OFFICE OF THE PRINCIPAL GOVT I.T.I. BILHA
DISTT- BILASPURCHHATTISGARH
Phone No. 07752-259056, E-mail - itiblh@rediffmail.com, itibilha@yahoo.com

Tender No. – WB/BILHA/VTIP/DEC/2013 **Dated 24.12.2013**

NOTICE INVITING TENDER

Principal, ITI Bilha Distt-Bilaspur, Chhattisgarh invites sealed tender from eligible bidders (Manufacturers, or their authorized dealer) for procurement of various Packages of Tools, Equipments & Machinery for Center of Excellence, under World Bank assisted Vocational Training Improvement Project (VTIP) in Shopping Mode.

The tender form (complete set of bidding documents along with the packages including details of Items with quantity for purchase) is available on the website **www.cgstate.gov.in**, from **28.12.2013**. A complete set of bidding documents may be downloaded **free of cost** by any interested eligible bidder

The sealed tender should reach the Office of the Principal, ITI Bilha Distt-Bilaspur, Chhattisgarh on or before **28.01.2014** by 13.00 hours and will be opened on the same day at 14.00 hours. Any bid received after the deadline for submission of bids as prescribed above will be rejected and returned to the Bidder. The undersigned has all the rights pertaining to the tender.

Principal,
Govt. I.T.I. Bilha
Distt-Bilaspur, Chhattisgarh

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World Bank Assisted Vocational Training Improvement Project

TERMS & CONDITIONS OF THE TENDER

Tender documents/Qualification requirements should be submitted in **Main envelope** as given below:

1. On the top of Main envelop mention Tender No., Due Date, all package nos. & names for which Bid are submitted.
2. Following documents should be kept inside the envelope :
    1. Covering letter for submission of Bid which should indicate -
        - Index for all the submitted documents for the tender
        - All particulars of Bidders viz address, phone No., e-mail, name of the authorized person(s), TIN/ TAN/ Service Tax No. etc. for correspondence.
        - Package Nos. & name for which Bid is submitted.
    2. Completely filled Form - "A" with signature & seal of authorized person which includes Earnest Money/ Bid security details - @ 3% of total tendered value.**Tender received without form "A" duly signed (As token of acceptance of tender conditions by the tenderer) will not be accepted.**
    3. Demand Draft/ Bank Guarantee (as given in the proforma Annexure-III) for earnest money/ bid security.
    4. All the pages of **Terms & Conditions of Tender** duly signed & stamped by the tenderer in token of his acceptance of tender conditions along with other documents.
    5. Valid certificates related to TIN / TAN / Service Tax No. etc. issued by competent Govt. authority pertaining to tender.
    6. Undertaking for "After Sales Services" on letter head of bidder.
    7. **Affidavit in prescribed format as given in Annexure-V on non judicial stamp paper of Rs. 50/- certified by Notary.**
    8. Manufacturer's Company Profile showing its product range, turn over, web-address and certifications like ISO/ ISI etc. along with the documentary proof of such certificates if company/ products bear such certificate.
    9. All relevant particulars, illustrative catalogue/ broachers etc. which should indicate the products technical specifications for all packages which is submitted in the bid.
    10. Filled Manufacturer's Authorization Form as given in SECTION XII (Annexure-VI) for all the quoted items.
    11. Package wise Commercial Bid in prescribed format (i.e. Annexure-I) should be submitted (separately for each package) in individual envelope along with the soft copy in CD (MS-Excel).
    12. On the top of each envelope of Commercial bid, bidder should clearly mention Tender No., Due Date, Package No. and Package Name with seal & sign of bidder.
3. Complete tender document must be duly singed, stamped, paged & indexed by the bidder. Unsigned or unpaged bids shall be straightway rejected.
4. **The bid would be evaluated separately for each item.**

5. Either a manufacturer or their authorized dealer can bid for a package(s) or item wise from the package. For each of the quoted items, appropriate documentary evidence for being a Manufacturer or their authorized dealer (Manufacturer's Authorization Form given in SECTION XII as Annexure-VI) must be submitted necessarily. In absence of above the bid will be treated non-responsive & likely may be rejected.

6. If bided items are manufactured out of India then manufacturer's authorized distributor/agency for India may specially authorize a dealer who may participate in this tender. The relevant certificates in proof of such Authorizations and Manufacturing must be submitted.

7. The bid should be accompanied by Earnest Money/ bid security of @ 3% of total tendered value (for all packages) as part of the bid, in the form of Bank Draft/ Bank Guarantee of Nationalized Bank. Bank Draft should be in favour of Principal, ITI Bilha Distt-Bilaspur Chhattisgarh, payable at BILHA, Chhattisgarh. If the bidder deposits earnest money/ bid security in the form of Bank Guarantee, he/she shall furnish the same to the Principal, ITI Bilha Distt-Bilaspur Chhattisgarh, for 3% of total tendered value through a bank guarantee by a nationalized bank in the prescribed proforma as Annexure-III. Earnest Money submitted in any other form will not be accepted and the tender will be rejected. Unsuccessful bidder's earnest money will be discharged/ returned as promptly as possible.

8. The bidder should submit the Manufacturer's Make/ Brand name being use for marketing and registration no. of Commercial Tax Department.

9. Prices shall be quoted in Indian Rupees only. All quoted rates should be for **new and unused** items unless and otherwise specified so.

10. The Technical specification of the Items given in the packages are as per the requirements of the curriculum of the related sectors/trades. Bidder may give equivalent / superior specification as manufactured along with the Technical details / catalogue / brochure etc.

11. Complete Tender Documents will be opened on the prescribed date and time in the presence of Bidders / representatives who choose to attend. The Bidders / representatives who are present shall sign a register evidencing their attendance.

12. The rates quoted by the bidder must be inclusive of all the charges (like – transportation, installation charges, delivery charges, inspection charges, training charges, charges for services, excise duty, customs duty etc.) except VAT. The VAT should be mentioned separately.

13. The tender matter including prices should be typed neatly; corrections/ overtyping in prices will not be accepted. However if correction/ overtyping is there, it should be attested by the tenderer with signature, date and their seal. Hand written and xerox tender will not be accepted.

14. 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.

15. Bids shall remain valid for 45 days after the deadline for submission of bids prescribed by the Purchaser. A bid valid for a shorter period shall be rejected by the Purchaser as non-responsive.

16. Tenderer should give all relevant particulars about every item, such as maker's name Country of Manufacture and Specifications and Price etc., "Specifications as given in catalogue" quoted in tender by the tenderer will not be accepted. Full specification must be written in tender positively and should also be supported by technical literature (Catalogue/ Broachers). Purchase Committee's approval/ decision will be final and binding.

17. Vague expression such as "complete with standard accessories" or "as per your specification" will not be accepted. The tenderers must specifically indicate all specification of the items and should mention clearly what item will be supplied under "accessories" with the Equipment/

Machinery in price schedule enclosed as Annexure-I. Any ambiguity or vagueness in tender for item concerned will be liable for rejection.

18. Makers stickers pasted on equipments/tools will not be accepted.

19. Catalogues/ brochures must be clear, specific and should reflect all the essential specifications of the products/ items, otherwise it will not be considered for comparison. It should be clearly indexed to reflect which item is related to which Catalogues/ brochures.

20. Supplies for any particular item in each package of the bid should be from one manufacturer only. Bids from agents offering supplies from different manufacturers, for the same item of the package in the bid, will be treated as rejected.

21. Contracts will be awarded only for those items which have minimum 3 valid rates.

22. The bids will be examined to determine whether they are complete, whether any computational errors have been made, whether required sureties have been furnished, whether the documents have been properly signed, and whether the bids are in order.

23. The decision of the Tender Committee will be final in the scrutiny of successful bidders.

24. The tenderer will have to submit samples on demand before the technical team at the purchaser end, in the prescribed time limit. In case the samples are not produced in the prescribed time it shall be open to the undersigned to forfeit Earnest Money Deposited by the tenderers. If the samples sent by the party are approved the same will be adjusted in regular supply and in the case of rejection, they will be returned back to the party at his cost.

25. Since this procurement is financed by a World Bank loan/ credit, bidders/ suppliers/ contractors are required to permit the bank to inspect their accounts and records and other documents related to the bid submission and contract performance and to have them audited by auditors appointed by the Bank.

26. The fact that the tenderer has signed the form "A" will mean that the tenderer has completely accepted Terms & Conditions of the tender and that the tenderer agrees to abide by these Terms & Conditions of the tender. No deviation from Terms & Conditions of the tender will be accepted under any circumstances. The Terms & Conditions of the tender and clause usually printed on the parties tenders or bills will not be binding on this department.

27. The contents of the form "A" should not be changed or amended otherwise will not be acceptable by this office.

28. The Principal, ITI Bilha Distt-Bilaspur Chhattisgarh, Chhattisgarh reserves the right at the time of Contract award to increase or decrease the quantity of goods originally specified in the Packages without any change in unit price or other terms and conditions.

29. **Contracts for procurement of packages will be awarded as per the priority and availability of budget.** Suppliers has to deliver and complete the task of installation strictly as per the specification of ordered items within stipulated time otherwise above contract may be treated as canceled without any prior notice.

30. **Before executing the awarded contract** the Supplier shall furnish Performance Security to the The Principal, ITI Bilha Distt-Bilaspur Chhattisgarh, Chhattisgarh for an **amount of 5%** of the contract value through a Bank Guarantee by a nationalized bank, in the prescribed proforma as Annexure-IV, valid upto 60 days after the date of completion of performance obligations including warranty obligations. If the desired Performance Security is not deposited by the tenderer in the specific period, the Earnest Money already deposited with the tender shall be forfeited. In the event of any correction of defects or replacement of defective material during the warranty period, the warranty for the corrected/ replaced material shall be extended to a further period of 12 months and the Performance Bank Guarantee for proportionate value shall be extended 60 days over and above the extended warranty period. In the event of any contract amendment, the Supplier shall, within 21 days of receipt of such amendment, furnish the

amendment to the Performance Security, rendering the same valid for the duration of the Contract, as amended for 60 days after the completion of performance obligations including warranty obligations.

31. If the Supplier fails to deliver any or all of the Goods or to perform the services within the stipulated delivery period(s) specified in the Contract, the Principal, ITI Bilha Distt-Bilaspur Chhattisgarh, shall, without prejudice to its other remedies under the Contract, forfeit the Bid Security and the order is liable to cancel.

32. If the supplier/ dealer fails to supply the items as per the specifications, items will not be received by the consignee and supplier/ dealer has to return it back on his/ her own cost. The supplier / dealer may supply the items of higher specifications (due to manufacturing obligations) if accepted by consignee after examination and testing.

33. The one time extension in the delivery period may be granted at the discretion of the undersigned. The liquidated damage at a rate of 2% per month subject to a ceiling of 10% of the contract price of the full cost of the tool/equipment/machine is liable to be charged for the extension of the delivery period. Once the maximum is reached, the Purchaser may consider termination of the Contract. Equipment received after the delivery period or dispatched after the delivery period mentioned in the order will also be subjected to this liquidated damage. Power to extend delivery period would remain reserved with Principal, ITI Bilha Distt-Bilaspur Chhattisgarh.

34. Loading/ Unloading charges shall be borne by the supplier.

35. The undersigned may get, the items supplied by the successful tenderer, inspected on receipt of the same by such person or persons he deems fit and to reject such of these items as in his opinion do not come up to the specification. The decision of the under signed will be final in such cases. The rejected items will be returned on the tenderer's cost.

36. Warrantee/Guarantee should be for a period of 1 year minimum after delivery for the goods and its accessories. An undertaking shall be given by the bidder for "After Sales Services" (in case of authorized supplier/ dealer it should be given by the Manufacturer).

37. All the equipments shall be suitably protected, coated, covered or boxed and crated to prevent damage or deterioration during transit/ handling and storage at site till the time of installation/ commissioning. While packing all the materials, the limitations from the point of view of availability of railway wagon sizes, in India should be taken into account. The contractor shall be responsible for any loss or damage during transportation, handling and storage due to improper packing.

38. If any Machines/Equipments require training for users, then supplier/ dealer has to arrange such training program at the destinations free of cost. Installation and working trial is to be given at site at the expenses of supplier.

39. 100% payment will be released after the safe receipt of goods, as per the specifications given in purchase order & and after ensuring successful installation, commissioning and performance of supplied items etc.

40. It must be noted that normally all correspondence and transactions will be made only with the parties whose tenders have been accepted and not with anybody else.

41. The undersigned reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time without assigning any reason prior to contract award, without thereby incurring any liability to the affected bidder or bidders.

42. At any time prior to the deadline for submission of bids, the Purchaser may modify the bidding documents by amendment. All prospective bidders who have purchased the bidding documents will be notified of the amendment by uploading in the website **www.cgstate.gov.in** or by E-mail or by fax and will be binding on them.

43. If any document given by the bidder is found fake/manipulated, then the entire EMD deposited by the bidder in the tender will be forfeited without assigning any reason and such bidder will not be entitled for future biddings.

44. Notwithstanding the above, the Purchaser reserves the right to accept or reject any quotations and to cancel the bidding process and reject all quotations at any time prior to the award of contract.

The decision of the "Tender Committee" will be final & binding to all the bidders. Any dispute arising out of this tender or supply of any other matter will fall under the civil jurisdiction of Chhattisgarh High Court only.

Principal,
Govt. I.T.I. Bilha
Distt-Bilaspur, Chhattisgarh

ANNEXURE-I

Note:- Give Bid Price Item-wise in the following Proforma only. Any deviation will not be accepted.

PRICE SCHEDULE

Package No. ....., Package Name. .....

Name of Bidder .....

(Amount in Rs)

Item Serial No.	Item Code	Specifications of items, which bidder offers	Name of accessories with specifications (if any)	Make/ Brand of Item	Manufacturer's Name	Catalogue / Brochure Page No. (as indexed by you)	Quantity of Item as per tender With unit	Cost per unit (Inclusive of all Charges) except VAT	VAT	Total value item wise (col. 9 + col. 10)	Total Value in Rs. (col. 8 x col. 11)
1	2	3	4	5	6	7	8	9	10	11	12
Total package Value (in words)											

Note:-

a. The bidding prices shall be for F.O.R. Destination.

b. Rates should be inclusive of all charges (such as charges for Inspection/ Demonstration/ Installation/ Commissioning/ Transportation/ Excise / Custom / Services charges etc. except VAT. VAT should be mentioned separately.

c. Conditional rates will not be accepted.

d. Comparison will be done item wise on the basis of total value as mentioned in column 11.

e. Rates will be finalized for purchase on the basis of individual items having 03 valid rates.

f. Specifications of the items which bidder offers as per the catalogue/ brochure/ Technical details etc. will be considered for comparison and selection. Incomplete details will not be considered for comparison.

g. Price Schedule given in other form will not be accepted and bid will be rejected.

FORM - A

(To be signed and returned along with the tender)

I/We (Full Name) .....

Address .....

.....

have read the Terms and Conditions of the tender for the supply of various stores as per your tender notice for supply of Package of _____ for INDUSTRIAL TRAINING INSTITUTES ..... of Chhattisgarh under World Bank assisted VTIP Scheme in Shopping Mode due on _____ and I/we fully accept the Terms and Conditions of the Bid supplied to me / us with the Bidding Documents.

I/We also undertake to permit the World Bank to inspect our accounts and records and other documents related to the bid submission and contract performance and to have them audited by auditors appointed by the Bank.

It is further noted that if any manipulation is found at any stage, the tender/ Contract / Supply order shall be rejected and the Principal, ITI ....., Chhattisgarh may take any action against me/us, as she/he deems appropriate.

Details of Earnest Money/bid security in the form of DD/BG (@ 03% of the total tendered value for the package(s) for which bid is submitted) :

(a) DD/BG no. ----------

(b) Value Rs. ----------

(c) Name of Bank ----------

Date: .....

Signature
(Name & full Address of the firm)

ANNEXURE- III

EARNEST MONEY / BID SECURITY FORM

To: **The Principal, Industrial Training Institute**

_____,

Distt.-_____ Chhattisgarh

WHEREAS ..... (Name of Supplier) hereinafter called "the Bidder" has undertaken, in pursuance of Tender No. ..... dated ..... 20..... to bid in the said tender.

AND WHEREAS it has been stipulated by you in the said Tender notification that the Supplier shall furnish you with a Bank Guarantee by a nationalized bank for the sum specified therein as Earnest Money/ Bid Security for compliance with the Bidders obligations in accordance with the Tender terms and conditions.

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

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

This guarantee is valid until the .....day of.....20.....

Signature and Seal of Guarantors

.....

.....

.....

Date.....20.....

Address:.....

.....

.....

.....

(Signature of the Bank)

Note : The bank guarantee (submitted by Indian Bidder) should be executed on stamp paper in accordance with stamp Act. The stamp paper should be in the name of executing bank.

PERFORMANCE SECURITY FORM

To. **The Principal, Industrial Training Institute**

_____,

Distt.-_____ Chhattisgarh

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

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

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

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

This guarantee is valid until the .....day of.....20.....

Signature and Seal of Guarantors

.....

.....

.....

Date.....20.....

Address:.....

.....

.....

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

ANNEXURE- V

On Non Judicial Stamp Paper of Rs. 50/-

निविदाकर्ता द्वारा Bid के साथ दिये जाने वाला
शपथ–पत्र

निविदाकर्ता फर्म मेसर्स ..... की ओर से मुझे/हमें अधिकृत किया गया है और मैं/हम निम्नलिखित कथन शपथपूर्वक कहता हूँ/कहते हैं कि :–

1. मैंने/हमने निविदा की सारी शर्तें ध्यानपूर्वक पढ़ी हैं और उनसे सहमत हैं तथा उन्हें मानने के लिये वचनबद्ध हैं।
2. मेरे/हमारे द्वारा संलग्न किये गये सभी दस्तावेज सही है और उनमें किसी प्रकार की कांट–छांट नहीं किया गया है एवं गलत जानकारी नहीं दी गई है।
3. मेरे/हमारे द्वारा कामर्शियल बिड में सामग्रियों के लिये जो स्पेशिफिकेशन दिया गया है और उनके सपोर्ट में जो भी संबंधित दस्तावेज, कैटलॉग/ब्रोशर्स आदि संलग्न किये गये हैं उनमें लिखा विवरण निर्माता द्वारा जारी किया गया है एवं मूल रूप में हैं और उनमें कोई फेरबदल या कांट–छांट नहीं किया गया है।
4. मेरे/हमारे द्वारा निर्माता से मुझे/हमें जारी आथॉराइजेशन प्रमाण पत्र जो कि बिड के साथ संलग्न किये गये हैं वे सही एवं मूल रूप में हैं और उनमें कोई फेरबदल नहीं किया गया है।
5. मैं/हम दिये गये क्रयादेशानुसार सामग्रियों को निर्धारित समय सीमा में स्पेशिफिकेशन के अनुसार सप्लाई करने के लिये बाध्य हैं। देर होने या सामग्रियों के स्पेशिफिकेशन में अन्तर होने पर मुझे/हमें दिये गये क्रयादेश को निरस्त किया जा सकता है एवं शासन को होने वाले नुकसान की भरपाई मेरे/हमारे द्वारा की जायेगी।
6. मेरे/हमारे द्वारा दी गई जानकारी असत्य पाये जाने पर मुझे/हमें एवं हमारी फर्म को निविदा में भाग लेने से वंचित किया जा सकता है।

दिनांक .....

हस्ताक्षर : .....

नाम : .....

धारित पद : .....

फर्म का नाम : .....
(सील सहित)

SECTION XII

MANUFACTURERS' AUTHORIZATION FORM*

No. _____ Dated

To

Principal / Head of the Institution
Government ITIs
Under Directorate of Employment & Training
Chhattisgarh

Dear Sir:

Tender no _____ Dated _____

We _____ who are established and reputable manufacturers of *(name and description of goods offered)* having factories at _____ *(address of factory)* do hereby authorize M/s _____ *(Name and address of Agent)* to submit a bid, and sign the contract with you for the goods manufactured by us against the above IFB.

No company or firm or individual other than M/s _____ are authorized to bid, and conclude the contract for the above goods manufactured by us, against this specific Tender. *(This para should be deleted in simple items where manufacturers sell the product through different stockists.)*

Yours faithfully,

(Name)

(Name of manufacturers)

Note: This letter of authority should be on the letterhead of the manufacturer and should be signed by a person competent and having the power of attorney to legally bind the manufacturer. It should be included by the Bidder in its bid.

* Modify this format suitably in case where manufacturer's warranty and guarantee are not applicable for the items for which bids are invited.

Package - 2
Hydraulic Items

S.N.	Details of Specification	Total
6	Hydraulic valves (relief, sequence, unloading, pressure reducing, check, flow control, directional control valves etc.).	1
7	Transperant Hydraulic Cylinder	1
8	Hydraulic wheel and bearing puller	1
9	Linear actuators (differential and non differential)	1
10	Hydraulic press 5 ton	1
11	Transparent gear pump	1
12	Transparent vane pump	1

Package - 3
Hydraulic & Pnumatic Items

S.N.	Details of Specification	Total
6	Pneumatic tools (portable nut spanner/runner, chisel, grinder, sander and hammer.	1
7	Pneumatic scraper with adjustable stroke	1
10	Cut model of pneumatic valve	1

Package – 4
Welding Transformer

S.N.	Details of Specification	TOTAL
1	Transformer welding set 300 amps- Welding current range :35-300A Welding Voltage range : 24-30V Continuous welding current 100% duty Cycle open circuit voltage electrode sizes continuous : 170A ,65V, 6-16G Electrode Sizes (intermittent) : 4G K.V.A. (Rat	1
3	CO2 welding machine complete 400 amps (Inverter type) : Power Supply Max. Welding Current @ 60% duty cycle :400 Amps @ 100% Duty Cycle :320 Amps Rating @ 60% duty cycle : 22.5 KVA @ 100% Duty Cycle : 18.5 KVA Open circuit voltage range 20-56 V-dc INPUT	1

Package - 5
Heat exchanger and Temprature Trainers

S.N.	Details of Specification	Total
10	Thermocouple kit	1
11	Thermister Kit	1

Package - 6
Humidity sensors, Temprature Recorders & Transmitters

S.N.	Details of Specification	Total
9	Hygrometer	1

Package - 7
Thermocouples & Thermometers

S.N.	Details of Specification	Total
9	Thermometers 0-100c	1
18	Thermometers : 0 to 36 C	1

Package - 8
Motor/ Diesel Related

S.N.	Details of Specification	Total
2	DISTIBUTER ASSEMBLY for Four cylinder	4
3	Double open ended ignition spanner of BA 0x1 to 8x9 set of 5 made of selected drop fordge steel chromium plated	2
4	DOUBLE OPEN ENDED TAPPET SPANNER FOR 10.5MM*12mmTO 16.5mm*18mm SET OF FOUR	1
8	Dynamo and Voltage Regulator (each)	1
10	FILLING JIG FOR ADJUSTING THE PISTON RING GAP	1
11	Grease Gun	1
12	GUN, PARA FIN PRESSURE	2
14	High rate discharge tester	2
16	INJECTOR CLEANING KIT	4
17	INJECTOR TESTING SET (HAND OPRATED)	2
18	INJECTORS	4
20	LIFTER, VALVE SPRING	2
21	LIFTING JACK, SCREW TYPE 30-48 KG	4
23	Pressure Grease Gun	1
24	RING EXPANDER AND REMOVER.	2
27	Starter Motor	2
30	TOOL VALVE GRINDING, SUCTION TYPE (CONSUMABLE TOOL)	12
33	Vacuum Gauge 0 to 75 cm	1
34	Valve key inserter	2
35	Valve refacer	2
36	Valve seat cutting tool complete with guides & pilot bar (all angles) in a box	2
40	TIMING LIGHTER	2
43	PISTON RING COMPRESSOR	4
44	P.T.Injector	1
46	COMPRESSION GAUGE TO READ 120 KG/SQ.CM	1
49	Piston groove cleaner	1
50	Cut Section model for fuel injector	1
51	Alternator	1
52	Glow plug	1
53	Nozzel holder zig	1

Package - 9
Exhaust gas analyser / Smoke Tester

S.N.	Details of Specification	Total
2	Smoke Tester with engine rpm sensor & engine coolant tempreture sensor	1

Package - 10
Motor/ Diesel Accessories

S.N.	Details of Specification	Total
2	Trolly type portable air compressure single cylinder with 45 liter air tank, all accessories & with working pressure 6.5 kg/sq cm	4
6	Carbauretor (two different types) (Ambeseder & Jeep)	4
8	Clutches, different types such as cone type disctype diaphragm type etc	2
9	CONECTING ROD ALIGNMENT FIXTURE	1
12	Fluid fly wheel torque converter	1

Package - 11
Fuel Injection Pump

S.N.	Details of Specification	Total
1	FUEL FEED PUMP	4
4	FUEL INJECTION PUMP 4 CYLINDER	4

Package - 12
Motor Vehicle / Diesel Engine

S.N.	Details of Specification	Total
1	Diesel engine (running condition) stationary type Four Cylinder	8

Package - 12-A
Motor Vehicle / Diesel Engine

S.N.	Details of Specification	Total
4	DIESEL ENGINE 4 STROKE MULTICYLINDER 4/6 VEHICULAR TYPE INDIAN MAKE CONTEMPORARY-MODEL	4

Package – 14
Printers/Plotter

S.N.	Details of Specification	Total
1	Dot matrix printer (132 Column)	1
2	inkjet printer (Deskjet printer) (Colour Tank Type)	1
3	Laser printer (1200 DPI)	1

Package – 15
UPS

S.N.	Details of Specification	Total
1	UPS 0.5 KVA	8
2	Inverter 1 KVA Input 12 Volt DC, output 220 volt AC with 12 Volt battery	1
3	2 KVA On-Line UPS for Server 60 Min Backup	1

Package – 16
Computer Server

S.N.	Details of Specification	Total
1	File Server for the LAN Processor	1
	Total	

Package - 18
Lathe Machine Accessories

S.N.	Details of Specification	TOTAL
6	Knurling tool with holder (straight, cross and diamond)	1
7	Revolving centers with Arbor 1 no.	1
8	Lathe carriers up to 75 mm	1
9	Boring tool holder (Armstrong) LH 8 and 10 sq. bit size x length 200 mm	1
10	Tool holder 8 and 10 sq. bit size straight x length 200 mm	1
11	Mandrel 120 mm long	1
12	Table chuck 3 jaw with tightening arrangement and graduated in degrees	1

Package - 19
Microprocessor & Bridges

S.N.	Details of Specification	Total
5	Transducers	1
6	DC motor control kit	1

Package - 20
Mechatronics Trainer Equipments

S.N.	Details of Specification	Total
1	AC timer kit	1
2	DC timer kit	1

Package - 21
Electronic Trainer Kit

S.N.	Details of Specification	Total
1	IC Trainer (Digital)	2
2	Discrete component trainer	2
3	Linear L.C. Trainer (Operational Amplifiers)	1
27	Linear I.C. Trainer	1
28	L.V.D.T. kit	1
29	Photo diode	1
30	Photo transistor kit	1
31	Decimal counter kit	1
32	L.D.R.S. Kit	1
	Total	

Package - 22
Circuit breaker

S.N.	Details of Specification	Total
1	Air circuit breaker 5 KVA	1
	Total	

Package - 23
Volt Meter, Ammeter, Wattmeter, Energy Meter

S.N.	Details of Specification	Tota
1	A.C ammeter M.I. 0-15-25 A	1
25	Ammeter MC 0-5 A	1
31	D.C. ammeter MC 0-1 A	1
32	D.C. Milli ammeter 0-500 ma	1
51	Energy Meter -Single phase Counter type Static Energy Meter having double insulated protection case IP51, Resistance to external influence with tamper proof feature.Voltage : 240V AC, Rated Current : 5, 10A, Frequency : 50 Hz,Complies to IEC/EN62052-11 +	1
53	Frequency meter	1
57	K.W. Meter 0-1-3 Kw	2
85	Power Factor meter Single Phase Digital type	1
126	Ammeter portable type 0-15 amp AC	1
127	Voltmeter 0-300-600 V AC	1

Package - 24
Pressure Gauge

S.N.	Details of Specification	Total
18	Strain gauge	1

Package - 25
Precision Mechanical Measuring Instruments

S.N.	Details of Specification	Total
2	Combination Set with 300mmscale centre head, square head and protector head	3
9	Dial test indicator 0.01 mm on stand.	1
11	Vernier caliper set 200mm or 250mm inside outside depth to read both inch and mm L.C.- 0.02mm	2
12	Direct reading vernier caliper 300mm	1
32	Vernier bevel protractor with 150 mmblade	1
33	Vernier height gauges 30 cm.	2
34	Dial vernier caliper 0-200 mm LCO 0.05 mm. (Universal type)	1
35	Comperators stand with dial indicator LC 0.01 mm.	1
36	Vernier caliper A 200mm with inside and depth measurement	1
37	Optical bevel protractor	1
38	Dial gauge type 1 Gr. A (complete with clamping devices and stand) IS:2092-1962	1
39	Vernier tooth caliper (metric)	1
40	Bevel gauge 200 mm	1
41	Indicator with magnetic base	1

Package - 26
(Surface Plate-V Block-Angle Plate-Universal Scribing Block)

S.N.	Details of Specification	Total
1	Angle plate size 200 x 100 x 200mm	2
3	Angle plate adjustable 250 x 150 x 175	1
6	Anvil 50 Kgs	3
10	C Clamp 150 mm	3
11	C clamp 50 mm.	2
13	C clamps 100 mm	4
14	C clamps 200 mm	3
15	Clamp toolmaker 5 cm and 7.5 cm set of 2.	2
16	Plate surface 45 X 45 cm CI	2
26	Scribing block universal 300mm	1
28	Surface plate 400x400 mmx 25 mm CI	1
30	SURFACE PLATE 600X600x40 MM Closed Grain Cast Iron	2
33	Surface roughness Comparision plates N1-N12 grade CI	1
34	Swage block 35 X 35 X 12 cm	1
35	Swages top & bottom 12 mm and 19mm	1
36	V block pair with clamp 75x38 mm.	4
38	V Block 100x100 mm	1
41	Universal scribing block 25 cm	4
42	Granite surface plate 1600x1000 mm with stand & cover	1
43	Marking out table 90x60x90 cm	1
44	Angle plate size 4 with slot 200x150x150 mm	1

Package - 27
Oscilators / Function Generator

S.N.	Details of Specification	Total
7	Function Generator Digital	1
9	Audio Signal Generator	1

Package - 29
Air Conditioner

S.N.	Details of Specification	Total
10	Split type Air Conditioners 1.5 tons.	3

Package - 30
Bench Vices, Machine Vice, Pipe bending machine, Pipe Cutter

S. N.	Details of Specification	Total
1	Bench vice 100 mm jaw	6
2	Bench vice 120 mm jaw	6
9	Hand Vice 37 MM	4
10	Hand vice 50mm	8
12	Machine vice 10 cm.	1
13	Machine vice 15 cm.	1
15	Pipe Bending Machine (Hydraulic type) 12mmto 30mm	1
16	Pipe cutter up to 50 mm wheel type	3
19	Pipe vice 100 mmjaw	2
23	Swivel Base Machine Vice 200mm	1
25	Vice leg 10 cm jaw	2
26	VICE bench type OF 12.5 CM JAW	1
29	Pipe cutter to cut pipes above 5 cm. dia	1
30	Machine vice swivel base 160 mm	1

Package - 31

Lifting Crane

S.N.	Details of Specification	Total
1	PORTABLE LIFTING CRAN ONE TON CAPICITY WITH CHAIN BLOCK & TACKLE ARRANGEMENT	2

Package - 32

Pump

S.N.	Details of Specification	Total
2	WASHING PUMP RECIPROCATING TYPE ELECTRICALY OPRATED WITH 3 HP MOTOR 272 LITER TANK	2
3	WATER PUMP 1 hp Sumbertial 230 V supply ac AND OIL PUMP 1 hp monoblok centrifugle 230 (each)	2
10	Gear pump Standered	1
11	Vane pump fixed and variable delivery	1
12	Piston pump (radial and axial)	1

Package - 33

Valve / Bearing / Chain pulley / Joints

S.N.	Details of Specification	Total
22	CHAIN AND BLOCK 1016 KG CAPACITY	3
23	ARBOR PRESS HAND OPRATED 2 TON CAPACITY	2
26	Ratchet chain pulley	1

Package – 34

Power Supply

S.N.	Details of Specification from DET	Total
4	DC Power Supply Input 230V AC OUTPUT 0-110.0V,5.00 Amp DC Digital meters for V & I Load regulation 0.05%+/- 10mV Line regulation 0.05%+/- 10mV Ripple max 1mV RMS Knobs for c	3
10	Power supplies (0 to 30V) 2 amp. Dual	1

Package – 35

Computer Peripherals

S.N.	Details of Specification	Total
4	DVD Writers	1
12	Optical Scanner (Desk Top Type)	1
14	Web Cam (Digital Camera)	1
16	Cartridge 3.5"	5

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Package – 36

Motor Generetor

S.N.	Details of Specification	Total
1	Motor generator (AC to DC) consisting of Motor induction squirrel cage. 7HP 440 Volts, 50 cycles. 3-phase with star delts starter and switch directly coupled to DC shunt generator 5KW 440 volts and switch board mounted with regulator, air circuit breaker.	1
2	Motor generator (DC to AC) set consisting of motor shut 5HP, 440 Volts with starting compensator and switch directly coupled to generator AC. 35 KVA, 400/230 Volts, 3 phase , 4wire, 0.8 PF 50 cycles with exciter and 1 switch board mounted with regulator & Starter,	1
3	DC shunt generator , 2.5KW, 220V with control panel	1
4	Motor series DC, 220 Volt, 2 HP coupled with mechanical load. with starter	1
7	Motor AC squirrel cage, 3-phase 400 volt, 50 cycles, 2 to 3 HP with star delta starter and triple pole iron clad switch fuse.	2
12	Electrical Machine trainer (Suitable for demonstrating the construction and functioning of different types of DC) Machines and AC machines (single-phase and three phase should be completed with friction brake dynamo meter. Instrument panel and power suppl	1
15	Stepper motor with digital controller.	1

Package - 37
Electronic Testers

S.N.	Details of Specification	Total
1	I.C. Tester Digital type with Standered Accessories	1
4	C.R.O. 50 Mhz	1

Package - 39
Soldering / Desoldering Items

S.N.	Details of Specification	Total
1	Copper bit soldering iron 0.25 kg fire headed	4
2	Desoldering gun	4
3	Iron soldering, 25 W	20
4	Iron soldering 350 gm	2
5	Iron, soldering 65 watt	20
7	Soldering Iron 125 watt.	4
9	Soldering iron copper 225 gms(fire heated) 150 mm& 200 mm	2
10	DRIFT, COPPER 10mm*150mm	4
13	Soldering iron 120 watts	2

Package - 40
Multimeter/Ohmmeter/AVO Meter

S.N.	Details of Specification	Total
2	A.V.O METER	2
4	Mul. meter 0 to 1000 M.Ohms, 2.5 to 1000 volt (Analog)	2
5	Tong tester/Clamp meter0-100	1
6	Digital Multimeter (4½ digits)	1

Package - 42

Battery / Charger

S.N.	Details of Specification	Tota l
1	Battery 12 Volt	4
3	Battery charger with variable output 1KW	1
4	Hydrometer	14
5	Battery charger (12-36 V) 10amp	2
7	Cell Tester	1

Package - 44

Air Compressors

S.N.	Details of Specification	Total
2	TROLLEY TYPE PORTABLE AIR COMPRESSOR 1 SINGLE CYLINDER WITH 45 LITRES CAPACITY	1

Package - 45

Coil Spring Compressors/Air Piston Type

S.N.	Details of Specification	Total
1	COMPRESSER AIR PISTON TYPE (VEHICULAR) AND EXHAUSTER UNIT	2

Package - 46

Electric Ovens

S.N	Details of Specification	Total
4	Elecric Furnace with capacity 600°C to 1400°C.	1

Package - 47

Growler

S.N.	Details of Specification	Total
1	Growler	3
2	Starter test bench	1

Package - 48

Hand Drilling Machines

S.N.	Details of Specification	Total
3	Drill machine Hand 0- 6 mm capacity.	1

Package - 52

Physics Laboratory Equipments

S.N.	Details of Specification	Total
10	Viscometer	1
4	Vibrometer	1
5	Flaw detector (magnetic crack detector)	1

Package – 53

File / Twist Drill / Morse Socket / Reamer

S.N.	Details of Specification	Total
1	File flat bastard 300 mm	17
2	File flat 25 cm second cut made of high quality carbon steel	18
4	File flat 20 cm Smooth made of high quality carbon steel	18
5	File half round 2nd cut 250 mm	17
6	File three corner smooth 200 mm	17
7	File round smooth 200 mm	17
8	File square smooth 200 mm	17
9	File needle set of 12 nos.	17
10	File flat 35 cm Bastard made of high quality carbon steel	1
11	File flat safe edge 25 cm smooth	1
12	File triangular 2nd cut 15 cm made of good quality carbon steel	1
14	File round 2nd cut 30 cm made of good quality carbon steel	1
15	File Square 2nd cut 20 cm made of good quality carbon steel	1
23	File half round 15 cm 2nd cut	1
24	Hand file 20 cm 2nd cut	17
25	Twist drill 3 to 13 mm (SS) by 1 mm (set)	2
26	Twist drill 13 to 25 mm by 1 mm (T.S)	1
27	Centre drill 1 to 5 mm	1
29	Set of morse socket 0-1, 1-2 & 2-3	1
30	H.S.S.Hand reamer adjustable 10.5 mm to 11.25 mm,11.25 to 12.75mm, 12.78 mm to 14.25mm, 14.25 mm to 15.75mm set of 4	1
31	Hand reamer 6 to 25 mm by 1 mm	1
32	Machine reamer 6 to 25 mm by 1 mm	1

Package – 54

Taps and Dies

S.N.	Details of Specification	Total
1	(a) Taps and dies complete set in box B.A. 0-10	1
2	(b) Taps and dies complete set in box B.S.W. 1/4" - 1"	1
3	(c) Taps and dies complete set in box B.S.F. 1/4" - 1"	1
4	(d) Taps and dies complete set in box American	1
5	(e) Taps and dies complete set in box Metric 6 - 24 mm	1
6	Tap and die M6 to M 12 with tap necessary tap wrench and die holder	1
9	Extractor stud "Ezy out" type	2
10	Tape Extractor	1
13	Stud remover	1

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Package – 55

DE Spanner, Ring Spanner, Plier, Wrenches, Chisel, Hammer, Punch

S.N.	Details of Specification	Total
1	Hammer ball pein 200 gm.	17
2	Hammer ball pein 0.5 kg	1
3	Hammer copper 1 kg. With handle	1
4	Hammer plastic 0.25 kg with handle (soft)	2
5	Hammer ball pein 0.75 kg.	17
6	Hammer ball pein 400 gm.	17
9	Hammer plainishing 400 gm.	1
10	Hammer seting 400 gm.	1
11	Ring spanner set of 12 metric 6 - 32 mm	17
12	Spanner socket set of 25 pieces (10 to 25, 27, 30, 32 mm = 18 pieces and	1
13	Half round chisel 10 x 150 mm	17
14	D.E. Spanner metric standard set 6-32 mm	18
15	Cold chisel 20 x 200 mm	17
16	Cross cut chisel 10 x 150 mm	17
17	Spanner, Clyburn 15 cm	1
18	Adjustable spanner 20 cm long drop fordge steel	1
19	Spanner ring set of 6, SAE made of selected drop fordge steel chromium steel	1
20	SPANNER FOR SPARKING PLUG 14 MM	1
21	Magneto spanner set with 8 spanner made of selected drop fordge steel chromium	1
22	Spanner socket set of 12 made from chrome vanadium steel chrome plated set containing 6–32 mm with handle T-Bar ratchet complete in a carrying box	3
23	Spanner T. Flex for screwing up and unscrewing in inaccessible position	1
24	Dimond point chisel 10 x 150 mm	17
25	Spanner double off-set double ended set of 7 w/w from 3 mm to 13.5 mm made of selected drop fordge steel chromium plated.	1
26	Long nose plier 150 mm insulated	17
27	Combination plier 150 mm	17
32	Cold flat chisel 19 x 200 mm	17
	(C) Pipe wrenches 450 mm	1
35	Pliers combination 200 mm	17
36	Round nose plier 200 mm	17
37	Chain Pipe Wrench 65 m	1
	(B) Circlip plier 200 mm (ext. & int. set)	2
41	Circlip plier 200 mm (straight)	1
43	Round diagonal cutting plier 150 mm	16
44	Torque wrench (0-40 kg./meter)	1
45	Torque wrench (0-75 kg./meter)	1
48	Allen hexagonal key (2-16 mm)	17
49	Plier side cutting 200 mm Insullated	2
54	Square box wrenches	1
71	Chisel cold cross cut 9 x 3 cm	1
86	Flaring tool	1

(11)

Cylinder Gauge, Telescopic Gauge, Filler gauge, Ring gauge, Slip gauge

S.N.	Details of Specification	Total
2	Telescopic gauge 13 - 300 mm	1
3	Slip gauge metric set of 87 pcs.	1
4	Radius gauge (metric) 1-15 mm	2
5	Screw pitch gauge for metric pitches (0.25 to 6 mm)	1
6	Center gauge 55 degree to 47 ½ degree	1
7	Centre gauge 60 degree	1
8	Plug gauge, plain	1
9	Ring gauge Morse taper No. 1, 2, 3, 4	1
10	Ring gauge 5 to 25 by 2.5 mm (Go and No Go)	1
11	Limit plug gauges 5 to 25 mm by 2.5 mm	1
12	Standard Wire gauge set	1
13	Bore dial gauge 0.01 mm dia	1
14	Cylinder gauge capacity 6.25 - 15 cm	1
15	Filler gauge 20 blade metric	18
26	Thread pitch gauge metric	1

Package - 57

Screw Driver, Punch, Steel rule, Scraper, Engineer Square, Calipers

S.N.	Details of Specification	Total
1	Screw Driver 300 mm x 9 mm Blade	17
2	Screw Driver 200 mm x 9 mm Blade Insullated	19
4	SCREW DRIVER, ELECTRICIAN TYPE 150 x 6 MM SIZE	18
8	Screw driver philips 150 x 3	16
	Screw driver philips 150 x 6	16
	Screw driver philips 200 x 6	16
9	Punch center 100 x 10 mm	34
11	PUNCH, HOLLOW, 6,7,8,9,10.5 & 12 MM SET	2
12	PUNCH FIGURE SET 3 MM	1
13	PUNCH LETTER SET 3 MM	1
14	Prick punch 100 mm	17
15	Prick punch 150 mm	1
16	PUNCH FIGURE SET 4 MM	1
17	PUNCH LETTER SET 4 MM	1
18	Pin punch 3 - 10 mm by 1 mm	1

19	Spindle blade screw driver 100 mm set of 5	17
21	Neon tester 500 V 200 mm stem rod insullated	16
22	Gasket Hollow Punch 5, 6, 8, 10, 12, 19, 25	1
23	Steel rule 15 cm english & metric graduation	17
24	Steel rule 30 cm english & metric graduation	18
25	Brass rule 30 cm	1
26	Caliper in side spring 150 mm	17
27	Caliper out side spring 150 mm	17
28	Divider spiring 150 mm	18
29	Hermophrodite caliper 150 mm (aud leg)	17
30	Engineers square 15 cm blade	18
31	Engineers square 70 cm blade	1
32	Scraper 250 mm (Bearing)	18
33	Scraper 250 mm (Triangular)	18
34	Scraper 250 mm (half round)	18
35	Scraper 250 mm (flat)	1
36	Scriber 150 mm x 0.4 mm (Knurled center position)	2
37	Scriber 150 mm x 3 mm (One side offset)	17
38	Trammel 30cm	1
40	Puller set universal bearing and bushes	1
41	Hacksaw frame adjustable 20-30 cm	19
44	Snip straight 250 mm	1
45	Scissors Blade 150 mm stainless steel & handle made of brass	16
47	Deep cutting hack saw frame 300 mm	2
48	Straight edge (steel) 1000 mm	1
49	Metal cutting shears 300	1

Package - 58
Welding Related Item

S.N.	Details of Specification	Total
1	Oxy-acetylene welding cylinder trolley	1
2	Welding hose of P.V.C. flexible internal dia. 6 mm (blue, red)	5
3	Hose coupling nipples	1
4	Hose protractor	1
5	Double stage pressure regulator (oxygen)	1
	Double stage pressure regulator (acety.)	1
6	Blow pipe with tips high pressure	1
7	Gas cutting torch with cutting tips	1
8	Welding gloves pair (leather)	1

9	Goggles (4A) for gas welding	3
10	Spark lighter	3
11	Spindle key for sylinder valve	1
12	Gas welding table with fire bricks	1
13	Smiths tongs hollow bit, Smiths tongs flat (30 mm)	1

Package - 59

Miscellinius Item

S.N.	Details of Specification	Total
2	Mallet	2
4	Oil can pressure type 0.5 ltr. Capacity	1
5	Stone carborandum 15 X 5 X 3.75 cm rough and smooth	3
6	Poker	2
13	Tweezer 100 mm	16
15	Master bar 45 degree scraping bar 600 mm width of bar 75 mm, thickness 25 mm, all sides an accuracy of 0.02 mm seasoned.	1
16	Master flat scraping test bar 600 mm, length 75 x75 mm sq. in cross section all sizes scraped to an accuracy of 0.02 mm per 300 mm seasoned.	1
17	Lubricant trolley 2400 x 1200 x 1200 mm (8 chamber)	1
18	Cellepsable tool kit 5 compartments	1
19	Accumulator (spring and gas)	1
23	Magnifying glass 75 mm	2
24	Pin spanner set	1
25	Hand key way broacher	1
26	Solenoid valve	1
27	Pneumatic meter	1
28	Head lamp	1
29	Bearing and gear tester	1
30	Cam lock type screw driver	1
31	Tube expander up to 62 mm	1
33	Sine bar 200 mm	1
34	Engineers parallel	1
35	Sprit level 2 V 250.05	1
36	Wooden straight edge 300, 600, 900, 1200 mm	1
37	Man on chisel	1
38	Pick axes 1 no.	1
39	Bar bending tools and cutting tools	1
40	Four fold foot rule	1
41	Plumb Bob	1

42	Masons tool for plaster work	1
43	Oil cane pressure feed 500 mm	1
44	Conical mallet	1
45	Half moon stake	1
46	Beak iron	1
47	Funnel stake	1
48	Hatchet stake	1
49	Snap rivet set A-3, A-4	1
50	Forks clips 02 tonnes (copa)	1
51	Forks clips 05 tonnes (copa)	1
52	Manila ropes 12, 20, 30 mm dia.	1
53	Crow bar	2
54	Rollers (steel tubes) from 40 to 65 mm dia.	5
55	Block of timber (various sizes)	5
56	Portable jack	1
57	Carge winches 3, 5 tonnes	1
58	Wall hoists	1
59	Traveling and gantry cranes	1
60	Shear legs (tripod)	1
61	Mobile crank	1
62	Conveyor	1
63	Elevators	1
64	Knife 100 mm	16

Package - 60
Precision Mechanical Equipments

S.N.	Details of Specification	Total
20	Machine tool calibrator	1
21	Lathe tool dynometer	1

Package - 60-A
Precision Mechanical Equipments

S.N.	Details of Specification	Total
22	Engg. Stethoscope	1

Package - 61
DC and AC Motor Drives

S.No.	Details of Specification	Total
34	Demonstration model for thyristorised DC motor drive (1HP) setup	1
35	Demonstration model for thyristorised AC motor drive (1HP) setup	1

Package – 62
Shaper Machine

S.N.	Details of Specification	TOTAL
2	Shaping machine 450 mmstroke (Motorized) with all attachments SPECIFICATIONS : Length of Ram Stroke : (450 mm), Working surface of Table : 300 x 228 mm, Working surface of Table : 300 x 228 mm, Max. Table Travel :Horizontal : 419 mm, Vertical : 140 mm, R	1

Package - 63
Micrometers

S.N.	Details of Specification	Total
14	Micrometer 25-50 outside	5
16	Micrometer 50 – 75 mmoutside-to read 0.01 mmwith ratched machine thread 1mmpitch measuring faces. Carbide tipped spindle hardened ground with micro cap finished on ends and forged steel frame complete in carrying case.	3
19	Micrometer out side 0-25mm	9
20	Micrometer With Extension Rod (Inside) 50 mmTo 150 Mm	1
21	Outside micrometer 75-100mm	2
26	Internal micrometer 5 to 30 mmIS:2966-1964	1
27	Adjustable micrometer sprit level to measure flatness, indication and taper with prismatic measuring base	1

Package - 64
Transformers

S.N.	Details of Specification	Total
16	Auto Transformer 0-300 V, 8 Amp.	1
17	P.T. single phase	1

Package - 65
Fuel injection pump calibration equipments

S.N.	Details of Specification	Tota_
1	Fuel injection pump calibration equipments and its accessories and special tools attachment for distributor pupm and inline pump	1