi	02no.e		
/3	range analog + digital)	U3110.e	acii	
7/1	Megger 500 volts + Earth megger 0-30 Ohm	03no.e	ach	
	Wheat stone bridge complete with galvanometer	03no.e		
	and battery	03110	·	
	Relays - Over current, under voltage, etc. 3 volt, 10	03no	s.	
	amp.			
	Brake test arrangement with two spring balance of	03no	S.	
	0 to 25 kg. rating			
	DC power supply 0 - 250 volt, 5 amp.	03no	S.	
-	Inverter 1 KVA input 12 volt DC, output 220 volt AC	02no	s.	
	with 12 battery			
80	Voltage stabilizer Input -150 - 230 volt AC, Output	03no	S.	
	220 volt AC - 1 KVA			
81	Rheostat 0-10 ohm- 5Amp, 0-100 ohm-5Amp, 0-250	14no	s.	
	ohm-1Amp., 0-300 ohm-3A			
	Flux meter	2 no:	S.	
83	Laboratory type induction coil 6 volt to 800-10,000	1 no).	
	volt			
	3-point D.C. starters 220 V, D.C., 3 KW	2 nos		
	4-point D.C. starters 220 V, D.C., 3 KW	2 no:		
	Electrical machine trainer:- Suitable for	01 pe		
	demonstrating the comstruction and functioning of	institu	ite	
	different types of DC machines and AC machines			
	(single phase and three phase). Should be			
	completed with friction brake dynamo miter,			
	magnatic break, instrument panel and power supply			
	units Motor generator (AC TO DC) consisting of: Motor	02 no		
6/	induction squirrel cage, 7 HP 400 Volts, 50 cyles, 3-	02 nc	J.	
	Phase with star delta starter and switch directly			
	coupled to DC shunt generator 5KW 400 Volts, and			
	switch board mounted with regulator, air circuit			
	breaker, ammeter, voltmeter knife blade switches			
	and fuses, set complete with case iron and plate,			
	fixing bolts, foundation bolts and flexible coupling.			
	inking boils, roundation boils and nexible coupling.			
Ь	<u> </u>		<u> </u>	

		1 - 1	T T	
88	Motor generator (AC TO DC) consisting of: Motor shunt	04nos.		
	5HP, 440 Volts with starting compensator and switch			
	directly coupled to generator AC .3.5 KVA , 400/230 Volts,			
	3-phase, 4 wire, 0.8 PF 50 cycles with exciter and 1 switch			
	board mounted with regulator, circuit breaker, ammeter, voltmeter, Synchronous scope meter frequency meter,			
	knike blade switch and fuses etc. Set complete with cast			
	iron bed plate, fixing bolts, foundation bolts and flexible			
	coupling.			
80	Phase sequence meter	04nos.		
	Used DC generators-series, shunt and compound	1 no.		
30	type for overhauling practice	1110.		
01		1 22		
91	DC shunt generator, 2.5 KW, 220 V with control	1 no.		
-03	panel	1		
92	D.C. compound generator, 2.5 KW 250 V, with	1 no.		
	control panel including field rheostat, voltmeter,			
	ammeter and circuit breaker			
93	Motor series DC 220 volt , 0.5 to 2 HP , coupled with	1 no.		
	mechanical load			
94	Motor shunt DC 220 volt , 2 to 3 HP, coupled with	2 nos.		
	magnetic break			
95	Motor DC compound wound 220 volt 2 to 3 HP with	2 nos.		
	starter and switch			
96	Transformer single phase, 1 KVA, 230/115-50-24-12	3 nos.		
	Volts, 50 cycles core types, air cooled			
97	Transformer three phase, 5KVA, 440/230Volts, 50	2 nos.		
	cycles, Delta/Star, Shell type Oil cooled			
98	Variable auto transformer 0-250V, 8 Amps.	2 nos.		
99	Bath impregnating	02nos.		
-	Oven stoving	02nos.		
101	Oil testing kit	1 no.		
102	Battery charger with variable output 1 KW	1 no.		
103	Hygrometer	1 no.		
104	A.C.B. 5KVA	1 no.		
	<u>FURNITURES</u>			
1	Lockers with two drawers (standard size)	04nos.		
2	Bench working 2.5 X 1.20 X 0.75 meters	08nos.		
3	Almirah 2.5 X 1.20 X 0.5 Meters	02no.each		
4	Fire extinguisher	04nos.		
5	Fire buckets	08nos.		
6	Metal rack 100 X 150 X45 cm	08nos.		

COMPENENTS OF RENEWABLE ENERGY SOURCES

SI. No.	Description of tools/equipments , machinery and furniture	Specification/Model/	Quantity	Unit Rate	Trade Tax/VAT	To	otal
		Brand/Make		(in India	n in Figure	In Fig	In
				Rs.)			Words
1	Solar cooker		6 nos.				
2	Components of SWH and solar cookers for		As required	d			
	assembling and dismantling						
3	Different makes of solar lighting systems		6 nos.				
4	Components of solar lighting systems		As required	ł			
5	Cut model of D.C. compound motor		1 no. each				
6	Lux meter		1 no.				
7	Altimeter		1 no.				
	TOTAL						

SSTARCs List of Tools & Equipment for a batch of 20 Trainees ELECTRICIAN - Module - TT - 11 TOOL KIT

1		 - Specification/Model			
а	Domestic Appliances:- Electric Hot Plate 1500 watt,	Brand/Make	2 nos.		
	220 volt with temperature control	Brana, wake			
b	Electric Kettle - 1750 watt, 230 volt		2 nos.		
С	Electric Iron- 1200 watts, 230 volt with		2 nos.		
	temmperature control				
d	Immersion Heater7 750@1000@1500 WATT& 230		2 nos.		
	Volt Geyser 25 litre, 230 volt				
e	Geyser 25 litre, 230 volt(Storage type)		1 no.		
f	Microwave Oven 20 Lt. convection		2 no.		
g	Washing Machine 6.2 kg automatic		1 no.		
h	Mixer/Grinder		2 no		
i	Hair dryer		2 no.		
2	Cut Out, reverse current, over load, under voltage		1 no each		
	relays				
3	Starter for 3 phase, 400 volt, 50 cycles, 2 to		1 no each		
	H.P.,A.C. motors Direct on line starter Star delta				
	starter with manual, semi& auto and automatic				
	Auto transformer type starter				
4	Motor AC squirrel cage, 3 phas 400 volt, 50 cycles, 2		2 nos		
	to 3HP with star delta starter and triple pole iron				
	clad switch fuse.				
5	Motor AC phase & wound slip ring type 5 HP 400		1no		
	volts, 3 & phase, 50 cycles with starter and switch				
6	Motor AC series type 230 V, 50 cycles, 1/4 HP with		1 no.		
	mechanical load.				
7	Motor AC single phase 230 V, 50 cycles, 1/4 HP		1 no		
	capacitor type with starter switch 1 HP				
8	Motor universal 230 volts, 50 cycles 1/4 Hpwith		1 no		1
	starter/switch.				
9	Stepper motor with digital controller		2 nos		
10	Fan AC 230 volt 1200 mm.		2 nos		

11	Oscilloscope dual Trace, 30 MMHZ	1 no	
	Function generator	1 no	
	Discrete component trainer	1 no	
	Linear I.C. Trainer	1 no	
15	Digital I.C. Trainer	1 no	
16	Thyristor/IGBT controlled DC motor drive 1 HP with	1 no	
	tacho- generator feedback arrangment		
17	Thyrisor /IGBT controlled AC motor drive with VVVF	1 no	
	Control,3 phase 2 HP		
18	A.C drive with microcontroller	1no	
19	D.C. drive with microcontroller	1no	
20	stepper motor	1no	
21	P.L.C.Trainer kit 6/4 input-output micro type	1no	
22	8051 micro controlled kit with simple application	1no	
23	Frequency meter(Digital)	1no	
24	Synchronous scope meter	2nos.	
25	Tachometer digital	2nos	
26	Cut model of 3 phase induction motor	1no	
27	Cut model of watermill and hydro power	1 each	
28	Components of typical small hydro power unit	1set	
29	Components of a typical water mill	1set	
	Furnitures		
1	Instructors table	1 no	
2	Instructor chair	2 nos	

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List of Tools & Equipment for a batch of 30 Trainees MODULE ENGINEERING TECHNOLOGY PART 1&2

TRADE:- ELECTRICIAN TOOL KIT

SI.	Description of tools/equipments, machinery and		Quantity	Unit Rate	Trade	To	otal
No.	furniture	Specification/Model/			Tax/VAT		
		Brand/Make		(in Indiar	in Figure	In Fig	In
				Rs.)			Words
1	White marker board (Magnetic)		2 nos.				
2	LCD Projector with latest configuration		o2no.				
3	OHP with latest configuration		2 nos.				
4	Computer with latest configuration		4 nos.				
5	Auto-Cad software - 2008 or latest (Mech.& Elect.)		4 nos.				
6	Scanner cum Printer with latest configuration		02 no.				
7	UPS		4 nos.				
8	Computer chair armed		06 nos.				
9	Computer Tables		06nos.				
10	Drawing Board(2' X 1 1/2')		30 nos.				
	TOTAL						

LIST OF FURNITURE, ACCESSORIES AND AUDIO VISUAL AIDS FOR AUDIO VISUAL LAB Teaching mathodology (COMMON FOR ALL ENGG. TRADES)

TRADE- ELECTRICIAN

SI.	Description of tools/equipments, machinery and		Quantity	Unit Rate	Trade	То	tal
No.	furniture with	Specification/Model/			Tax/VAT		
	Specifications	Brand/Make		(in Indian	in Figure	In Fig	In
				Rs.)			Words
1	Class Room Chairs (armless) / Dual desk may also be		50/25 nos.				
	allowed						
2	Class Room Tables (3ft X 2ft) / Dual desk may also		50/25 nos.				
	be allowed						
4	Table for Trainer (4 1/2 ft X 2 1/2 ft) with Drawer		02 nos.				
	and cupboard						
5	LCD Projector		02 nos.				
6	Multimedia Computer System with all accessories		02set				
	with UPS (.5 KVA)						
8	White Board (6 ft X 4 ft.)		02nos.				
9	LCD Projector Screen		02nos.				
10	Air Conditioner 1.5 Ton (OPTIONAL)		04nos.				
12	Wall Charts, Transparencies and DVDs related to		As reqd.				
	the trade						
13	Document Camera / Visualiser		01 no.				
14	Smart Board / Inter Active Board		01 no.				_
15	Over Head Projector		01 no.				_
16	Video Camera with stand		01 no.				
	TOTAL						

FURNITURE, ACCESSORIES AND AUDIO VISUAL AIDS MODULES:TT-I AND TT- II (COMMON FOR ALL ENGG. TRADES)

TRADE- ELECTRICIAN

SI.	Description of tools/equipments, machinery and		Quantity	Unit Rate	Trade	То	tal
No.	furniture with	Specification/Model/			Tax/VAT		
	Specifications	Brand/Make		(in Indian	in Figure	In Fig	In
				Rs.)			Words
1	wall clocks		02 nos				
2	wall clocks Wall charts, Transparencies and DVDs related to		02 nos As req.				

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List of Tools & Equipment for a batch of 20 Trainees FOR MODULE TT-1 Trade: "REFRIGERATION AND AIRCONDITIONING MECHANIC"

	Trade: REFRIGERATI						
	Description of tools /organization and the same	Consideration /s.a		Unit Rate	Trade		
SI.	Description of tools/equipments , machinery	Specification/M			Tax/VAT	To	tal
No.	and furniture	odel/	Quantity	(in Indian	in Figure	In Fig	In Words
		Brand/Make		Rs.)			
	Flaring tool set, single type for tube 4.7to 16		10Sets				
1	mm OD						
	Swaging tool, punch type, set of size, for tube		4 Sets				
2	4.7 to16 mm OD.						
	Swaging tool, screw type, with adapter set of		4 Sets				
3	size for tube 4.7 to 16 mm OD						
	Bending spring external type, for copper tube 3		4 Sets				
4	to 6 mm. Dia						
	Pipe cutter miniature for copper tube 3 to 16		10 Sets				
	mm. Dia		2				
6	Pipe cutter with build in reamer and space		8Nos.				
	cutter, for copper tube 3 to 32 mm. Dia		_				
	Pinch off tool, for copper tube 6 to 18 mm.dia		8 Nos.				
7			0.11				
	Ratchet spanner of 6.4 mm. sq. reversible		8 Nos.				
9	Capillary plug gauge		4 Nos				
10	Pinch off pliers/crimping pliers tool 6-18		4 Nos.				
10	mm.dia Piercing pliers 6-18 mm. & piercing valves both		8Nos.each				
11	with access fittings		olvos.eacii				
	Spanner, double ended 4.7 mm to 16 mm.		6 sets				
	Spanner, double ended 19 mm to 31.8 mm.		2 set				
	Ring spanner, off set 4.7 mm to 16 mm.		6 Sets				
	Ring spanner, off set 19 mm to 31.8 mm.		2 set				
_	Box spanner size 6.4 to 10 mm.		4 sets				
_	Wrench adjustable length 150 mm.		8 Nos				
_	Wrench adjustable length 200 mm.		8 Nos.				
	Wrench adjustable length 225 mm.		4 Nos.				
	Pipe wrench size150 mm.		4 Nos.				
21	Pipe wrench size 250 mm.		4 Nos.				
	Torque wrench 300 mm. 12.7 mm. square drive		2 set				
	right and left hand						
	Valve key –T, handle – 4.7 & 6.4 mm. sq.		8 sets				
24	Socket set, ratchet, reversible 12.7 mm. square		4 sets				
	drive with extension, 4.7 to 31.2 mm.						
	Socket set, ratchet, reversible, 1/2 square drive		2 Set				
3.5	with extension, 3/16 to						
25	11/4 BSW & SR						
	Pressure gauge, diameter 63 mm. with						
36	recalibration set screw, scale 0 to		42 N				
26	35 kg/sq.cm.		12 Nos.	<u> </u>			<u> </u>

	In 1 12 1 10 1		12 N	I	ı	
	Compound gauge, diameter 63 mm. with		L2 Nos			
	recalibration set screw, scale					
27	vacuum 76 mm. pressure 15 kg/sq.cm.					
	Serviceman thermometer in metal case(-30	4	Nos.			
28	to+30 Deg. C)					
	Sling psychrometer mounted on aluminum	2	Nos.			
	back scale					
	(-50 Deg. c. to +50 Deg. C).					
_	Gas leak detector for halogen gas		4 Nos.			
31	Lapping plate 250x200 mm.		3 No.			
1	Punch hole for cutting gasket, 4.7 to 16 mm.		4Nos.			
32	dia					
1	Scissor, gasket cutting stainless steel, length 25		4 Nos.			
_	mm.					
	L –Allen key set, size 1.5 to 6.4 mm.		4 sets			
_	T –Allen key set, size 5/32 & 1/8		4 sets			
36	Screw driver, plastic handle, 6 mm. tip length		10 each			
	100,150mm.		40 '			
1	Screw driver, plastic handle, 10 mm. tip length		10each			
37	200.250mm.		4+			
	Philips screw driver- complete set in leather		4 sets			
38	case					
20	Screw driver, plastic handle,3 mm. tip length		4 sets			
39	100 and 150mm. insulated		C			
40	Pliers combination insulated, length 200 mm.		6 nos.			
40	DI: 1 1 200		4 Non			
	Pliers long nose, length 200mm.		4 Nos.			
	Pliers flat nose, length 150mm.		4 Nos.			
	Hammer ball peen 450 gms.		4 Nos.			
	Hammer ball peen 220 gms.		4 Nos.			
_	Hammer nylon 300 gms.		4 Nos.			
	Tape, measuring 10 m graduation in mm.		2 No.			
	Tape, measuring 2 m graduation in mm.		4 Nos.			
	Chisel flat length 150 mm.		6 Nos.			
	Hack-saw tubular metal frame adjustable		8 Nos.			
_	Centre punch length 100 mm.		4 Nos.			
21	Oil can pressure type – 1 liter		8 Nos.			
52	File, flat medium double cut, length 200 mm.		o INUS.			
52	File, half round medium, double cut length 200		8 Nos.			
E 2	mm		o INUS.			
	File, half round, fine double cut, length 150		8 Nos.			
54			o INOS.			
	mm. File, round, fine, double cut, length 150 mm.		8 Nos.			
55	ir ne, round, nne, double cut, length 150 mm.		o INOS.			
	File flat, fine double cut, length 150 mm.		8 Nos.			
30	File square, fine double cut, length 150 mm.		8 Nos.			
57	ine square, fine double cut, length 130 filli.		0 1403.			
37	Soldering Iron exchangeable copper tip 65		10 Nos.			
50	watts.		TO 1402.			
38	Pipe bending tool, lever type with degree		4 Sets			
59	indicator, for tube OD 6.4 to 16 mm.		. 500			
	וווווווווווווווווווווווווווווווווווווו	<u> </u>		l	<u> </u>	

60	Puller 3 legged, with flexible arm 120 mm.		2 No.		
00					
61	Puller 2 legged, with flexible arm 300 mm.		2 No.		
	Hand blower portable complete 1/10 HP motor		2 No.		
62	& other attachments.				
63	Snipper sheet metal straight nose 200 mm.		2 No.		
-	Vernier Caliper length 250 mm.		3 No.		
	Micrometer, outside measurement 0-25 mm.		4 Nos.		
65					
66	Vernier height gauge 250 mm.		2 No.		
67	Bench vice 75 mm. jaw		4 Nos.		
68	Bench vice 120 mm. jaw		4 Nos.		
	Electrical drill portable with chuck and key,		4 Nos.		
	capacity 6.4 mm.				
	Pillar drilling machine 200 to 2500 rpm.		2 No.		
_	capacity 20 mm.				
	Pedestal grinder, double ended wheel dia 200		2 No.		
	mm. 3000 rpm.				
72	Oxy- Acetylene welding set complete with		2 set		
	cylinders regulators welding	C	omplete		
	torches with difference nozzles				
	Gas cylinder truck two wheel type		2 No.		
74	Line tester 500 volt. Heavy duty		8 Nos.		
	Tong-tester 0-10-30 amps. 0-500 volts (Clamp		8 Nos.		
75	on Multimeter)				
	Voltmeter AC/DC portable, precision grade teak		10 Nos.		
	wood case, leather belt, 0 to 5 amp.				
76			40 N		
77	Ammeter AC/DC portable, precision grade teak		10 Nos.		
	wood case, leather belt, o to 5 amp. Ammeter AC/DC portable, precision grade teak		10Nos.		
/8	wood case, leather belt, o to 30 amp.		101103.		
70	·		2 N		
	Megger- 1000 Volt.		2 Nos		
80	Variac input 230 volt output 400 volt. amp. portable complete with meters				
	and controls.		2Nos.		
			201-		
	Wattmeter, multi range up to 1 KW		2Nos		
_	Wattmeter, multi range up to 5 KW		2 Nos		
_	Multimeter – Analog type		5 Nos. 7 Nos.		
84	Multimeter – Digital type Tachometer digital, multi range 0 to 3000 rpm.	2N			
QΕ	Portable, small size in leather case	214	03		
	Transistor tester		2Nos		
-	R.L.C. Bridge		2 Nos		
-	Stop watch		2 Nos		
	Hand grinder small		1 No.		
	Filler, gauge 0.05 mm1 mm.		2 Set		
	Wire gauge metric and Whitworth		2 Set		
-	Refrigerant cylinder capacity 2.5 Kg.		2 Nos.		
_	Refrigerant cylinder capacity 20 Kg.		4 Nos.		
-	Refrigerant cylinder capacity 05 Kg.		4 Nos.		
		l	L	-	

			•		1	Ī	
95	Evacuating & refrigerant charging station		2 Set.				
	comprising						
	Rotary two stage vacuum pump and motor						
	(with gas ballast & anti suck back) Manifold						
	with gauges & valves and capable of pulling						
	vacuum up to						
	50 microns of Hg and with provision of						
	connecting to a micro level vacuum gauge						
	Graduated charging cylinder with provisions for						
	temperature correction and all necessary						
	isolating valves						
	Evacuating & charging station as above but						
	fitted with weighing scale (up to 2 kg. in lieu of						
	(b) above and with accuracy of +/- 1gram, for						
	charging hydrocarbons.						
96	Dial thermometer remote control, armored		2Nos				
	capillary dial 75 mm50 Deg. C						
	to + 50 Deg. C.						
	<u> </u>						
	Two stage rotary vacuum pump of capacity						
	approx 60-100 L/min., capable of evacuating to						
	50 microns of Hg and fitted with gas ballast,		2 Nos.				
	anti suck back		2 1103.				
	valve and single phase motor.						
97							
_	Anemometer (Vane type)		2 No.				
	Air compressor, two stage for oil-less dry air,		2 No.				
	with rust proof tank assembly,						
	heater and control max. Pressure. 10 kg/sq. cm						
	cap. 45 liter, Motor 1 HP						
	· ·						
99			2 Nos.				
100	Scraper, triangular blade removable 60 mm.		2 NOS.				
100			2.11-				
	Descaling pump set with stainless steel impeller		2 No.				
	and housing complete with						
101	motor 1 HP and accessories.						
102	Spray outfit, 'V' twin, with motor ½ HP. delivery	_	2 No.				
1	up to 120 liter free air						
	pressure up to 3 Kg/sq.cm. with spray gun and						
1	fitting.						
100	<u> </u>		1 No				
103	Pressure testing tank with lighting		1 No.				
	arrangement, pressure gauge (0 to 35						
	kg/sq.cm.) double stage						
	Heating kit with infra red bulb (200 watt.		1 Set.				
104	capacity)						
	Refrigerator, compression type 165 liter/170		2 Nos.	1			
105	liter						
	Refrigerator, compression type 300 liters		2 Nos.				
1 100			_ 1403.				
1	double door, doubles compressor						
107	system. Deep freezer 165 liter – 18 Deg. C., ¼ HP		1 N.c				
	IDEED HEEZEL 103 HILL - 10 DEK. C., 1/4 NF		1 No.		Ī	Ī	

Window air conditioning capacity 4500 k. cal/hr Window air conditioning capacity 4500 k. cal/hr Split air conditioning capacity 4500 k. cal/hr Split air conditioning capacity 4500 k. cal/hr Split air conditioning capacity 4500 k. cal/hr 112 Bottle cooler, 110 liters, 1/6 HP. 1 No. 113 Water cooler instantaneous type 2 Nos. Ice candy unit complete with stainless steel tank. Mould box. Thermocole	
109 110 Split air conditioning capacity 4500 k. cal/hr 2 Nos 111 Split air conditioning capacity 4500 k. cal/hr 112 Bottle cooler, 110 liters, 1/6 HP. 1 No. 113 Water cooler instantaneous type 2 Nos. 114 Water cooler, storage type 2 Nos. Ice candy unit complete with stainless steel 2 Nos.	
110 Split air conditioning capacity 4500 k. cal/hr 111 Split air conditioning capacity 4500 k. cal/hr 112 Bottle cooler, 110 liters, 1/6 HP. 1 No. 113 Water cooler instantaneous type 2 Nos. 114 Water cooler, storage type 2 Nos. Ice candy unit complete with stainless steel 2 Nos.	
Split air conditioning capacity 4500 k. cal/hr 112 Bottle cooler, 110 liters, 1/6 HP. 113 Water cooler instantaneous type 2 Nos. 114 Water cooler, storage type 2 Nos. Ice candy unit complete with stainless steel 2 Nos.	
112 Bottle cooler, 110 liters, 1/6 HP.1 No.113 Water cooler instantaneous type2 Nos.114 Water cooler, storage type2Nos.Ice candy unit complete with stainless steel2 Nos.	
113 Water cooler instantaneous type2 Nos.114 Water cooler, storage type2Nos.Ice candy unit complete with stainless steel2 Nos.	
114 Water cooler, storage type 2Nos. Ice candy unit complete with stainless steel 2 Nos.	
Ice candy unit complete with stainless steel 2 Nos.	
insulated sun mica body, agitator compressor,	
motor etc. Temperature, pressure refrigerant	
control gauges, motor, pipe fitting etc. 3000 K	
Cal/hr. or working trainer model/ simulator.	
115	
Prefab PUF insulated panel for cold room 6 x 1	1
4.5 x 8 cft. maintaining temp.	
0 deg. to +5 deg. C. Condensing unit complete set.	
with semi sealed compressor duly mounted on	
base plate & charged R-22 gas. Evaporator unit	
complete with expansion valve & other	
accessories. Electrical control panel complete	
with digital temperature & pressure indicator &	
other electrical controls. Fabrication/	
Erection/Insulation completed by supplier.	
116	
Air conditioning plant, Direct system with Air 2Nos.	
cooled condenser, complete with all controls	
including humidity control etc. capacity 15000	
k.cal/hr.or	
working trainer model/simulator. Alternatively,	
a packaged Air-conditioner of similar capacity.	
Air conditioning plant, Indirect system with 2 Nos	
Water cooled condenser, chiller, Cooling	
Tower, complete with all controls including	
humidity control etc. capacity 15000 k.cal/hr.or	
working trainer model/ simulator.	
118	
Condensing unit with open type compressor air	
cooled condenser controls 2Nos.	
119 etc. capacity 3000 kcal./hr.	
120 Condensing unit with open type compressor	
evaporative condenser controls etc. capacity 2Nos.	
3000 kcal./hr.	
Reciprocating compressor with provision of 2Nos.	
capacity control etc. for demonstration,	
121 capacity 9000 kcal./hr.	1

122 Work bench 1000x600x800 mm.high	8Nos.	\neg
123 Almirahs, 195x90x49 cm.	8Nos.	
124 Lockers of eight compartments	4Nos.	
125 White board portable	2Nos.	
126 Desk top table and two revolving chairs	2Set.	
Micron vacuum gauge capable of reading up to	4Nos.	
127 20 microns		
128 Sensor thermometer (digital)	4Nos.	
129 Fin straightener/ fin comb	2Nos.	
Hc refrigerant cylinders/ disposable containers	4Nos.	
130		
131 134a refrigerant cylinders	4Nos.	
132 Recovery unit for 134a refrigerants with	2Nos.	
recovery cylinder.		
Recovery unit for CFC refrigerants with	2 Nos.	
133 recovery cylinder.		
Reverse cycle AC/Heat pump 3000 kcal/hr. or	2Nos.	
134 4500 kcal/hr		
Refrigerator 170 liter using 134 A refrigerant	4Nos.	
135		
No frost refrigerator 300 liter capacity using HC	4Nos.	
136 refrigerant		
137 Automatic Ice cube m/c capacity 5kg/hr	2Nos.	
138 Fire extinguisher powder type	4Nos.	
Dry Nitrogen gas cylinder with drier unit and 2	2Nos.	
139 stage pressure regulator.		
140 Two way manifold with gauges	2Nos.	
141 Four way manifold with gauges	2Nos.	
Small Car A/C Kit with driving arrangements	2 Nos.	
142		
Components of car AC systems wobble plate	1No.each	
compressor with mounting brackets serpentine		
evaporator parallel flow condenser hoses,		
tubes, receiver, expansion valve electrical		
components & siring harness		
143		
144 Small capacity shell and tube condenser	2Nos.	\Box
145 Fan coil unit with water valves (2&3 way)	2Nos.	\Box
146 Shell and tube, DX chillers (small)	2Nos.	
147 Circulating water pump (small)	2Nos.	
148 Schraeder valve core removal tool	1Nos.	
149 Pitot tube & inclined tube manometer	2Nos.	
150 Hermetic compressors (1/6hp.)	4 Nos.	
151 Hermetic compressors (1/2hp.)	4 Nos.	
152 Semi-hermetic compressor (1/2hp.)	2 Nos.	
153 Rotary compressors 1 TR	4 Nos.	
Quick couplers, process tube adaptors for ¼",	4 pairs for	
154 3/8" tubes	each tube	
TOTAL		
		 —

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List of Tools & Equipment for a batch of 20 Trainees FOR MODULE TT-II Trade: "REFRIGERATION AND AIRCONDITIONING MECHANIC"

	ITaue: REFRIGERAT			т	г	I	
	Description of tools/equipments , machinery			Unit Rate			
SI.	and furniture with	Specification/M			Tax/VAT	To	tal
		odel/	Quantity	(in Indian	in Figure	In Fig	In Words
No.	Specifications	Brand/Make	_	Rs.)			
		•		,			
	Split type AC 4500 kcal/hr. With indoor unit &						
1	outdoor units and electronic remote control		2 nos				
	inverted control (EER mes)						
_							
	Spirit level precision metallic 200 mm.		1 No.				
3	Anemometer dial type 1-10,000 meter/min.		1 No.				
	cold storage plant complete with all controls						
	and accessories including cooling tower and						
4	water treatment plant capacity 15000k.cal/hr.		1 No.				
	or working trainer model/simulator.						
5	Dial type manometer 0-10,000 meter/minutes						
	biar type manometer o 10,000 meter/imiates		1 No.				
6	Hermetic compressor 1.5 TR (AC)		1No.				
-							
	Visi cooler 270 Ltr.		1 No.				
	Recycling unit (Optional)		1 No.				
-	LCD projector		1 No.				
	Over head projector		1 No.				
11	Computers(Latest Version) with all accessories		5Sets.				
	& UPS 650 VA.		55013.				
12	LASER PRINTER		1 No.				
4.0	Bacnet / Lonwork / Web monitoring tool		4.81				
13	Software		1 No.				
14	CBT / simulating software on commercial						
	refrigeration system		1 Set.				
15	Hygrometer		1 No.				
	Hydrometer		1 No.				
			I INO.				
1/	CBTs on Railway/Bus/Air-craft/ Marine A/Cs.		1 Set				
10	Interestive Desira		4 N -				
-	Interactive Board		1 No.				
-	Internet Connectivity		1 No.				
20	EER Machine i.e. VRV & VFD air conditioning						
	system, small capacity. With inverter control		1 No.				
	system						
21							
	A/C system with digital scroll compressor-		1 No.				
	twin/triple compressor		compl ete				
	complete with microprocessor control boards		12. 12. 2.0				
	F 172						
	TOTAL						
	IOIAL						L

FURNITURE ACCESSORIES AND AUDIO VISUAL AIDS FOR THE MODULES TT-1 & TT-2 (COMMON FOR ALL ENGG, TRADES)

	•			Unit Rate	Trade		
ļ	Description of tools/equipments , machinery	Specification/M			Tax/VAT	То	tal
SI. No.	and furniture	odel/ Brand/Make	Quantity	(in Indian Rs.)		In Fig	In Words
		Diana, Wake		113.)			
1	Class Room Chairs (armless) / Dual desk may also be allowed		50/25				
	Class Room Tables (3ft X 2ft) / Dual desk may also be allowed		50/25				
3	Chair for Trainer (armed) movable		2				
4	Table for Trainer (4 ½ ft X 2 ½ ft) with Drawer and cupboard		2				
5			2				
6	Multimedia Computer System with all accessories with UPS (.5 KVA)		02 set				
7	Computer Table		2				
8	White Board (6ft X 4 ft.)		02 no.				
9	LCD Projector Screen						
10	Air Conditioner 1.5Ton (OPTIONAL)		4				
11	Wall Clock		02 no.				
12	Wall charts, Transparencies and DVDs related to the trade		as required				
13	Laser Printer with scanner		1				
14	Steel Cupboard with 8 pigeon lockers		3				
15	Work bench for fitters with two vices of 100mm		2				
16	Steel cupboard 180x90x45cm		2				
17	Steel cupboard 120x60x45cm		2				
1 10	Multi drawer tool rack trolley with minimum 4 drawers and 20 tool capacity		4				
19	First aid box.		1				
	TOTAL						

LIST OF FURNITURE, ACCESSORIES AND AUDIO VISUAL AIDS FOR AUDIO VISUAL LAB (COMMON FOR ALL ENGG, TRADES)

SI. No.	Description of tools/equipments , machinery and furniture	Specification/M odel/ Brand/Make	Quantity	Unit Rate	Trade Tax/VAT	Total	
				(in Indian Rs.)	in Figure	In Fig	In Words
	Wall charts, Transparencies and DVDs		as				
	related to the trade		required				
2	Document Camera / Visualiser		1				
3	Smart Board / Inter Active Board		1				
4	Over Head Projector		1				
5	Video Camera with stand		1				
6	Printer cum Scanner		1				
	Total						