OFFICE OF THE PRINCIPAL GOVT I.T.I. DONGARGARH
DISTT. - RAJNANDGAON , CHHATTISGARH

Phone No. 07823-233050 , E-mail - itidgrd@rediffmail.com

Tender No. Dongargarh/Pur/WB/VTIP/03/Dec.2013 **Dated 26-12-2013**

NOTICE INVITING TENDER

Principal, ITI DONGARGARH Chhattisgarh invites sealed tender from eligible bidders (Manufacturers, or their authorized dealer) for procurement of various Packages of Tools, Equipments & Machinery for Up-gradation of Various Trades 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.cg.gov.in**, from 26.12.2013 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 DONGARGARH , Chhattisgarh on or before 25.01.2014 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. Dongargarh
Dist.-Rajnandgaon (C.G.)

OFFICE OF THE PRINCIPAL GOVT I.T.I. DONGARGARH
DISTT. - RAJNANDGAON, CHHATTISGARH

Phone No. 07823-233050 E-mail – itidgrd@rediffmail.com

Tender No. – DONGARGARH/PUR/WB/VTIP/03/Dec.2013 Dated 26-12-2013

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). 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 Schedule Bank. Bank Draft should be in favour of Principal, ITI **DONGARGARH** payable at **DONGARGARH**, 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 **DONGARGARH** for 3% of total tendered value through a bank guarantee by a Schedule 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 **DONGARGARH** 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 **DONGARGARH** Chhattisgarh for an **amount of 5%** of the contract value through a Bank Guarantee by a Schedule 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 **DONGARGARH** 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 **DONGARGARH** 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.cg.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. DONGARGARH
Distt. –RAJNANDGAON (C.G.)

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.

ANNEXURE- II

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.

ANNEXURE- IV

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)

ANNEXURE- VI

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.

I.T.I. Dongargarh
Summanry of Tendered Packages

Sno.	Package No.	Package Name
1	05	Valves / Valve Positioners
2	06	Hydraulic & Pnumatic Items
3	08	Welding Transformer
4	10	PID Controllor Trainer
5	11	Pneumatic Equipment
6	12	Temprature calibrator & pyrometer
7	16	Motor / Disel Related
8	17	Exhaust gas analyser / Smoke Tester
9	18	Motor / Diesel Accessories
10	19	Fuel Injection Pump
11	20	Motor Vehicle / Diesel Engine
12	21	Motor Vehicle / Petrol Engine
13	26	Electric / Electronic / Controlers / Actuator
14	27	Process Control Trainers
15	29	Diesel Engine Cut away model
16	35	Mircroprocessor & Bridge
17	37(A-1)	Electronic Trainer Kit
18	37(A-2)	Electronic Trainer Kit
19	40	Volt Meter Ammeter . Energy Meter
20	41	Pressure Gauge
21	42	Deflecting / Helical / Roating Vane Flow Meter
22	43	Impeller Flow Meter
23	44	Electromagnetic / Positive Displacement Flow Meters
24	46	Coriolis / Turbine / Ultrasonic / vetex flow meters
25	48(A-1)	Level Measurment Equipments
26	48(A-2)	Level Measurment Equipments
27	49	Flow Meters
28	50	Precision Mechanical Measuring Instruments
29	51	Surface Plate - V Block Angle Plate Universal Scribing Block
30	52	Oscilators / Function Generator
31	55	POwer Hacksaw / Band Saw
32	61	Pump
33	63	Valve / Bearing / Chain Pully / Joints
34	64	Power Supply
35	68	Computer Peripheral
36	73	LCD/ Overhead Projector
37	78	Electronic Tester
38	81	Soldering / Desoldring Items
39	82	Multimeter / Ohmmeter / AVO Meter
40	83	Resistance
41	84	Battery / Charger
42	89	Growler
43	96	Physics Laboratory Equipments
44	100	File / Twist Drill / Morse Socket / Reamer
45	114	Cut Model Items
46	Additional Package - 01	Safety Equipments
47	Additional Package - 02	Tools Items
48	Additional Package - 03	Torch
49	Additional Package - 05	Measuring Tools
50	Additional Package - 06	Table & Trolly
51	Additional Package - 07	Machine
52	Additional Package - 08	Screw Driver . Twiser
53	Additional Package - 09	File
54	Additional Package - 12	Glass
55	Additional Package - 13	Puller
56	Additional Package - 15	Guage

Sno.	Package No.	Package Name
57	Additional Package - 17	Pricision Gauge
58	Additional Package - 18	Monochromatic light Source
59	Additional Package - 20	Vibrometer
60	Additional Package - 21	Electrical Instrument
61	Additional Package - 22	Rotational / Velocity Instrument
62	Additional Package - 26	Flow Meters / Instruments
63	Additional Package - 27	Analytical Instruments
64	Additional Package - 28	Calibrator
65	Additional Package - 30	Manometer & Switch
66	Additional Package - 32	Testing Bench
67	Additional Package - 33	Pressure Gauge

Total No. of Packages - 67

Principal
ITI Dongargarh

Schedule of Requirements
Package - 5

Valves / Valve positioners

S.N.	Code No.	Details of Specification	Dongargarh	Total
1	UIM276	Various types - Different types of control valves such as gate valves, globe valves, ball valves, diaphragm valves, butterfly valves etc electrically actuated. Technical Specifications:(1) Globe Valve: (Pneumatically Operated) ,(2) Gate Valve:(Hydraulica	1	**1**
2	UIM277	Valve positioners, booster relays, gland packing etc.	1	**1**

Package - 6

Hydraulic & Pnumatic Items

S.N.	Code No.	Details of Specification	Dongargarh	Total
1	UIM275	**Pneumatic actuators** 1. Multi Spring Short height Field reversible Pneumatic Actuator Action : Proportionsl. Travel : 20 mm Type : Diaphragm (Nylon impregnated Neoprene Rubber)/(75 X 100 mm) Air Pressure : 3-15 PSI Input air pressure	1	**1**
2	UIM266	Pnematic and electronic recorders (single point and multipoint) both circular and strip chart types	1	**1**

Package – 8

Welding Transformer

S.N.	Code No.	Details of Specification	Dongargarh	TOTAL
1	UW60	CO2 welding machine 400 amps capacity with air cooled torch , regulator , gas oreheater , gas hose and standard accesories	1	**1**
2	U587, UW59	Welding generator DC 200-300 amp. With all accessories set	1	**1**

Package - 10

PID Controller trainer

S.N.	Code No.	Details of Specification	Dongargarh	Total
1	UIM267, NIM267	PID Controller trainer consisting of instrument panel, digital computer and interface system	1	1

Package - 11

Pneumatic Equipments

S.N.	Code No.	Details of Specification	Dongargarh	Total
1	UIM206, NIM206	Differential pressure transmitter (Pneumatic)	2	2

Package - 12

Temprature calibrator & pyrometer

S.N.	Code No.	Details of Specification	Dongargarh	Total
			Upg	
1	UIM255, UIM258, NIM255	Optical pyrometer Optical Pyrometer, Fast response and sensitive measuring system Light weight & portable High measuring accuracy Two measuring ranges in each instrument SPECIFICATIONS Spectral sensitivity: 0.65 µm Accuracy : ± 1% o	3	**3**
2	UIM258	Radiation pyrometer, Temparature Range : -32 to 600°C Accuracy : ±1% of reading or ±1°C whichever is greater Repeatability : £ ±0.5% or £ ±1°C whichever is greater Emissivity : 0.1 to 1.0 by 0.01 D : S : 30 : 1 Response time : £ 0.5 Sec Sighting :	2	**2**
3	UIM254, NIM254	Thermocouple type pyro meter with Milli- volt meter with different thermocouple	1	**1**

Package - 16

Motor/ Diesel Related

S.N.	Code No.	Details of Specification	Dongargarh	Total
1	U408, NMM74, NDM74	DOUBLE OPEN ENDED TAPPET SPANNER FOR 10.5MM*12mmTO 16.5mm*18mm SET OF FOUR	1	1
2	U432, UDM107, NDM107	Dynamo and Voltage Regulator (each)	1	1
3	U427, UDM98, NDM98, NMM98	FILLING JIG FOR ADJUSTING THE PISTON RING GAP	1	1
4	U761, UDM119, NDM119	High rate discharge tester	1	1
5	U420,UDM89, NDM89, NMM132	Piston RING EXPANDER AND REMOVER.	1	1
6	U415, UDM83, NDM83, NMM83	TOOL VALVE GRINDING, SUCTION TYPE (CONSUMABLE TOOL)	2	2
7	U756, U445, UDM116, NDM116, NMM128	Cylinder head Valve key inserter	1	1
8	U442, U759, UDM118, NDM118, NMM131	Valve refacer	1	1
9	U416, UDM84, NDM84, NMM84	Valve seat cutting tool complete with guides & pilot bar (all angles) in a box	1	1
10	UIM219, NIM219	Vaccum tester with pump	1	1
11	NMM86	Compression gauge to read 17.6 kg/sq. cm	1	1
12	NMM106	Tester sparking plug neon type	1	1

Package - 17

Exhaust gas analyser / Smoke Tester

S.N.	Code No.	Details of Specification	Dongargarh	TOTAL
1	U785, NMM165, NDCM24	Exhaust gas analyser (4 gases) with engin rpm sensor & engin coolant tempreture sensor	2	2
2	U786, NMM166, NDCM25, NDM152	Smoke Tester with engin rpm sensor & engin coolant tempreture sensor	2	2

Package - 18

Motor/ Diesel Accessories

S.N.	Code No.	Details of Specification	Dongargarh	Total
1	U750, NMM121	Carburator repair tool kit	1	1
2	U743, U431, UDM106, NDM106, NMM114	Clutches, different types such as cone type disctype diaphragm type etc	2	2

Package - 19

Fuel Injection Pump

S.N.	Code No.	Details of Specification	Dongargarh	Total
1	U770, NMM147	Fuel Injection pump (Diesel) inline 4 CYLINDER	1	1
2	U771, NMM1478	Fuel Injection pump (Diesel) rotary 4 CYLINDER	1	1
3	U745, NMM116	Full floating axle and semi-floating axle assembly	1	1
4	U772, NMM149	Multi-point fuel injection pump	2	2
5	U773, NMM150	Petrol nozzle set	2	2

Package - 20

Motor Vehicle / Diesel Engine

S.N.	Code No.	Details of Specification	Dongargarh	Total
1	UDM142, NMM160, NDM142	Diesel engine (running condition) stationary type	8	8

Package - 21

Motor Vehicle / Petrol Engine

S.N.	Code No.	Details of Specification	Dongargarh	Total
1	UDM141, NMM159, NDM141, NMM155	Petrol engine (running condition, car type) indian make contremproray model	4	4
2	UDM143, NMM161, NDM143	Petrol engine vertical (2stroke) motor cycle/scooter type 1.5 hp indian make Contemporary model	3	3
3	NMM158	Petrol Engine Running condition MPFI type	2	2
4	NDM155	Engine with P.T. system	1	1

Package – 26

Electric/Electronic/Controlers/Actuator

S.N.	Code	Details of Specification	Dongargarh	Total
1	UIM274, NIM274	Electric actuators	1	1
2	UIM207, NIM207	Differential pressure transmitter (electronic)	3	3

Package – 27

Process Control Trainers

S.N.	Code	Details of Specification	Dongargarh	Total
1	UIM270, NIM270	Programmable logic controller (PLC) Trainer	1	1

Package – 29

Diesel engine cut away model

S.N.	Code	Details of Specification	Dongargarh	Total
1	U451, UDM139, NDM139	Diesel engine cut away model to show working parts for demonstration 2 stroke	1	1
2	U451, UDM139, NDM139	Diesel engine cut away model to show working parts for demonstration 4 stroke	1	1

Package - 35

Microprocessor & Bridges

S.N.	Code No.	Details of Specification	Dongargarh	Total
1	UIM279, NIM279	Training kits or Trainers as available on microprocessors applicable to process control and instrumentation	1	1
2	UIM282, NIM282	Data acquisition system (DAC)	1	1
3	UIM283, NIM283	ADC to DAC Cards	4	4
4	UIM284, NIM284	Digital I/O Cards	4	4

Package - 37(A-1)

Electronic Trainer Kit

S.N.	Code No.	Details of Specification	Dongargarh	Total
1	UELE141, UIM169, NELE141, NMT280, NIM169	Discrete component trainer	1	1
2	UELE142,UIM168, NELE142, NIM168	Linear L.C. Trainer (Operational Amplifiers)	2	2
3	UIM167, NIM167	Trainers on network circuits i.e. Kirchhoff s law, resonance, electromagnetic and transformer	2	2
4	UIM170, NIM170	Trainers on power suppliers- half wave rectifier, ful wave rectifier, bridge rectifier and power supply, regulated power supply	2	2
5	UIM171, NIM171	Trainers on basic digital electronics i.e. logic gates, Boolean expression, adder, subtracter, flip-flop, counter, register, converter	2	2

Package - 37(A-2)

Electronic Trainer Kit

S.N.	Code No.	Details of Specification	Dongargarh	Total
1	UIM153, NIM153	Instrumentation amplifier trainer	2	2
2	UIM218, NIM218	P to I and I to P converters each	1	1
3	UIM209, NIM209	Pressure Transducers training kits (a) Potentiometer (b) Capacitive (c) Reluctive (d) Strain guage,	1	1

Package - 40

Volt Meter, Ammeter, Wattmeter, Energy Meter

S.N.	Code No.	Details of Specification	Dongargarh	Total
1	UIM177, NIM177	DC moving coil voltmeters (various ranges)	5	5
2	UIM181, NIM181	AC moving iron type voltmeter (various ranges)	5	5
3	UIM182, NIM182	AC moving iron type ammeters (various ranges)	5	5
4	UIM188, NIM188	Watt hour meter induction type Iph	3	3
5	UIM120, NIM120	Digital panel meters 41/2 digit	6	6
6	NMM145	Continuity meter	1	1

Package - 41

Pressure Gauge

S.N.	Code No.	Details of Specification	Dongargarh	Total
1	UIM201, NIM201	Bourdon type pressure gauges of various ranges	8	8
2	UIM202, NIM202	Capsule type pressure gauge	3	3
3	UIM205, NIM205	Pressure regulator with filter and input & output gauges	2	2
4	UIM220, NIM220	Vacuum guage, 100 mmdial, Bourdon tube type	1	1

Package - 42

Deflecting/ Helical/ Rotating vaneFlow Meter

S.N.	Code No.	Details of Specification	Dongargarh	Total
1	UIM227, NIM227	Deflecting vane flow meter	2	2
2	UIM228, NIM228	Helical flow meter	1	1
3	UIM227, NIM227	Rotating vane flow meter	2	2

Package - 43

Impeller flow meter

S.N.	Code No.	Details of Specification	Dongargarh	Total
1	UIM225, NIM225	Impeller type flow meter	4	4

Package - 44

Electromagnetic/positive displacement Flow Meters

S.N.	Code No.	Details of Specification	Dongargarh	Total
1	UIM226, NIM226	Below and Liquid seal drum Type Flow meter each	1	1

Package - 46

Coriolis/Turbine/Ultrasonic/Vertex Flow Meters

S.N.	Code No.	Details of Specification	Dongargarh	Total
1	UIM238, NIM238	Coriolis mass flow meter	1	1
2	UIM228 NIM228	Turbine flow meter	1	1
3	UIM236, NIM236	Vertex flow meter	1	1

Package - 48(A-1)

Level Measurement equipments

S.N.	Code No.	Details of Specification	Dongargarh	Total
1	UIM248, NIM248	Level Measurement equipments for solid, sonic solid level, Microvave, Capacitance probes, Diaphragm switches, Each	1	1

Package - 48(A-2)
Level Measurement equipments

S.N.	Code No.	Details of Specification	Dongargarh	Total
1	UIM248, NIM248	Level Measurement equipments for Nuclear gauges, sonic and microwave solid level detectors. Each	1	1

Package - 49
Flow Meters

S.N.	Code No.	Details of Specification	Dongargarh	Total
1	UIM230, NIM230	Orifice type flow meter	2	2

Package - 50
Precision Mechanical Measuring Instruments

S.N.	Code No.	Details of Specification	Dongargarh	Total
1	UFIT82, UIM57, NMT99, NFIT82, NIM57	Combination Set with 300mmscale centre head, square head and protector head	3	3
2	UFIT155, UIM89, UIM62, NFIT155, NIM89, NIM62	Dial test indicator.01 mm on stand.	2	2
3	UFIT89, UIM56, NMT90, NFIT89, NIM56	Vernier height gauges 30 cm.	3	3

Package - 51

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

S.N.	Code No.	Details of Specification	Dongargarh	Total
1	UIM48, NIM48	Tool makers clamps 65 x 12 x 25 mm opening	2	2
2	UIM21, NDM21, NFIT24, NIM21	Universal scribing block 25 cm	4	4

Package - 52

Oscilators / Function Generator

S.N.	Code No.	Details of Specification	Dongargarh	Total
1	UIM123, NIM123	Digital multy generation (1 MHz) with frequency counter (8 digit or 10 MHz)	1	1
2	UIM124, UELE140, NELE140, NIM124	Function Generator Digital	1	1

Package - 55

Power Hacksaw/Band Saw

S.N.	Code No.	Details of Specification	Dongargarh	Total
1	UW71, NW71	Power Hacksaw Machine 1Hp, 24 inch	1	1

Package - 61

Pump

S.N.	Code No.	Details of Specification	Dongargarh	Total
1	U426,U730, UDM97, NDM97, NMM97	WATER PUMP AND OIL PUMP (each)	2	2

Package - 63

Valve / Bearing / Chain pulley / Joints

S.N.	Code No.	Details of Specification	Dongargarh	Total
1	NMM78	CHAIN AND BLOCK 1016 KG CAPACITY	2	2
2	NMM153	ARBOR PRESS HAND OPRATED 1/2 TON CAPACITY	1	1

Package – 64

Power Supply

S.N.	Code No.	Details of Specification from DET	Dongargarh	Total
1	UIM213, NIM213	Power supply unit	1	1
2	UIM122, NIM122	D.C. Regulated power supply +-15 volts / +- 30 volts	2	2

Package – 68

Computer Peripherals

S.N.		Details of Specification	Dongargarh	Total
1	UCOPA12	Web Cam (Digital Camera) Latest & Higher Mega Pixel	1	1

Package – 73

LCD/Overhead Projector

S.N.	Code	Details of Specification	Dongargarh	Total
1	UIM304 NIM304	Overhead projector with all accessories (min 3000 limunous , 1024x768 pixel with USB & Wireless Conectivity Latest Technology	2	2

Package - 78

Electronic Testers

S.N.	Code No.	Details of Specification	Dongargarh	Total
1	UIM132, NMT290, NIM132	I.C. Tester Digital type	1	1
2	UIM131, NIM131	Digital L.C.R.bridge	1	1
3	UIM133, NELE139, NIM133	Oscilloscope-Dual trace 30 MHz	2	2

Package - 81

Soldering / Desoldering Items

S.N.	Code No.	Details of Specification	Dongargarh	Total
1	UIM34, NIM34	Electric soldering iron 6 watt pencil tip	8	**8**
2	UIM75, NIM75	Soldering station (Temp, controlled)	2	**2**

Package - 82

Multimeter/Ohmmeter/AVO Meter

S.N.	Code No.	Details of Specification	Dongargarh	Total
1	UIM192, UIM128, NELE79, NIM192, NIM128	Digital Multimeter (3½ digits)	4	4
2	UDM120, NDM120, NMM134	A.V.O METER	1	1

Package - 83
Resistance

S.N.	Code No.	Details of Specification	Dongargarh	Total
1	UIM137, NIM137	Decade Capacitance Box 5 Dial,Range : 100pf to 11.111 MFD in steps of 100pf	2	2
2	UIM138, NIM138	Decade Inductance Box 6 Dial,Range : 90uH to 9.99999H in steps of 90uH	2	2
3	UIM136, NIM136	Decade Resistance Box 7 Dial,99,99,999 ohms in steps of 1	2	2

Package - 84
Battery / Charger

S.N.	Code No.	Details of Specification	Dongargarh	Total
1	UDM147, ELE148, NDM147, UIM305, NIM305	Hydrometer	3	3

Package - 89
Growler

S.N.	Code No.	Details of Specification	Dongargarh	Total
1	UELE95, UDM144, NDM144, NELE95, NMM141	Universal Growler	2	**2**

Package - 96
Physics Laboratory Equipments

S.N.	Code No.	Details of Specification	Dongargarh	Total
1	UIM203, NIM203	Aneroid barometers	2	2

Package – 100

File / Twist Drill / Morse Socket / Reamer

S.N.	Code No.	Details of Specification	Dongargarh	Total
1	NMM38, NDM35, NIM10	File triangular 2nd cut 15 cm made of good quality carbon steel	1	1

Package - 114

Cut Model Items

S. N.	Code No.	Details of Specification	Dongargarh	Total
1	NMM163	Air compressor two stage 500ltr with 5HP motor and air receiver	1	1

ITI Dongargarh

Additional Schedule of Requirements

Additional Package - 01

Safety Equipments

S.N.	Code No.	Details of Specification	Requirement (in Unit)
1	W01	Glove pair leather (in pair)	24
2	W02	Apron leather	26
3	W03	Screen welding helmet type	17
4	W04	Screen Welding hand	19
5	W05	Gas Welding Goggles with colour glass	14
6	W07	safty boot for welders (in pairs)	20
7	W08	Safty goggles	22
8	W09	magnifying glass 10 cm	2
9	W10	Glass colouerd 108x82x3mm DINIIAl3A	5
10	W12	Leather hand sleave (in pair) 16 inch	26

Tools Items

Additional Package - 02

S.N.	Code No.	Details of Specification	Requirement (in Unit)
1	W14	Hammer scaling 0.25kg	21
2	W18	Electrode holder 400 amps	2
3	W19	Rubber hose clips	3
4	W21	Tip Cleaner	8

Torch

Additional Package - 03

S.N.	Code No.	Details of Specification	Requirement (in Unit)
1	W25	HP Welding Torch no. 02 with nozzle nos 1,2,3,5 & 7 in set	1
2	W26	Oxy Acetylene gas cutting blow pipe	1

Measuring Tools

Additional Package - 05

S.N.	Code No.	Details of Specification	Requirement (in Unit)
1	W031	Weld measuring guegg fillet & butt each	1
2	W032	Steel Tape 5 mtr flexible in case	1

Table & Trolly

Additional Package - 06

S.N.	Code No.	Details of Specification	Requirement (in Unit)
1	W033	Suitable Gas Welding Table with fire bricks	5
2	W034	Suitable Arc welding table all metal with positionar	5
3	W035	Trolly for cylinder (HP unit)	2

Machine

Additional Package - 07

S.N.	Code No.	Details of Specification	Require ment (in Unit)
1	W037	D.C. Arc welding rectifire set with all accessories (400A , OCV 60-100V , 60% Duty Cycle)	1
2	W038	AC/DC Tig welding machine with water cooled torch 300 A Argon Regulator , Gas hose water circulating pump and standard accessories	1
3	W040	Braze weld equipment brazier	1

Screw Driver , Twiser

Additional Package - 08

S.N.	Code No.	Details of Specification	Require ment (in Unit)
1	IM01	Watch maker screw driver (set of six)	34
2	IM02	Twiser fine point 125 mm	24
3	IM04	Phillips screw driver 200 mm in set	2

File

Additional Package - 09

S.N.	Code No.	Details of Specification	Require ment (in Unit)
1	IM05	File hand smooth 200 mm	31
2	IM24	File flat 2nd cut 200 mm	10

Glass

Additional Package - 012

S.N.	Code No.	Details of Specification	Require ment (in Unit)
1	IM05	Eye glass 3" focus watch maker	4
2	IM70	Magnifying glass 75 mm	2

Puller

Additional Package - 013

S.N.	Code No.	Details of Specification	Requirement (in Unit)
1	IM31	Pointer extractors (puller)	4

Guage

Additional Package - 015

S.N.	Code No.	Details of Specification	Requirement (in Unit)
1	IM32	Screw pitch guage B.A. & metric each	2
2	IM49	Radius guage leaf type 1 to 15 mm	1
3	IM47	Standard wire guage	1

Pricision Gauge

Additional Package - 17

S.N.	Code No.	Details of Specification	Requirement (in Unit)
1	IM4	Plug gauge	2
2	IM5	Ring gauge	1
3	IM6	Snap gauge	1
4	IM9	Telescopic gauge	1
5	IM12	Gauge blocks	3

Monochromatic light source

Additional Package - 018

S.N.	Code No.	Details of Specification	Requirement (in Unit)
1	IM14	Monochromatic light source	1
2	IM21	Load cells of various ranges	2

Vibrometer

Additional Package - 020

S.N.	Code No.	Details of Specification	Requirement (in Unit)
1	IM18	Vibrometer sensing elements	2
2	IM19	Accelerometer	1
3	IM20	Sesmic intruments	2

Electrical Instrument

Additional Package - 021

S.N.	Code No.	Details of Specification	Requirement (in Unit)
1	IM22	Transistor tester	1
2	IM19	Autotransformer	2
3	IM20	Synchronoscope	1

Rotational /velocity Instruments

Additional Package - 022

S.N.	Code No.	Details of Specification	Requirement (in Unit)
1	IM1	Speedometers (at least four different popular make) with adopters of various sizes.	1
2	IM5	Chronometric type tachometer	1
3	IM7	Stroboscope	1

Flow meters/ instruments

Additional Package - 26

S.N.	Code No.	Details of Specification	Requirement (in Unit)
1	IM01	Simple tank type quantity meter.	1
2	IM11	Rotameter	1

Analytical Instruments

Additional Package - 27

S.N.	Code No.	Details of Specification	Requirement (in Unit)
1	IM01	Conductivity meter	1

Calibrator

Additional Package - 28

S.N.	Code No.	Details of Specification	Requirement (in Unit)
1	IM18	Pneumatic calibrator	1
2	IM19	Electronic calibrator. HART / field bus / profibus type device compatible	1

Manometer & Switch

Additional Package - 30

S.N.	Code No.	Details of Specification	Requirement (in Unit)
1	IM01	"U" tube manometers	1
2	IM02	Well type manometer	1
3	IM20	Pressure switches of various ranges.	4

Testing Bench

Additional Package - 32

S.N.	Code No.	Details of Specification	Requirement (in Unit)
1	IM06	Instrument testing bench with cup-boards	4

Pressure Gauge

Additional Package - 33

S.N.	Code No.	Details of Specification	Requirement (in Unit)
1	IM22	Low pressure measuing guages such as thermal conductivity gauges, meloyd gauge.	1