



GOVERNMENT COLLEGE OF ENGINEERING, KALAHANDI
AT: KandBandopala, PO: Risigaon, Dist: Kalahandi,
Bhawanipatna-PIN 766002, ODISHA.

No: GCEK/TEQIP/322

Date: 18/01/2019

TENDER CALL NOTICE (FOR TWO BID SYSTEM)

Sealed tenders are invited from the reputed firms/ISO 9001 certified companies/Authorized Dealers/Manufactures with valid documents and GSTIN for supply of Laboratory Equipments/Components/Items for the Dept. of Electrical Engg. Interested parties may apply in the prescribed tender document which can be downloaded from the website (<http://www.gcekbpatna.ac.in>) and the filled-in application form along with a non-refundable fees of **Rs.1, 500/-** (Rupees one thousand & five hundred) only per package in shape of demand draft in favour of **“Principal, Government College of Engineering, Kalahandi”** payable at **Bhawanipatna** on or before 20/02/2019 at **5.00 PM**. The Technical Bids will be opened on 21/02/2019 at **3.00 PM** and the Price Bids will be opened on 26/02/2019 at **3.00PM**. The sealed tenders super-scribing the package number should be submitted to “The Principal, Govt. College of Engineering, Kalahandi, Bhawanipatna, At: Bandopala, Po:Risigaon, Bhawanipatna-766002.” through speed post/registered post only. Tenders received beyond the scheduled date and time will be summarily rejected.

The undersigned reserves the right to extend the date and accept or reject any or all tenders without assigning any reason thereof.

BIDDING DATA SHEET

A. GENERAL INFORMATIONS:

Sl. No.	Item	Details
1	Bid Identification No.	
2	Name of the Work	PROCUREMENT OF Lab EQUIPMENT/ MACHINERIES ELECTRICAL ENGINEERING DEPARTMENT
3	Officer inviting tender	HOD, ELECTRICAL ENGINEERING DEPARTMENT
4	Accepting Authority	PRINCIPAL, GOVERNMENT COLLEGE OF ENGINEERING KALAHANDI.

B. BID INFORMATION:

1	Intended completion period/Time period assigned for Completion of supply.	90 (ninety) days from the date of issue of supply order.	
2	Last Date & time of submission of Bid	Time: 5.00PM	
		Date:20/02/2019	
3	Cost of Tender Paper (Clause No.6.1of DTCN.)		
	i	Bank draft for Tender Paper Cost	Rs. 1500/- per package inclusive GST
	ii.	in favour of	PRINCIPAL , GOVERNMENT COLLEGE OF ENGINEERING KALAHANDI
	iii.	payable at	Bhawanipatna
4	Bid Security (Clause No.5.1 of DTCN.)		
	i	Amount	2% (Two Percentage) of the tender value Package Wise
	ii	Pledged in favour of	Principal , Government College of Engineering Kalahandi
	iii	payable at	Bhawanipatna
	iv	Type of instrument	As specified in the Bid document in Clause No.5.1 of DTCN1
5	Bid validity period (Clause No.16.1 of DTCN)	90 days from the date of opening of Technical bid.	
6	Currency of Contract	Indian Rupees	
7	Language of Contract	English	
8	Date of opening of Technical bid	Dt.21/02/2019 at 3 PM	
9	Date of opening of Price bid/ BOQ	Dt.26/02/2019 at 3 PM	

DETAILED TENDER CALL NOTIC **(DTCN)**

The tender document is available in the official website of the college i.e. <http://www.gcekbpatna.ac.in>. All bids must be accompanied by cost of tender paper (i.e. Rs1500/- per package) and Bid Security (i.e. of 2% tendered value Package wise) in shape of demand draft in favor of "Principal, Government College of Engineering, Kalahandi" payable at Bhawanipatna from any nationalized bank with copies of relevant documents of the bidder, failing which the bid will be liable for rejection. The bid security in other form like cash, personal cheque etc. will not be accepted and in such case bid will be rejected. Interested parties may submit the tender documents on or before 20/02/2019 at **5.00pm**. The Technical Bids will be opened on 21/02/2019 at **3 PM** and the Price Bids will be opened on 26/02/2019 at **3 PM**.

The authority reserves the right to extend the date and accept or reject any or all tenders without assigning any reason thereof.

GENERAL TERMS & CONDITIONS OF CONTRACT

ADDENDUM

The bid is to be submitted in two covers separately if otherwise eligible. and these two bid should be enclosed in main cover by mentioning the package name and number

(i) Cover-I -Technical bid

(ii) Cover-II- Financial bid

The Bidders shall furnish as part of the Bid the following Documents in cover-I (Technical bid) establishing Bidders eligibility and qualification to perform the contract to the Purchaser's satisfaction.

1. Eligible Goods and Services

- 1.1 The Bidders shall quote the articles of reputed make as per list of equipments enclosed in this tender document at the end with make/brand and model names as per the Bid technical specifications (in **Annexure-III**) in **Annexure-IV** and may quote alternative standards in the Bid. The articles quoted should have adequate service facilities.

2. Documents Establishing Bidder's Eligibility & Qualification

- 2.1 The Bidders shall furnish as part of the Bid the following Documents in cover-I (Technical bid) establishing Bidder's eligibility and qualification to perform the contract to the Purchaser's satisfaction.

a) **FOR ORIGINAL MANUFACTURER:**

- i) **Company Registration Certificate** (in case of Company registered under Company Act 1956), **Partnership deed**, duly registered before competent authority (in case of Partnership firm) and **documents from appropriate authority depicting the authority/license** to manufacture laboratory testing equipment That the Bidder, who is not a manufacturer / producer, has been duly authorized by the manufacturer/ producer to supply the goods.
- ii) Valid ISO certificate.
- iii) EMD/ Bid security in proper shape as mentioned at clause 5.1 of DTCN.
- iv) Cost of Tender paper as mentioned at clause 6.1 of DTCN.
- v) GST registration certificate.
- vi) Valid GST clearance certificate.
- vii) PAN card (in the name of Company in case of Company/Partnership firm and in the name of the Proprietor in case of Proprietary firm).
- viii) Bid Declaration Form / Verification & Undertaking in affidavit form on stamp paper of Rs 100/- duly signed before Notary or any appropriate Authority as per format in Annexure-II.

NOTE:

- a) If the bid is made by a Proprietary firm, the bid declaration form shall be signed by the Proprietor & the bidder shall furnish **type-written full name and name of his/her address** in declaration form.
- b) If the bid is made by a firm in partnership, the bid declaration form shall be signed by the managing partner or any other partner holding the Power of Attorney for the firm (**with type-written full name and name of his/her firm with its current address**), in which case a certified copy of the power of attorney in affidavit form shall accompany the tender.
- c) If the bid is made by a Company or a Corporation, the bid declaration form shall be signed by the managing director or a duly authorized person holding Power of Attorney on behalf of the company for signing the bid (**with type-written full name and name of his/her firm with its current address**), in which case a certified copy of the Power of Attorney shall also be submitted.
- ix. Details of make/brand with specification & logo etc. of the machineries & equipment package wise duly filled in as per format in **Annexure-IV**
- x. Performance statement as per format in **Annexure-V** with documentary proof for each item of the package.
- xii. No Relation Certificate as per Format in **Annexure-VIII**.
- xiii. Details of the bidder's service center as per format in **Annexure-IX**.
- xiv. Proof of Annual average turnover of Minimum of Rupees Ten Lakh for Package Four and thirty Lakh for remaining Packages in last 3(three) financial years certified by the Chartered Accountant as per format (**Annexure-VI**).
- xv. Checklist duly filled in as per details in **Annexure-IA**.

- b) **FOR AUTHORISED DEALER/ DISTRIBUTOR:**
- i. Manufacturer's authorization as per Format in **Annexure-VII**.
 - ii. Valid Documents of the manufacturer as applicable.
 - iii. Valid ISO certificate of the manufacturer.
 - iv. EMD/ Bid security in proper shape as mentioned at clause 5.1 of DTCN.
 - v. Cost of Tender paper as mentioned at clause 6.1 of DTCN.
 - vi. GST registration certificate.
 - vii. Valid GST clearance certificate.
 - viii. PAN card (in the name of Company in case of Company/Partnership firm and in the name of the Proprietor in case of Proprietary firm).
 - ix. Bid Declaration Form / Verification & Undertaking in affidavit form on stamp paper of Rs 100/- duly signed before Notary or any appropriate Authority as per Format in **Annexure-II**.

NOTE:

a) If the bid is made by a Proprietary firm, the bid declaration form shall be signed by the Proprietor & the bidder shall furnish **type-written full name and name of his/her firm with its current address** in declaration form.

b) If the bid is made by a firm in partnership, the bid declaration form shall be signed by the managing partner or any other partner holding Power of Attorney for the firm (**with type-written full name and name of his/her firm with its current address**), in which case a certified copy of the power of attorney in affidavit form shall accompany the bid.

c) If the bid is made by a Company or a Corporation, the bid declaration form shall be signed by the managing director or a duly authorized person holding Power of Attorney on behalf of the company for signing the bid

(**with type-written full name and name of his/her firm with its current address**), in which case a certified copy of the Power of Attorney shall also be submitted.

x. The bidder has to mention make/brand specification & logo etc. of original manufacturer only for the equipment/machineries of the packages to be supplied in **Annexure-IV**

xi. Performance statement as per **Annexure-V** with documentary proof.

xii. Proof of Annual average turnover Minimum of Rupees Five Lakh for Package Four and Twenty Lakh for remaining Packages 3(three) financial years certified by the Chartered Accountant as per format (**Annexure-VI**).

xiii. No Relation Certificate as per Format in **Annexure-VIII**.

xiv. Details of the bidder's service center as per format in **Annexure-IX**.

xv. Checklist duly filled in as per details in **Annexure-IB**.

- 2.2 Copies of valid GSTIN/STCC and ITCC/Non-Assessment Certificates shall be furnished by the Bidder and the originals of the above certificates shall be produced to the purchaser before placement of notification of award. In case of outside State Bidders, the concerned firm is required to submit copy of the Non-Assessment Sales Tax Clearance Certificate issued by competent Sales Tax authority of the State of Orissa in favour of their firm along with copy of the GSTIN & Income Tax Clearance Certificate. Any Bidder failing to submit the above documents the Bid of the firm may be rejected.

3. Documents Establishing Goods Eligibility

- 3.1 The goods offered against the schedule of requirement of goods should be in accordance with the stipulated specifications.

TECHNICAL SPECIFICATIONS:-The machinery/ equipment to be supplied should be genuine **IS/ISI standard** and also strictly as per the detailed technical specifications attached at the end of the bid document (**Annexure-III**).The bidder has to specify the name of manufacturer, make/brand with detail specification and model in **Annexure-IV**.

In case of authorized dealer/ distributor, the bidder has to mention make, brand, specification & logo etc. of original manufacturer only. If the authorized dealer of a manufacturing company proposes to supply any brand or make other than that of the original manufacturer, then the same shall not be acceptable.

- 3.2 The documentary evidence may be in the form of Literature, pamphlets, manuals, drawing, circuit diagram etc. and shall furnish :

- Detailed description of goods with essential technical and performance characteristics.
- a)
 - b) A list giving full particulars, including available source and current price of spare parts, special tools etc. necessary for proper and continuing function of the goods for a period of two years following the commencement of the use of the goods by the Purchaser.

4. **Bid Price**

- 4.1 The Bidder shall quote their lowest possible price (in **Annexure-XIV**) (as per list of equipments for different categories enclosed in this tender document) & prices quoted by the Bidder shall be fixed during the Bidder's performance of the contract and not subject to any variation.
- 4.2 The contract price shall include the cost of the Goods, Charges towards Packing, forwarding, handling, insurance, freight, incidental service, installation & commissioning of the goods and training to the consignee's personnel at site.
- 4.3 The Bidder shall furnish the breakup of cost as follows solely for the purpose of facilitating the comparison of Bids only. The price must be stated separately for each item. (**Annexure-XII**)
- a) Ex-Factory/ Ex-Warehouse/ Ex-Showroom/ off the self price
 - b) Packing, Forwarding and Handling charges
 - c) Insurance charges
 - d) Freight up to destination Institution.
 - e) Erection, Assembly, commissioning, incidental service, including testing, training charges.
 - f) Tax component (i.e Excise Duty, Sales Tax, GSTIN other levies) payable by the Consignee.
 - g) Delivery cost at site (including Tax Component)

5. **Bid Security Deposit :**

- 5.1 All bids must be accompanied by the bid security @ not less than 1% (One Percentage) of the tender value in shape of demand draft in favour of "Principal, Govt. College of Engineering ,Kalahandi payable at Bhawanipatna" enclosed in sealed envelope, failing which the tender will be rejected.
- 5.2 The bid security is required to protect the Purchaser against the risk of Malfunctioning of the equipment within the Guarantee period.
- 5.3 Bidder's conduct which would warrant the security's forfeiture. Unsuccessful bidders' bid security will be discharged or returned as promptly as possible but not later than thirty (30) days after the expiration of the period of bid validity prescribed by the Purchaser.
- 5.4 The successful Bidder's bid security will be discharged upon the Bidder signing the contract.
- 5.5 The bid security may be forfeited if a Bidder withdraws its bid during the period of bid validity.

6. **Tender paper Cost**
6.1 The cost of Bid documents (non-refundable) in shape of demand drafts issued by any Nationalized Bank shall be drawn in favour of **Principal, Government College of Engineering Kalahandi** payable at Bhawanipatna for **Rs1500/- towards cost of tender paper & inclusive GST.**
7. **Delivery of Goods**
7.1 The delivery of goods shall be made by the supplier in accordance to the order placed/ Notification of Award to the Consignee as shall be detailed in the Schedule of Requirement of Goods.
8. **Inspection/ Test**
8.1 The Purchaser or his representative shall have the right to inspect/ Examine/ test the goods in conformity to contract awarded.
8.2 The inspection/examination/ test may be conducted in the premises of the Supplier or at the goods final destination at the premises of the Consignee, as will be decided by the Purchaser.
8.3 The purchaser's right to inspect/ examine/test & where necessary to reject the goods after the goods arrival at the final destination, shall in No way be limited or waived by the reason of the goods having been inspected and tested by the manufacturer previously.
8.4 In case of any inspected/ tested goods fail to confirm to the specification/ working condition, the purchaser may reject them and the supplier shall replace/ repair the same free of cost to the purchaser.
- 8.5 **INSTALLATION & COMMISSIONING:-**
The successful bidder shall visit the schedule place and recommend pre-installation requirements at each place to the Consignee ahead of delivery. The electrical power supply will be provided by the purchaser at the room where the equipment will be installed but the wiring, electrical fittings and accessories, if any, required for installation & commissioning of the equipment from the power supply point to the point of actual installation will be provided by the supplier without any extra cost.
- 8.6 **DEMONSTRATION/QUALIFIED AND TRAINED CUSTOMER SUPPORT STAFF:**
The bidder should possess qualified and trained customer support staff with ample experience in the required field, who shall impart necessary training/ demonstration to Purchaser's personnel for operation of equipment supplied.

- 8.6 **REJECTED ITEMS:**
No payment shall be made for rejected supplied items. Rejected items must be removed by the bidders within two weeks of the date of rejection at their own cost and replaced immediately. In case these are not removed, the same will be auctioned by the purchaser (at the risk and responsibility of the suppliers) without any further notice.
- 8.7 **TRAINING:** - Supplier is required to impart training to operate Equipment/ machineries to minimum 2 persons (one Laboratory staff and one faculty) for 7 days for each machinery/ equipment within 15 days of installation at site where the Equipment is installed. The bid price includes the Training & Demonstration charges.
9. **PAYMENTTERMS & PERFORMANCE SECURITY (SECURITY DEPOSIT)**
- 9.1 No advance payment is allowed by the Purchaser to the supplier for any deal.
- 9.2 The standard payment terms(subject to recoveries, if any) upon submission of required documents shall be as follows :
- 9.3 Payment to the successful bidder shall be made only after items are received in good and serviceable condition as per conditions stipulated in the bid documents along with required documents in support of Bills. Ninety percent (90%) of the bill amount will be released after successful commissioning, demonstration & operation of the machineries / equipment & Ten percent (10%) of the Bill amount shall be retained towards "Performance Security" as security deposit which will be released without any interest after three months beyond the Guarantee/ Warranty period subject to fulfillment of all contractual obligations. The proceeds of the Performance Security (security deposit) shall be payable to the Purchaser as Compensations for any loss resulting from the Supplier"s failure to complete its obligations under the contract. The payment of the bill shall be made after deducting Government dues, statutory recoveries and other deductions, if any. The prevailing rate of income tax and rate of GST on the gross amount of the bill will be deducted from the supplier"s bills. Under no circumstances, interest is payable by the purchaser for any dues to the supplier. The bidder shall be responsible for payment of any charges due to any statutory authorities such as **Income Tax @2% will be deducted at source from the contract value above of 50 Lakhs**, GST as applicable.
The supplier shall not raise any claim in any manner after the Bill amounts are cleared against the purchase order.
- 9.4 **PAYING AUTHORITY:** - The Principal, Government College of Engineering, Kalahandi shall be the paying authority. Payment will be released by the Principal after receipt of Installation/ Supply certificate in prescribed Format (Annexure-XII) from the consignee.

- 9.5 **The Bills / Invoices are to be submitted by the supplier(s) specifying the following minimum details.**
- a) No. & date of Bills/ Invoices.
 - b) No. & date of Supply Order.
 - c) Name & Specification of Item.
 - d) Name of Manufacturer, Model, make/ brand.
 - e) Item-wise quantity, rate & bill amount of that item.
 - f) Total bill amount along with break-up of taxes & duties.
10. **Guarantee / Warranty for supply of tools, equipments and furniture.**
- 10.1 The Supplier warrants that the Goods supplied under the contract are new, unused, of the most recent or current models and incorporate all recent improvements in design and materials unless provided otherwise in the contract. The goods shall be covered with warranty /guarantee for a minimum period of **24 months** from the date of completion of supply including installation & commissioning. The warranty also includes all accessories related to instruments & equipment quoted for. The firm/ bidder shall provide prompt after-sales services & attend to the complaints/ repair/ breakdown and shall replace all defective parts within a week to prevent disruption of work in the laboratory and the firm shall visit at least three times for preventive maintenance during the warranty/guarantee period. The supplier has to rectify the defects in the items supplied within **7 (seven) days of issue of intimation during the Warranty/ Guarantee period**, failing which an amount of one percent (1%) of Performance Security will be forfeited per week of delay. In case of any breakdown during warranty/ guarantee period, the period of warranty/ guarantee shall get extended for the period for which Instrument/ Machinery/Equipment remained out of service (downtime). Guarantee/Warranty Bond shall be furnished in the Format **Annexure –XI in Affidavit form** at the time of execution of Agreement. The cost of spare parts for all replacements has to be borne by the successful bidder during the period of Warranty /guarantee.
11. **Packing**
- 11.1 The Supplier shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit and open storage. Packing case size and weights shall take into consideration, where appropriate, the remoteness of the Goods, final destination and the absence of suitable handling facilities at all points in transit.
12. **Insurance**
- 12.1 The Purchaser will not pay separately for transit Insurance. The supplier is completely responsible for delivery of goods in perfect condition and shall replace/ rectify the missing / defective parts if any at his own cost.

12.2 The goods to be supplied under the Contract shall be fully insured (110% of the Ex-Factory/ Ex-shop value of the goods) against loss or damage incidental to manufacture or acquisition, transportation, storage & delivery of the goods from Warehouse / Factory / Ex-shop of the supplier to the delivery on "All Risk" basis including war Risks and Strike causes.

13. **Transportation**

13.1 The Supplier shall be required to meet all transport and storage expenses until delivery of the Goods covered in the contract to the Consignee.

14. **Incidental Services**

14.1 The Supplier shall be required to provide any or all of the following

- a) Furnishing of detailed literature/pamphlets/ circuit diagram/ operation & maintenance manual / drawings (as applicable) for each appropriate unit of supplied goods.
- b) Furnishing of tools required for assembly and / or maintenance of the supplied Goods.
- c) Performance or supervision of on-site assembly and / or Maintenance of the supplied goods.
- d) Performance or supervision or maintenance and/ or repair of the supplied goods, for a period of time agreed by the parties, provided that this service shall not relieve the supplier of any warranty/ guarantee obligations under the contract:
- e) Training of the Purchaser's personnel at the Supplier's plant and / or on site, in assembly, start up, operation, maintenance and/ or repair of the supplied Goods.
- f) A maintenance contract for the goods supplied, if required by the user beyond the warranty period shall be executed on mutually agreed terms between the user and supplier. The cost of such maintenance contract shall not be included in the Bid cost.

15. **Taxes and Duties**

15.1 The Supplier shall entirely responsible for all Government Taxes, Duties etc. incurred until delivery of the contract goods to the Consignee subject to recovery after words in the bill as claimed in the Bid offer.

15.2 The Excise Duty is payable to Manufacturer quoting excisable items, on production of proof thereof, if claimed in the Bid Offer.

15.3 GSTIN as applicable is payable, to the suppliers of the State of Orissa if claimed in the Bid offer

15.4 C.S.T will be paid to the Suppliers of the outside State other than Odisha , if claimed in the Bid offer

- 15.5 Entry Tax, if paid by the Supplier, at the local (destination head) Corporation / Municipality / NAC is allowed once only on production of money receipt for such payment, if claimed in the Bid offer.
16. **Period of Validity of Bid**
- 16.1 The bid shall remain valid for a period of minimum 90 days for acceptance, from the date of opening of bid as prescribed by the Purchaser.
- 16.2 A bid valid for a shorter period may be rejected, as non-responsive.
- 16.3 In absence of any indication of the date of validity in the bid, it will be presumed that the offer will remain valid for a minimum period as prescribed.
- 16.4 In exceptional circumstances the purchaser may solicit the bidders consent for extension of the period of validity. If agreed upon, the bid security so deposited shall also be suitably extended.
17. **Standards**
- 17.1 The Goods supplied under this Contract shall conform to the standards mentioned in the Technical Specifications and when no applicable standard is mentioned, the Goods shall conform to the latest National/ International standards.
18. **Sealing and Marking of Bids**
- 18.1 The bidders shall submit bids in sealed covers. **The bid security in shape of draft shall be enclosed along with bid, failing which the tender will be rejected.**
- 18.2 **The sealed bid envelope shall be:-**
- a Addressed to the Purchaser at the following address:
To the Principal, Government College of Engineering, Kalahandi, At:Bandopal, Po:Risigaon, Bhawanipatna-766002
- b Bear 'PROCUREMENT OF(as mentioned in the tender notice)
-) 'DO NOT OPEN BEFORE'(the last date & time of opening as indicated in tender notice)
19. **Deadline for Submission of Bids.**
- 19.1 Bids must be received by the Purchaser at the address specified no later than the date and time mentioned in the tender notice.
- 19.2 The Purchaser may, at its discretion, extend this deadline for the submission of bids.
20. **Late Bids**
- 20.1 Any bid received by the Purchaser after the deadline for submission of bids prescribed by the Purchaser, will be rejected and / or returned unopened to the Bidder.
21. **Opening of Bids by Purchaser**

- 21.1 The Technical BID will be opened on 21/02/2019 at **03.00 P.M.** in the presence of Bidder's representatives who choose to attend at the date & time of opening mentioned in the tender Call Notice in the following location. **Principal, Government College of Engineering, Kalahandi, Bhawanipatna- 766002.** The Bidders' representatives who are present shall sign in a register evidencing their attendance.
- 21.2 The Bidders' name, bid prices, modifications, bid withdrawals and the presence or absence of the requisite bid security if any and such other details as the Purchaser, at its discretion, may consider appropriate will be announced at the opening.
22. **Preliminary Examination**
- 22.1 The Purchaser will examine the bids to determine whether they are complete, whether any computational errors have been made, whether required securities have been furnished, whether the documents have been properly signed, and whether the bids are generally in order.
- 22.2 Arithmetical errors will be rectified on the following basis. If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected. If the supplier does not accept the correction of the errors, its bid will be rejected. If there is a discrepancy between words and figures, the amount in words will prevail.
- 22.3 Prior to the detailed evaluation, the Purchaser will determine the substantial responsiveness of each bid to the Bidding Documents. For purposes of these Clauses a substantially responsive bid is one which conforms to all the terms and conditions of the Bidding Documents without material deviations. The Purchaser's determination of a bid's responsiveness is to be based on the contents of the bids itself without recourse to extrinsic evidence.
- 22.4 Bids received without certified copies of ITCC & STCC/GSTIN valid upto current year issued by competent authority may be treated as non-responsive and liable for rejection
- 22.5 Bids received without the requisite Bid Security shall be treated as non-responsive and shall be rejected.
- 22.6 The Purchaser may waive any minor informality or non-conformity or irregularity in a bid which does not prejudice or affect the relative ranking of any Bidder.
23. **Evaluation and Comparison of Bids**
- 23.1 The comparison shall be of ex-factory/ ex-warehouse/ off-the shelf price of the goods offered from within the Purchaser's country, such price to include all costs as well as duties and taxes paid or payable on components and raw-material incorporated or to be incorporated in the goods, the CIF port-of-entry price of the goods offered from outside the Purchaser's Country.

- 23.2 The Purchaser's evaluation of a bid will take into account, in addition to the bid price and the price of incidental services, the following
- a) Cost of the inland transportation, insurance and other costs as per Clause 4 within the Purchaser's Country incidental to delivery of the goods to their final destination;
 - b) Delivery schedule offered in the bid;
 - c) Deviations in payment schedule from that specified in the General Terms & Conditions of Contract;
 - d) The cost of components, spare parts and service;
 - e) The availability in the Purchaser's country of spare parts and after-sales services for the goods offered in the bid;
 - f) The projected operating and maintenance costs during the life of the equipment / goods;
 - g) The performance and productivity of the equipment / goods offered;
 - h) The quality and adaptability of the equipment / goods offered;

24. **Award Criteria**

24.1 The Purchaser will award the Contract to the successful Bidder whose bid has been determined as the lowest evaluated bid, provided further that the Bidder is determined to be qualified to perform the Contract satisfactorily.

24.2 Quality, durability and adaptability of the equipment/ goods offered suiting to use in Training Practice shall continue to be the overriding factor for selecting any goods and determining the lowest evaluated bid.

25. **Purchaser's Right to Accept any Bid and to Reject any Bid**

25.1 The Purchaser reserves the right to accept or reject any bid and to annul the bidding process and reject all the bids at any time prior to award of Contract, without thereby incurring any liability to the affected Bidder or Bidders on the grounds for the Purchaser's action.

26. **Notification of Award**

26.1 Prior to the expiration of the period of bid validity, the Purchaser will notify the successful Bidder in writing by registered letter or by Fax, to be confirmed in writing by registered letter or by speed post, that its bid has been accepted.

26.2 The notification of award will constitute the formation of the Contract.

26.3 The Purchaser will promptly notify each unsuccessful Bidder and will discharge its bid security.

27. **Signing of Contract/Agreement**

The successful bidder shall have to sign an Agreement on stamp paper worth Rs.100/-(Rupees one hundred) only purchased in the name of the successful bidder with the Competent Authority of Department in the appropriate form (ANNEXURE-X) within 15 days from the date of issue of Letter of Acceptance(LOA) of bid. The bidder should sign on each page of bid document with seal as a token of acceptance of all terms & conditions of the bid documents. Following documents shall form part of the Agreement: - IFB (Invitation for Bids), terms & conditions of detailed Tender document, detailed technical specifications, Schedule of delivery of goods, price bid, letter of acceptance, Warrantee and Guarantee bond, conditions of contract and other relevant documents. Supply order will be issued after signing of the Agreement.

28.

Resolution of Disputes

- a) The Consignee & the Supplier should try to resolve the disputes (if any) amicably.
- b) Thereafter, it should be taken up with the Principal, Govt. College of Engineering, Kalahandi, Bhawanipatna.
- c) Thereafter, it may be taken to the proper Court of Law.

ANNEXURE-IA
CHECK LIST FOR ORIGINAL MANUFACTURER
SCHEDULE OF DOCUMENTS TO BE SUBMITTED IN COVER-I
(TECHNICAL BID)

The bidder has to submit the copies of documents as mentioned in checklist with Technical bid.

All the bid documents uploaded by the bidder should be serially page numbered for reference.

Sl. No.	Documents / Certificate	Attached	Page No.
1	Cost of Tender paper	Yes/No	
2	EMD/ Bid security in proper shape as mentioned	Yes/No	
3	Company Registration Certificate (in case of Company registered under Company Act 1956), Partnership deed, duly registered with competent authority (in case of Partnership firm) and documents from appropriate authority depicting the authority/license to manufacture laboratory testing equipment.	Yes/No	
4	Valid ISO certificate.	Yes/No	
5	GST registration certificate.	Yes/No	
6	GST clearance certificate.	Yes/No	
7	PAN card (in the name of Company in case of Company/Partnership firm and in the name of the Proprietor in case of Proprietary firm).	Yes/No	
8	Bid Declaration Form / Verification & Undertaking in affidavit form on stamp paper of Rs 100/- duly signed before Notary or any appropriate Authority as per format in Annexure-II .	Yes/No	
9	Details of make/ brand specification & logo of the machineries & equipment duly shall be filled in Annexure-IV against tendered items.	Yes/No	
10	Performance statement as per Annexure-V with documentary proof such as:- <ul style="list-style-type: none"> • Copy of supply order or certificate of supply from concerned purchaser for tendered items as indicated in Annexure-III. • Copy of supply order or certificate of supply along with proof of satisfactory performance from concerned purchaser for items as indicated in Annexure-III 	Yes/No	

11	No Relation Certificate as per Format in Annexure-VIII.	Yes/No	
12	Details of the bidder's service center as per format in Annexure-IX	Yes/No	

It is verified that all the Certificates/ information/ documents submitted with this bid are currently valid and have not been withdrawn/ cancelled by the issuing authority. It is clearly and distinctly understood by me/ us that the bid is liable to be rejected if on scrutiny any of these certificates/ particulars are found to be false or invalid.

I/We further undertake to produce on demand the original certificates/ particulars/ documents for verification at any stage during the processing of the tender.

Signature of the bidder:

Full name of bidder:

Date:

Place:

ANNEXURE-IB
CHECK LISTFOR AUTHORIZED DEALER/DISTRIBUTOR
SCHEDULE OF DOCUMENTS TO BE SUBMITTED IN COVER-I
(TECHNICAL BID)

The bidder has to submit the copies of documents as mentioned in checklist with Technical bid.

All the bid documents uploaded by the bidder should be serially page numbered for reference.

Sl. No.	Documents / Certificate	Attached	Page No.
1	Cost of Tender paper	Yes/No	
2	EMD/ Bid security in proper shape as mentioned	Yes/No	
3	Manufacturer authorization in prescribed format (Annexure-VII)	Yes/No	
4	Valid Documents of the manufacturer (i.e. Company Registration Certificate (in case of Company registered under Company Act 1956), Partnership deed, duly registered with competent authority (in case of Partnership firm) and documents from appropriate authority depicting the authority/license to manufacture laboratory testing equipment).	Yes/No	
5	Valid ISO certificate.	Yes/No	
6	GST registration certificate.	Yes/No	
7	GST clearance certificate.	Yes/No	
8	PAN card (in the name of Company in case of Company/Partnership firm and in the name of the Proprietor in case of Proprietary firm).	Yes/No	
9	Bid Declaration Form / Verification & Undertaking in affidavit form on stamp paper of Rs 100/- duly signed before Notary or any appropriate Authority as per format in Annexure-II .	Yes/No	
10	Original manufacturer's make, brand specification & logo of the machineries & equipment to be supplied by the bidder against tendered items as in Annexure-IV .	Yes/No	
11	Performance statement as per Annexure-V with documentary proof such as:- <ul style="list-style-type: none"> • Copy of supply order or certificate of supply from concerned purchaser for tendered 	Yes/No	

	items as indicated in Annexure-III . <ul style="list-style-type: none"> • Copy of supply order or certificate of supply along with proof of satisfactory performance from concerned purchaser for items of Annexure-III. 		
12	No Relation Certificate as per Format in Annexure-VIII .	Yes/No	
13	Details of the bidder's service centre as per format in Annexure-IX	Yes/No	

It is verified that all the Certificates/ information/ documents submitted with this bid are currently valid and have not been withdrawn/ cancelled by the issuing authority. It is clearly and distinctly understood by me/ us that the bid is liable to be rejected if on scrutiny any of these certificates/ particulars are found to be false or invalid.

I/We further undertake to produce on demand the original certificates/ particulars/ documents for verification at any stage during the processing of the tender.

Signature of the bidder:

Full name of bidder:

Date:

Place:

ANNEXURE-II
BID DECLARATION FORM / VERIFICATION & UNDERTAKING

Bid Reference No.

From

M/S _____

No.
Dt.

To

The Principal,
Government College of Engineering Kalahandi
AT: KandBandopala, PO: Risigaon, Bhawanipatna
Dist: Kalahandi
PIN 766002
Odisha.

Dear Sir,

1. Having examined the specification enclosed together with the conditions therein, I/ We hereby offer our rate covered therein complete in all respects, as per the specifications, terms and conditions at the rates entered in the attached contract schedule of price (Price bid). The rates quoted against each item are inclusive of all taxes, duties and other charges and inclusive of installation, commissioning, demonstration & training at respective place(s).
2. I/ We hereby under-take to complete the supply within time specified in the schedule.
3. I/ We hereby confirm that we have gone through all the terms and conditions of bid and we agree to abide by all of them.
4. I/ We hereby guarantee for the particulars entered in the schedule attached to the specification.
5. I/ We verify/certify that the scanned copies of the Certificates/ Documents attached herewith are authentic and true copies of the Original Certificates/ Documents and shall produce the Originals for verification within 5 working days from date of opening of bids (Financial bid).
- 6. I/ We hereby certify that all the statements/documents furnished in our bid are true, correct and authentic.**
7. I/ We hereby authorize and request any bank, person, firm or Corporation to furnish pertinent information as deemed necessary and as requested by the Department to verify this statement or regarding my /our competency and general reputation.
8. I/ We understand and agree that further qualifying information may be requested and agree to furnish any such information at the request of the Department.
9. I/ We verify that I/ We are in possession of the requisite valid manufacturing licenses/ permits required for the manufacture/ supply/ sale/ distribution of the items and further verify that the said licenses/ permits have not been revoked/ cancelled by the issuing authorities and are valid up-to date.

10. I/ We also certify that I/We have not been declared defaulter, blacklisted or debarred by any State or Central Govt. or Constitutional Authority or Financial institution or Judicial Court or any Govt. Undertaking for supply of substandard quality items/ part supply/ non-supply.

11. I/ We also take Cognizance of the fact that providing misleading or questionable information or failure to furnish correct or true information to you or any other failure to comply with any contractual requirements laid down by you will be considered as a serious breach of the terms & conditions of the Tender and will invite disqualification and other penal action as deemed fit by the Purchaser.

12. I/ We also hereby certifies that neither our firm M/s -----nor any of its constituent partners/ I have failed to execute any supply in India nor any contract awarded to us/ me for such supply order have been rescinded during the last five years.

13. I/ We understand that you are not bound to accept lowest or any bid you receive.

14. I/ We hereby declare that I/We am/are not supplying/ quoting the same item at rate lower than the rate quoted in the bid to any Govt. Organization or any other institute.

15. I/We agree that the Bid Inviting Authority can forfeit the Earnest Money Deposit or Security Deposit and debar me /us for 3(three) years from participation in Tender, if any information furnished by me/us is proved to be false at the time of inspection/ verification and not complying with the bid Terms & Conditions.

Seal:

Date:

Signature of bidder:

Full Name of bidder:

Name & Address of the Firm:

Note: The above declaration shall be made on stamp paper worth Rs.100/- (Rupees one hundred) only in Affidavit form.

ANNEXURE – III
(DETAILED TECHNICAL SPECIFICATIONS
OF THE MACHINERIES & EQUIPMENT TO BE SUPPLIED BY THE BIDDER)

Sl. No.	ITEM NAME AND SPECIFICATION	QTY.

ANNEXURE – IV
(DETAILS (MAKE, BRAND & MODELS WITH SPECIFICATION) OF THE
MACHINERIES & EQUIPMENT TO BE SUPPLIED BY THE BIDDER)

Sl. No.	ITEM NAME AND SPECIFICATION AS PER TENDER	NAME AND SPECIFICATION TO BE SUPPLIED BY THE BIDDER	MAKE / BRAND & MODEL No.	Remark (if any deviation)

ANNEXURE-V
PERFORMANCE STATEMENT

**LIST OF CLIENTS TO WHOM TESTING MACHINERIES/ EQUIPMENT SUPPLIED
DURING THE LAST FIVE YEARS**

Sl. No	Name of the equipment/ machinery proposed to be supplied	Name of Govt. /Govt. Undertaking Organizations/ Govt. Engineering Institution/ Govt. Laboratories to whom supplied.	Purchase Order No. & Date. (Enclose scanned copies of purchase/ supply order)	Page number	Make/ brand & logo	Quantity	Date of completion of Delivery	Reasons for late delivery, if any	Proof of satisfactory performance (Certificate from Govt. / Govt. Undertaking Organization/ Govt.Engineering Institution/ Govt.Laboratories to whom Equipment supplied to be furnished)	Contact person of the organization and contact number, email and Fax etc. to whom the supply was made.
1										
2										
3										

ANNEXURE-VI

ANNUAL TURNOVER STATEMENT

The Annual Turnover for the last three financial years of M/S _____, who is a manufacturer/dealer of laboratory machineries & equipment are given below and certified that the statement is true and correct.

Sl. No.	Financial Year	Turnover in Cores (Rs) both in words and figures
1		
2		
	Average	

Date:
Place:

Signature of Auditor/
Chartered Accountant

(Name in Capital)

Seal:

Membership No.

ANNEXURE-VII

MANUFACTURES' AUTHORISATION FORM

(FORMAT OF AUTHORISATION TO BE OBTAINED FROM ORIGINAL MANUFACTURER
BY THE AUTHORIZED DEALER/ DISTRIBUTOR)

No. _____ / Date _____ /

To
The Principal
Government College of Engineering,
Kalahandi, Bhawanipatna

Tender No. _____

Dear Sir,

I/We _____ who are established and
reputed manufacturers of Laboratory testing machineries/equipment, having factories at

_____ (Address of Factory) do hereby
certify that M/s. _____ (Name and address of Dealer) is an
Authorized Dealer/Distributor of our company and we authorize it to submit the bid
and sign the contract with you or your representative(s) against the above bid.

I/We hereby extend our full guarantee and warranty as per terms & conditions of
contract for the goods and services offered by the above firm against this bid.

Yours faithfully,

(Full Name and Signature of the
Manufacturer)

Seal/stamp

**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 bind the manufacturer.**

ANNEXURE-VIII

CERTIFICATE OF NO RELATIONSHIP

I/We hereby certify that I/We* am/are* **related/not related** (*) to any officer of the Principal, Government College of Engineering Kalahandi of the rank of Assistant Professor & above and any officer of the BPUT Odisha. I/We* am/are* aware that, if the facts subsequently proved to be false, my/our* contract will be rescinded with forfeiture of E.M.D and security deposit and I/We* shall be liable to make good the loss or damage resulting from such cancellation.

I// We* also note that non-submission of this certificate will render my / our* tender liable for rejection.

(*) - Strike out which is not applicable

Signature of the bidder

Full name of the bidder:

Date:

ANNEXURE-IX

DETAILS OF THE BIDDER & SERVICE CENTER

GENERAL INFORMATION ABOUT THE BIDDER					
1	Name of the Bidder				
	Registered address of the firm				
	State		District		
	Telephone No.		Fax		
	Email		Website		
Contact Person Details					
2	Name		Designation		
	Telephone No.		MobileNo.		
Communication Address					
3	Address				
	State		District		
	Telephone No.		Fax		
	Email		Website		
Type of the Firm					
4	Private Ltd.		Public Ltd.		Proprietorship
	Partnership		Society		Others, specify
	Registration No. & Date of Registration.				
Nature of Business					
5	Original Equipment Manufacturer (OEM)			Authorized Distributor	
	Direct Importer			Authorized Dealer	
6	<i>Details of <u>existing</u> Service Centre nearest to Odisha:</i>				
	<i>Name of Contact Person:</i>				
	<i>Designation:</i>				
	<i>Address of Service Centre:</i>				
	<i>Telephone No.:</i>				
	<i>Email :</i>				
	<i>Fax:</i>				
<i>Date:</i>		<i>Office Seal</i>		<i>Signature of the bidder/ Authorised signatory</i>	

ANNEXURE-X

**AGREEMENT FOR SUPPLY, INSTALLATION & COMMISSIONING OF
MACHINERIES/ EQUIPMENT**

(Reference- Clause -27 of DTCN)

Bid Reference No.

This Agreement made this day of2018 between M/s
..... having registered office in the State of
.....(hereinafter called the „Supplier” which
expression shall, unless excluded in the subject or context, include the heirs, successors,
legal representatives, and permitted assigns) of the one part.

&

the Governor of Odisha (hereinafter called the “Governor” which expression shall, unless
excluded in the subject or context, include the heirs, successors, legal representatives
and permitted assigns) of the other part.

WHEREAS the Governor wants to purchase the goods mentioned in the schedule and
has accepted a bid by the supplier for supply, installation & commissioning of
machineries/ equipment @ sum of ---

-----Contract price in words and figures (hereinafter called the contract price).

NOW THESE PRESENT WITNESSES AND IT IS HEREBY AGREED AS FOLLOWS:

1. That the time shall be the essence of the contract and the supplier shall supply the
goods in the schedule completely at..... (Place) on or before the
date....., failure to do which will entitle the Governor to rescind the contract
immediately.
2. That the goods shall be of the specifications and price mentioned against each. Any
variation on inspection will entitle the Governor to refuse the consignments either in
whole or in part, as the case may be, the whole, if the part renders it useless.
3. That the goods shall be inspected at(place) in the presence of
the officers of both Parties duly Authorized in that behalf on a day fixed in a notice by
either of the parties, provided such day is not postponed for more than a period of two
months after the date given in the notice. Default by the Supplier shall disentitle him to
raise any objection subsequently to the result of inspection made by the Governor in his
absence and claim any compensation on that
account.
4. That the supplier shall guarantee durability of the goods for a period of 24 (twenty four)
calendar month from the date of completion of supplies and installation in the case of

Machineries and any damage, done to the goods in the usual course of use or any deficiency, detected in them subsequent to such completion & installation and during the period aforesaid shall be made good to render due service at the cost of supplier within a period of seven days from the date of issue of the notice in that behalf. Failure to do so shall be deemed that the supplier has no intention to discharge the obligation and thereupon, the amount of security, deposited separately or withheld from his bills, shall stand forfeited to the Governor as per terms and conditions. The supply of Machines and equipment shall be deemed to be complete only after final approval of the officer duly Authorized on inspection whose decision shall be final and in case of Machineries exactly in the same manner and installation which would include successful test working.

5. The goods shall be duly packed & insured by the supplier for transit and be dispatched at the risk of the carriers and the Governor shall not be responsible for any loss or damage during the transit or at any time prior to inspection and approval.

6. That the price of goods shall be paid on completion of supplies, installation & commissioning including test working as per payment terms and conditions.

7. That any damage or deficiency if not removed during the stipulated period by the Supplier may be removed by the Governor at his cost to be reimbursed by the Supplier. Any amount Payable to the Governor hereunder shall be recovered as Public Demand under the Odisha Public Demand Recovery Act, 1963 and shall bear 6% interest per annum till certificate of recovery is filed.

8. That the supplier shall deposit Rs.-----towards Initial Security Deposit at the time at the time of acceptance of Tender for due performance of the covenants hereof and such money shall be forfeited to the Governor in case of breach of any of the covenants.

9. That the dispute arising hereunder shall be resolved in following manner:

The purchaser & the supplier should try to resolve the disputes, if any, arising out of the contract, amicably between them.

10. That Sri..... is authorized by the Governor and Sri..... on behalf of the supplier to execute the deed.

11. The cause of action hereunder shall always be deemed to arise at -----.

12. The stamp duty shall be borne by the supplier.

13. This shall be read with terms & conditions of DTCN along with other relevant bid documents which will form part of this Agreement.

SCHEDULE OF GOODS

Sl. No	Name of Goods	Specification with make & model	Qty.	Price agreed per unit

IN WITNESS WHEREOF the parties hereto have signed this deed this day.....

of..... mentioned against the signature of each in the presence of

.....

Signed, sealed and delivered by the said

----- (for the purchaser)

in the presence of -----

Signed, sealed and delivered by the said

----- (for the supplier)

in the presence of -----

Note: The agreement shall be done on stamp paper worth Rs.100/- only.

ANNEXURE-XI

GUARANTEE/WARRANTY BOND

We hereby declare that the machines/equipment sold to the Department under this contract shall be of the best quality and workmanship, shall be strictly in accordance with the specification and particulars contained / mentioned in the purchase Order No. dt. and leaflet submitted by us and hereby guarantee that the said machines/equipment would continue to confirm to the description and quality aforesaid for a period of 24(twenty four) months from the date of supply of the same to the Department notwithstanding the fact that the Department may have inspected and/or approved the said machines/equipment. If during the aforesaid 24(twenty four) months, the said machines/equipment be discovered not to confirm to the description and the quality of the aforesaid and have deteriorated, the decision of the Department in this behalf will be final and conclusive and the Department reserves the right to reject the said machines/equipment or such portion thereof as may be discovered not to confirm to the said description and quality. On such rejection, the machines/equipment will be at our risk and all the provisions herein contained relating to rejection of goods shall apply. We shall, if called upon to do, replace the machines/equipment or such portion thereof as rejected by this purchaser, otherwise, we shall pay the purchaser such damages as may arise by reasons of breach of condition herein contained. If the machines/equipment supplied either do not operate properly or efficiently, we will replace the same free of cost. The parts replaced must be new parts or equivalent in performance to new parts. In the event of any complaint of the defective machines / equipment supplied to the purchaser, Principal, shall investigate and determine whether a part/parts/sub-assembly/assembly/Engines was/were defective and if so, any damage has also been caused by it to other parts, in such cases the decision of the Principal is final and binding. In case of any break-down during Warranty/Guarantee, period the period of warranty shall get extended for the period for which the machinery/ equipment remained out of service.

Signature with Seal of Supplier

Full name of the Supplier:

Note:

- i. The Guarantee/Warranty bond shall be done on stamp paper worth Rs.100/- only in Affidavit form.**
- ii. In case of authorized distributor/ dealer, the original manufacturers shall also sign the guarantee/ warrantee bond.**

ANNEXURE-XII

DETAILS OF INSTALLATION CERTIFICATE

(Reference- Clause 31 of DTCN)

Organisation Name:				
Equipment Details				
Name of the equipment:		Purchase Order No:		
Make/Manufacturer:		Purchase Order Date:		
Model:		Purchase amount of the equipment:		
Quantity:				
Installation Start Date:		Installation Complete Date:		
Warranty/ Guarantee Start Date:		Warranty/ Guarantee End Date:		
Preventive Maintenance Schedule(Specify Year &Month)				
YEAR	Visit 1	Visit 2	Visit 3	
Contact Details				
Name of the Supplier:				
Name of Service Engineer with his/ her mobile number:				
Service centre manager's name with mobile number:				
Service centre address:				
ACCESSORIES \ SUPPLIED				
Sl. No.	Item	Qty.	Serial No.	Remarks
To be filled by Consignee				
Whether a digital photograph of the installed equipment in the presence of the consignee appended?				Yes/No
Whether the demonstration of the equipment/ machinery with accessories on the technical specification/ key features was conducted to the satisfaction at the time of installation?				Yes/No
Whether the original printed operation manual, maintenance manual etc. furnished along with the machine/equipment?				Yes/No
Whether Calibration Certificate, along with Testing Machine/ Equipment is furnished.				Yes/No
Whether training was conducted to the satisfaction at the time of installation?				Yes/No
Recommended to release 90 % (ninety percent) payment		The equipment is working satisfactorily.		
Yes	No	Yes	No	

Signature of the
Consignee Name
in capital

Annexure-XIII

PRICE SCHEDULE FOR Equipments Package Wise

Bid No. _____

Category _____

1. Item No. :
2. Item with specification :
3. Total quantity to be delivered :
(Approx. quantity as shown in schedule of requirement)
4. Bid Price.
 - a) Rate per unit at delivery point :
(excluding tax component)
 - b) Delivery cost at site (3 x 4a) :
5. Delivery period offered:
6. Break up Price (of SL – 4b)
 - a) Ex-factory/Ex-warehouse/Ex-show room/off the shelf price :
 - b) Packing, forwarding & handling charge :
 - c) Insurance charge (if any) :
 - d) Transportation cost up to institution :
 - e) Erection, Assembly, Commissioning & incidental service :
 - f) Delivery cost at site (excluding tax component)
(Add 6a + 6e) = 4b.
7. Tax Components.
 - a) Excise duty (if any) :
 - b) GSTIN/Sales Tax and other levies (if any):
 - c) Total tax component (Add 7a + 7b):
8. Delivery cost at site (including tax component)
(Add 6f + 7c)

Signature of the Bidder

TECHNICAL SPECIFICATION

PACKAGE -1

Sl. No.	Item name	Specification	Quantity
1.	Electromechanical Type Directional Over-Current Relay Study trainer	<p>Ratings Current Output: 1A/2A Dc Voltage Output (Between 20 to 50)V Relay Voltage 220V Relay Current:1A</p> <p>The Relay. Technical Specification:-</p> <p>RELAY: Over Current (Directional)</p> <p>MAKE: ALSTOM/L&T/ABB</p> <p>CURRENT RATING CT Secondary : 1 /5 Amps</p> <p>AUXILIARY VOLTAGE : 220/110/48/24Volts AC/DC Part B. RELAY</p> <p>TESTING KIT should be equipped with :</p> <ol style="list-style-type: none"> 1. It Secondary Current Injection type 2.Power input 220Volts AC 50Hz 3.Built in digital timer 199.9 seconds for measurement of trip time – Stop /Start timer Digital 4.Trip Status Indicator/Buzzer 5.Power ON/OFF through MCB, Power on indicator 6.Variable Current injection power circuit 7.Built in circuit breaker manual ON/OFF & Auto control 8.Auxiliary Power for Relay 220 /110 /48 /24 Volts AC/DC 9.Built in digital Ammeter Educational Bench Model with schematic diagram of the test circuit should be printed on the model 10. patch cards. 	1
2	Electromechanical Type Under Voltage Relay Study Trainer	<p>Ratings</p> <p>Current Output: 1A/2A</p>	1

		<p>Dc Voltage Output (Between 20 to 50)V</p> <p>Relay Voltage 220V</p> <p>Relay Current:1A</p> <p>Technical Specification:-</p> <p>A. RELAY: Under Voltage IDMTMAKE : ALSTOM/L&T/ABB</p> <p>CHARECTERISTICS : IDMT for Electromechanical relay</p> <p>P.T. SECONDARY VOLTAGE : 110 Volts AC 50Hz</p> <p>AUXILIARY VOLTAGE: 220 /110 /48 /24 Volts AC/DC B. RELAY TESTING KIT should be equipped with:</p> <ol style="list-style-type: none"> 1.Power input 220Volts AC 50Hz 2.Secondary Voltage injection type 3.Time interval meter – digital 199.9 seconds for measurement of trip time – Stop/Start timer Digital 4.Circuit Breaker ON/OFF & Relay Trip Status Indicator/Buzzer 5.Built in Variable voltage source 6.Built in circuit breaker manual ON/OFF & Auto control 7. Trip Status Indicator / Buzzer 8.Power ON/OFF through MCB, Power on indicator 9. Control Circuit for Voltage relay testing 10. Auxiliary Power for Relay 220 /110 /48 /24 Volts AC/DC 11. Built in digital Voltmeter Educational Bench Model with schematic diagram 12. Patch chords. 	
3	<p>FEEDER PROTECTION RELAY TRAINER {NUMERICAL}</p>	<p>This should equipped with:</p> <ol style="list-style-type: none"> 1. The trainer should consist of built in requisite relay testing kit typically consisting of voltage injector, current injector, elapsed time counter (1 m sec resolution), trip relay logic etc. 2. The trainer should have a few set of associated relay testing (current / voltage injection etc.) panels (7-8 nos. typically) which should be mounted in a light weight sturdy aluminium profile flat demo panel system. 3. Should have sturdy shrouded banana patch cords and shrouded arrangements. 4. Each panel should have plastic sturdy enclosure, and colourful screw less overlays showing circuit diagrams & 	1

		<p>its connection tag numbers for easy understanding and connection.</p> <p>5. Should Facilitates easy and safe wiring.</p>	
4	<p>Biased Differential Relay Trainer set should consist of the following features</p>	<p>1. Should have sturdy shrouded banana patch cords and shrouded arrangements.</p> <p>2. Each panel should have plastic 1sturdy enclosure, and colourful screw less overlays showing circuits diagrams & its connection tag numbers for easy understanding and connection</p> <p>3. The trainer should consist of built in requisite relay testing kit typically consisting of voltage injector, current injector, elapsed time counter (1 m sec resolution), trip relay logic etc.</p> <p>4. Should Facilitates easy and safe wiring by students due to use of 4mm sturdy Shrouded banana patch cords and shrouded socket arrangements for high voltage circuits</p> <p>5. Each panel Should have plastic sturdy enclosure, and colourful screw less overlays showing circuits diagrams & its connection tag numbers for easy understanding and connection.</p> <p>6. The interfacing panels should be of Aluminium profile sturdy Flat panel system carrying various high voltage components housed in plastic enclosures to minimize shock possibility</p> <p>7. Set of Instructor Guide & Student Workbook should be provided.</p> <p>8. List of experiments that can be performed.</p> <p>[1]. To plot characteristics of % biased differential relay.</p> <p>[2]. Pick up test for differential relay.</p> <p>[3]. Transformer protection using differential relay for in zone trip faults.</p> <p>[4].Transformer out zone or non-trip faults.</p> <p>The set comprise of following modules</p> <p>(1) Input 3 phase DOL Starter panel [10 Shrouded Banana]</p> <p>Should consists of</p> <p>a) 4 pole MCB of 415 V/2A ,</p> <p>b) DOL 9A Contactor with 230V / 50 Hz / 11VA COIL ,</p> <p>c) Bimetallic thermal O/L relay with range 1.4A – 2.3A.</p> <p>(2) 1 phase AC input supply panel [10 Shrouded Banana]</p> <p>Should consists of</p> <p>a) 1 phase MCB of 4A/1.6A – 2 Nos,</p> <p>b) Bulb load</p> <p>(3) Variable voltage and current Injector panel [16 Shrouded Banana]- 2 nos.</p> <p>Should consists of</p> <p>a) 1 phase dimmer of rating 0-230VAC/0.75A,</p> <p>b) Toroidal current injecting transformer of 100VA with primary</p> <p>c) 230VAC/1A, secondary-0-2-8V/12A,</p>	1

		<p>d) All connections of dimmer & transformer should be brought out on shrouded sockets for easy connection.</p> <p>(4) 3 Phase Bidirectional Power cum Energy meter panel Should consists of</p> <ul style="list-style-type: none"> a) Bidirectional Multifunction b) 3 phase 3/4 wire, 415VAC, CT Input 5A c) LCD/LED display, Aux. supply 230V, 45-65Hz,5W, d) V, I, Hz, Pf, KVA, KW, KWH. e) Modbus RTU RS 485 connections.\ <p>(5) Over current measurement & Elapsed time counter panel [6 Shrouded Banana] – 2 nos Should consists of:</p> <ul style="list-style-type: none"> a) AC ammeter of 0-20A range, Aux. supply 230VAC, Display: 0-19.99. b) Elapsed time counter with display range 999.999 of resolution of 1msec. Should have facility to freeze time. c) Should have start-stop push buttons, provision to connect trip NO contact from protection relay. <p>(6) Differential Relay Panel All connection of relay should brought out on this panel & should consists of:</p> <ul style="list-style-type: none"> a) 2 NO Trip contacts b) Aux. Supply 110VDC/230VAC <p>(7) CT panel Should consists of</p> <ul style="list-style-type: none"> a) 5/5 Amp. CT 6 Nos. b) Primary side of CTs connection should brought on 3 x 2 x 2 SBS-5 sockets. c) Secondary side of CTs should be Star connected in group of 3 & brought out on 4 x 2 SBS-5 sockets. <p>(8) 415/230VAC, 1KVA, Star/Delta Transformer Panel ,Should consists of 415/230VAC, 1KVA, Star/Delta transformer Panel The connections of transformer primary and secondary should brought on SBS5 on the top of panel.</p> <p>(9) Resistor Load (Table Top panel) Should consists of AC/DC Resistors 750E/600E/300E/212E/162E/ 125E/ 112E/100E/400W /8 taps + OFF + separate 60E tap for DC series Ge</p>	
5	<p>Numerical Type over current relay study trainer/test kit (Complete Setup)</p>	<p>This test set up shall consist of:- Numerical type over current relay: Auxiliary supply 230 VAC, 50 Hz, Current injection source: Continuously variable type, Experiment setup for study of performance and operation of static 3-phase over current relay with arrangement for creating over current and earth fault conditions in all the three phases and other items like CT, time totalizing equipment, tripping arrangement for circuit and other necessary instruments</p>	1

6	Numerical type over/under frequency relay study trainer/test kit (Complete Setup)	This set up should be equipped with:- Numerical type over/under relay: Auxiliary supply 230V,50 Hz, AC , Variable Frequency voltage source(Continuously variable) ,Single Phase, Voltmeter, timer with start & Stop facility, Push Button for timer start & stop, 1-Phase variable Frequency source, DP Switch.	1
7	Numerical type reverse power relay study trainer/test kit (Complete Setup)	This set up should be equipped with Numerical type reverse power relay in which Auxiliary supply 230 VAC, 50 Hz	1
8	Underground Cable tester	Operation Temperature : 5 to 45 Degree Celsius Voltage: 230 VAC Frequency: 50 Hz Accuracy: + 1.0% of reading Display Type: Digital	1

Package -2

Sl. No.	Equipment Name	Specification	Quantity
1	Transmission Line Analyzer	<p>The Unit should be consisting of minimum following 3 units. Each Unit should be capable and equipped with below defined specifications and Features</p> <p>1. Generating Station Model</p> <p>The Generation unit should have 220 / 63.5 V Isolated Source Transformer (1 Phase)</p> <p>The Electrical Ratings should be a following</p> <p>Input Voltage – 220V Output Voltage – 60 to 70V Nominal Current – 1A Fault Current – 5A (10 Sec), 10A (1.2 Sec)</p> <p>At least 1 Phase definite time Over Current Relay should be integrated</p> <p>Should have Inbuilt Breaker for Relay Must be Equipped with Multifunction Meter</p> <p>The Multifunction Parameters should display - V, I, PF, VAR, VA, W, Frequency etc.</p> <p>There should be Power ON Indicator Should have Blow Fuse</p> <p>Must be Equipped with Primary and Secondary Control Knobs Should have MCB Protection</p> <p>MS Panel with Powder Coating would be preferred Screen Printed Front Panel would be preferred</p> <p>2. Load Station Model</p> <p>Must have Inductive Loading with Two step control Should have Inbuilt 1 Phase Inductor for Loading Should have Resistive Loading with Two step control Must be Equipped with Inbuilt 1 Phase Rheostat for Loading Should have the Capacitor Bank with Two Step Control</p> <p>The Electrical Ratings should be as following</p> <p>Voltage – 60 to 70V Nominal Current – 1A Fault Current – 5A (10 Sec), 10A (1.2 Sec)</p> <p>There should be 1 Phase definite time Over Current Relay</p>	1

		<p>Should have Inbuilt Breaker for Relay Must be Equipped with Multifunction Meter The Multifunction Parameters should display - V, I, PF, VAR, VA, W, Frequency etc. Should have Power ON indication Should have Slow Blow Fuse MS Panel with Powder Coating is Preferred Screen Printed Front Panel is Preferred</p> <p>3. PI Section Model should be as per following specification</p> <p>50 KmX4 Single phase Twin moose 400KV Line (Total Length 200Km)</p> <p>MS Panel with Powder Coating, Screen Printed Front Panel Electrical Ratings</p> <p>Voltage – 60 to 70V, Nominal Current – 1A, Fault Current – 5A (10 Sec), 10A (1.2 Sec)</p> <p>Easy Connection through front terminals and Inbuilt Resistors, Capacitors and Inductors of High Quality</p>	
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PACKAGE -3

SL. NO	KIT/ SET UP REQUIRED (PURPOSE)	DETAIL SPECIFICATION	Quantity
1	DC motor driven position control system.	<ul style="list-style-type: none">• 12 V, 1A, 1500 RPM PMDC Motor (with gear ratio 30:1)• Provision for positive & Negative Tachogenerator feedback Servo potentiometers with full 360° rotation• 4 Quadrant MOSFET chopper with driver for forward & reverse direction• Built-in 3½ digit display for signal measurements (actual & reference position, voltage)• Calibrated dials for reference and output position: resolution 1°• PI Controller with adjustable Gain & Integral Time• Accessories: Test leads, Instruction manual	1
2	Two phase ac servomotor trainer kit (Provision to compute TF of the motor, to plot load- torque characteristics).	<ul style="list-style-type: none">• 100 W, 2-phase AC Servomotor with MW voltage 230V AC, CW voltage (0-230)V ac• Loading Arrangement: Belted or small generator loading• Display: Built in 3½ digit display for speed, CW current & CW voltage measurement.• Phase shifting transformer to provide phase shift between MW & CW• Accessories: Test leads, Instruction manual	1
3	Lag, lead & lag-lead compensator kit (Provision to plot frequency response	<ul style="list-style-type: none">• Uncompensated system.• Built-in square and sine wave generators	1

	characteristic of the compensators & the compensated system).	<ul style="list-style-type: none"> • Compensation network implementation through external R&C component add-on • Accessories: Test leads, Instruction manual 	
4	Servomotor with PID controllers (Provision to obtain time response characteristics and validate the effect of controllers).	<ul style="list-style-type: none"> • 12 V, 1A, PMDC Motor with speed range (0 – 1500) RPM • Loading Arrangement: Eddy Current type • Electronic Tachogenerator Feedback • Built-in sine ,square and ramp wave generators with provision to vary frequency, amplitude, offset and frequency range • Controller: PID Controller with adjustable Gain, Integral Time & Derivative Time and option to choose P, P+I & P+I+D control action. • Display: 3½ digit display for set & actual speed, armature voltage & armature current • Accessories: Test leads, Instruction manual 	1
5	Transfer function analyzer (To be able to simulate 1 st order, 2 nd order systems with & without time delay)	<ul style="list-style-type: none"> • Simulated first, second and third order system of type-0 and type-1 • Built-in square and sine wave generators • Calibrated variable gain amplifier • Provision for disturbance inputs • Accessories: Test leads, Instruction manual 	1
6	Temperature control system with on/off & PID controllers. (Provision to obtain time domain response characteristics of the temperature control system and validate the effect of	<ul style="list-style-type: none"> • Temperature Control System: 25W oven fitted with IC / RTD temperature sensor. • Operating Temperature: Preferably (0 - 90)° C • Controller: PID Controller with adjustable Gain, Integral Time & Derivative Time and option to choose P, P+I & P+I+D control action. 	1

	controllers)	<ul style="list-style-type: none"> • PC Based, compatible with MATLAB / SIMULINK • Accessories: Test leads, Instruction manual 	
7	Relay control system to analyze nonlinearities (Provision to obtain the characteristics in phase plane for Dead Zone, Hysteresis, Saturation & their combination non linearity)	<ul style="list-style-type: none"> • Simulated electronic relay using high speed IC's • Simulated 2nd order linear plant • Nonlinearities: Dead zone (0-600)mV , Hysteresis (0-500)mV • Built-in square and sine wave generators with amplitude (0-1) V & frequency (1 Hz to 1kHz) • Accessories: Test leads, Instruction manual 	1
8	Microprocessor based stepper motor control (Provision to plot the dynamic characteristics)	<ul style="list-style-type: none"> • Stepper Motor: Torque: 2.8 Kg-cm, Step angle: 1.8°, Power: 12V, 1A/phase • Stepper motor operation through pulse circuit & 8085 microprocessor kit • Servo Potentiometer • 8085 microprocessor kit with built-in programs in EEPROM & required peripherals to control stepper motor • Accessories: Test leads, Instruction manual 	1
9	Study of temperature transducers (To plot the characteristic of Thermistor (PTC & NTC), Thermocouple, AD590 sensors)	<ul style="list-style-type: none"> • Temperature Control System: 25W oven with digital display • Operating Temperature: Preferably (0 - 150)° C Transducers: Chromel - Alumel thermocouple, Copper - Constantan thermocouple, RTD, Thermistors (PTC, NTC) & Semiconductor sensor (AD590). • Required signal conditioning circuits. • 3½ digit display for measured quantities • Accessories: Test leads, Instruction manual 	1

10	Level Control System (To study the level control system & validate PID controller for the system)	<ul style="list-style-type: none"> • System: Transparent process tank of (5 liters) with graduated level scale, Rust proof water reservoir of 10 liters capacity & drain valve fitted with process tank to give disturbance to the process. • RF Capacitance type level probe to sense the level up to 250mm with required signal conditioning circuits • Controller: PID Controller with adjustable Gain, Integral Time & Derivative Time and option to choose P, P+I & P+I+D control action. • PC Based, compatible with MATLAB / SIMULINK • Accessories: Test leads, Instruction manual 	1
11	Magnetic Levitation System (To determine TF & design controller to maintain stability of the system)	<ul style="list-style-type: none"> • Object suspended in air by magnetic force. • Provision for PD and lead compensation with different parameter • PC Based, compatible with MATLAB / SIMULINK • Accessories: Test leads, Instruction manual 	1

PACKAGE - 4

SL.NO	NAME OF THE EQUIPMENT	RATING	QUANTITY
1.	Three phase PWM Inverter with different modulation schemes kit	400V,5A	1
2.	Single Phase Dual converter	230V, 5A	1
3.	Four quadrant chopper with DC Motor kit	220V, 5Amp	1
4.	Single phase firing circuit	-----	3
5.	Three phase firing circuit	-----	2
6.			
7.	Analog Tachometer	(0-9999)rpm	1
8.	Digital Tachometer	(0-9999)rpm	2
9.	Patch chords	5Amp	100
10.	Cartridge Fuses	1A,5A,10A (Long Fuses)	100 each
11.	Cartridge Fuses	(0-500)mA	50
12.	Cosine control triggering scheme kit	-----	2
13.	Forward and Flyback converter	230V/30V, 5A	1
14.	Three phase PWM Inverter Kit	400V,10A.	1
15.	Single Phase PWM Inverter Kit	230V,2A	1
16.	single phase Full wave controlled converter Kit	230V,5A	1
17.	BUCK Converter and BOOST converter	(50-150V), 2Amp	1
18.	SCR, POWER MOSFET, IGBT, TRIAC KITS	200Volts, 2Amp	2

PACKAGE - 5

Sl no	apparatus	specification	quantity
1.	RLC circuit trainer kit	<ol style="list-style-type: none"> 1. On board DC Regulated Power Supply 5V OR 12V at 250mA. 2. On board Square Wave Generator. 3. On Board RL and RC Circuit Provided With Circuit Diagram. 4. Components are mounted behind the panel 5. Adequate no. of patch cords stackable from rear both ends 4mm spring loaded plug length ½ meter 	2
2.	Two port network Z , Y , ABCD and H parameter trainer kit	<ol style="list-style-type: none"> 1. Instrument comprises of DC IC Regulated Power Supplies 0-15 V/250 mA 2. On Board Ac Supply 15 V 3. Two Square / Digital / Round meters for voltage & current measurement 4. T and PIE Network provided on the board 5. Variable Resistor Using Band switch is mounted on the board 6. Required no of patch chords 	4
3.	DC and AC transient trainer kit	<ol style="list-style-type: none"> 6. On board DC Regulated Power Supply 5V OR 12V at 250mA. 7. On board Square Wave Generator. 8. On Board RL and RC Circuit Provided With Circuit Diagram. 9. Components are mounted behind the panel 10. Adequate no. of patch cords stackable from rear both ends 4mm spring loaded plug length ½ meter 	2 from each
4.	Series and parallel resonance trainer kit	<ol style="list-style-type: none"> 1. Inductances made on ferrite cores, selectable by a switch 2. Capacitances with low loss factor, selectable by a switch 3. Resistances, selectable by a switch 4. Two Square / Digital / Round meters for voltage & current measurement 5. Adequate no. Of patch cords stackable from rear both ends 4/ 2 mm spring loaded plug length ½ meter 	2

5.	Active and passive low pass and high pass filter trainer kit	<ol style="list-style-type: none"> 1. Set of inbuilt resistors and capacitors with different magnitudes 2. Inbuilt IC741 OP-AMP 3. On board +12V and -12 V DC power supply 4. Required number of patch chords 	2
6.	Active and passive band pass and band reject filter trainer kit	<ol style="list-style-type: none"> 1. Set of inbuilt resistors and capacitors and inductors with different magnitudes 2. Inbuilt IC741 OP-AMP 3. On board +12V and -12 V DC power supply 4. Required number of patch chords 	2
7.	Kelvin's Double Bridge Trainer Kit	<ol style="list-style-type: none"> 1. On board oscillator section. 2. On board circuit for designing Kelvin's double Bridge 3. On board amplifier section 4. On board unknown Resistors for conducting the experiment 5. On board Speaker interface 6. Test points are provided to analyze signals at various points 7. ON/OFF switch and LED for power indication. 8. Bare board Tested Glass Epoxy SMOBC PCB is used. 9. Block Description Screen printed on glassy epoxy PCB 10. All interconnections are made using 2mm banana Patch cords 11. Supplied with User manual and patch cords 12. With built-in power supply 13. Enclosed in a wooden/plastic box 	1
8.	Maxwell Bridge Trainer Kit	<ol style="list-style-type: none"> 1. The kit contains a bridge with provision for connections of capacitors and an unknown inductor. In built ac supply [1 KHz and 2 Vpp] and dc supply [+5 V] on board. Two nos dial resistances [50 ohm to 200 ohm] and [1 ohm to 11 ohm] in step. A dc and ac null detector using selector switch. A dial type variable capacitor [range 0.2 uF to 1.2 uF] and six nos. unknown inductors [range 1 mH to 12 mH]. 	1
9.	Schering Bridge	<ol style="list-style-type: none"> 1. Potentiometer 1K & 10 K helical 2. Fixed resistance 10M, 1M, 100K, 10K, 	1

	Trainer Kit	<ul style="list-style-type: none"> 1K, 100 & 10Ω 3. Fixed capacitance of 100μf, 10μf, 1μf, 100nf, 10nf, 1nf & 100pf available through selector switch 4. Variable power DC supply: 0-15V 5. Test points: 3nos 6. Power supply: 230V\pm10%, 50/60 Hz 	
10.	Current Transformer	<ul style="list-style-type: none"> 1. Primary current:- 10A 2. Secondary current:- 300mA 3. Frequency-50 Hz 4. Operating temperature:-(-40 to 85 $^{\circ}$C 	3
11.	Potential transformer	<ul style="list-style-type: none"> 1. Input voltage: 230 V AC single phase, terminal(s): N-L1 400 V AC phase to phase, terminal(s): L1-L2 2. Output voltage: 230V AC 3. Ambient temperature of operation: - 20...50 $^{\circ}$C 4. Rated power: 400VA 	6
12.	Transformer	<ul style="list-style-type: none"> 1. Rated voltage: 230/30, 230/230 2. Rated Power : 1KVA 	2
13.	Strain Gauge, 0-50 Kg	<ul style="list-style-type: none"> 1. Capacity: 40- 50 Kg 2. Excitation voltage $V \leq 10V$ 3. Operating temperature: 0-50$^{\circ}$C 4. Output sensitivity mv/v: 1.0\pm0.1 	2
14.	LVDT	<ul style="list-style-type: none"> 1. Supply voltage: 12V, 24V 2. LVDT supply voltage: 1.2Vrms, 3Vrms 3. Output signal: 0-5V DC, 0-10V DC, \pm5V DC, \pm10V DC 4. Supply frequency: 2.5KHZ, 5.0KHZ 	2
15.	RTD, Thermocouple	<ul style="list-style-type: none"> 1. Type: pt100 2. Measuring range: -20$^{\circ}$-200$^{\circ}$C 3. Cable length: about 2 meters 4. Probe length: 50 mm 5. Probe diameter: 5mm 6. Probe material: stainless 	4
16.	Torque sensor	<ul style="list-style-type: none"> 1. Torque range- 0-10NM 2. Voltage output- 0-\pm10V 3. Internal resistance- 100Ω 4. Supply voltage-10- 220V DC 5. Frequency output 10KHZ\pm5KHZ 	2

PACKAGE - 6

Sr	Module	Qty
1	TMS320C6713 DSP Starter Kit (DSK)	10
	TMS320C6713 DSK Board	
	Code Composer Studio for C6713 DSK	
	USB Cable	
	AC Power Cord(s) and Power Supply	
	Quick Start Guide	
	Technical Reference (includes schematics)	
	Customer Support Guide	

Sd/-
Principal, GCEK
Bhawanipatna