

INDIRA GANDHI ENGINEERING COLLEGE SAGAR (M.P.) 470021
(DECLARED AUTONOMOUS BY M.P. GOVT.)

NO/IGEC/Electrical/2015-16/

Sagar, Date



Tel.No.07582-263844,263826

Visit us: www.igecsagar.ac.in

e-mail: dr.principalgec@rediffmail.com

“TENDER NOTICE No.ELECTRICAL/01/15-16”

Sealed tender are invited from the manufactures/authorized dealers/distributers on their Letter head for supply of Equipments in various laboratories of EE Engineering Department of this institution.

1. DC DRIVE	EMD Rs 7,000/-	Approx Cost Rs 3.50 Lac
2. PMSM(Permanent Magnet Synchronous MOTOR DRIVE	EMD Rs 6,700/-	Approx Cost Rs 3.35 Lac
2. OMBLDC Motor Drive with Measuring instruments	EMD Rs 6,000/-	Approx Cost Rs 3.00 Lac
3. POWER ANALYZER	EMD Rs 11,100/-	Approx Cost Rs 5.55 Lac

Details specification of all the items along with the terms and conditions are provided in the tender document. Tender can be purchased from the office of the Principal Indira Gandhi Engineering College Baheria, Sagar (M.P.) on payment Rs 1000/- in cash or in the form of DD in any working day between 9.00 am to 2.00 pm from 05.02.2016 .Tender Document by post will not entertained.

Important dates of the Tender are as follows:-

Last date and time of selling the Tender from	25/02/2016 up to 2:00 pm
Last date and time of receiving the Tender	27/02/2016 up to 2:00 pm
Date and time of opening the Tender	29/02/2016 up to 12:30 pm

Tender will be opened in the institute in the presence of such Tenderers or their representative who may like to be present. Information regarding Tenders can be seen from the institute Website www.igecsagar.ac.in

SECRETARY/PRINCIPAL

कार्यालय, प्राचार्य इंदिरा गांधी इंजीनियरिंग महाविद्यालय सागर(म0प्र0)
(शासन द्वारा स्वशासी घोषित)

क्रमांक / आई.जी.ई.सी. / ई.ई. / 2016 /

सागर, दिनांक



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निविदा आमंत्रण सूचना संख्या / इलैक्ट्रीकल / 01 / 15-16

निविदा आमंत्रण सूचना संख्या / इलैक्ट्रीकल / 01 / 15-16 इस संस्था के इलैक्ट्रीकल विभाग की विभिन्न प्रयोगशालाओं के उपकरण कय करने हेतु अधिकृत डीलरो / डिस्ट्रीब्यूटरो से उनके लेटर हेड पर निविदा आमंत्रित की जाती है।

01 डी.सी.ड्राइव	अमानत राशि रु. 7000 /- अनुमानित राशि रु. 3.50 लाख
02 पी.एम.एस.एम.(परमानेंट मेगनेट सिन्क्रोनस मोटर ड्राइव)	अमानत राशि रु. 6700 /- अनुमानित राशि रु. 3.35 लाख
03 पी.एम.बी.एल.डी.सी. मोटर विथ मेजरिंग इंस्ट्रूमेन्ट	अमानत राशि रु. 6000 /- अनुमानित राशि रु. 3.00 लाख
04 पावर एनालाइजर	अमानत राशि रु.11100 /- अनुमानित राशि रु. 5.55 लाख

सभी आईटमों के विस्तृत स्पेसीफिकेशन निविदा प्रपत्र में सभी शर्तों के साथ दिये गये हैं। कार्यालय प्राचार्य इंदिरा गांधी इंजीनियरिंग महाविद्यालय से नगद रु.1000 /- अंकन एक हजार मात्र अथवा बैंक ड्राफ्ट देय प्राचार्य इंदिरा गांधी इंजीनियरिंग महाविद्यालय सागर के कार्यालय समय में दिनांक 05/02/2016 समय 09.00 बजे से 2:00 बजे दोपहर तक निविदा प्रपत्र कय किये जा सकते हैं अथवा वेबसाइट से डाउन लोड किए जा सकते हैं। डाक द्वारा निविदा प्रपत्र नहीं भेजे जावेगे।

निविदा हेतु महत्वपूर्ण तारीखें:-

1. निविदा प्रपत्र कय करने की अंतिम तारीख व समय 25/02/2016 समय 2:00 बजे दोपहर
2. निविदा प्रपत्र जमा करने की अंतिम तारीख व समय 27/02/2016 समय 2:00 बजे दोपहर
3. निविदा खुलने की तारीख व समय 29/02/2016 समय 12:30 बजे दोपहर

निविदा संस्था में निविदाकारों अथवा उनके प्रतिनिधियों जो उपस्थित रहने के इच्छुक हों, के सामने खोली जावेगी। निविदा से संबंधित जानकारी महाविद्यालय की वेबसाइट www.igecsagar.ac.in पर देख सकते हैं।

सचिव / प्राचार्य

**OFFICE OF THE PRINCIPAL
INDIRA GANDHI ENGINEERING COLLEGE SAGAR M.P.**
(Declared autonomous by Govt. of M. P.)



Tender No. EE/01/15-16

Tel.No.07582-263826,263844
Visit us: www.igecsagar.ac.in
E-mail: dr.principalgcec@rediffmail.com

Sagar, Dated- / / 2016

Tender

In

The Department of Electrical Engineering 2015-16

The 27 February, 2016, at 2:00 pm in the Office of The Principal, I.G.E.C. Sagar, M.P.

TOTAL PAGE 06

Price Rs. 1000/-only by Cash / Bank Draft, in favour of Principal IGEC, Sagar

INDIRA GANDHI ENGINEERING COLLEGE SAGAR M.P.

(declared autonomous by the Govt. of M.P.)

S/No./IGEC/ EE / 2015-16/ /

Sagar Dated



Subject:- 1- Terms & Conditions .
2 - Detailed Specifications.

Last date and time of selling tender form	25/02/16 at 2:00 P.M.
Last date and time of receiving sealed tenders	27/02/16 at 2:00 P.M.
Date and time of opening tenders :	29/02/16 at 12:30 P.M.

I TERMS AND CONDITIONS:

1. The tender form is non transferable.
2. Tender received after due date and time will not be accepted in any case.
3. (a) Only actual manufacturers or their authorized suppliers/dealers/stockiest/agents may submit their tender.
A certificate to this effect should be enclosed along with the tender.
(b) The tender must be sent in firm's own letter head, along with the terms and conditions of supply.
4. Tender received with overwriting or filled with pencil will not be accepted.
5. Representatives of the firms are advised to be present in this institution at the time of opening the tender for demonstrating the silent features of the equipments quoted by them through multimedia presentation failing which the tender may not be considered.
6. The tenders are required to mention the salient features of the services provided after the sale of the item.

II SPECIFICATIONS

- (i) Complete technical specifications must be furnished in the tender. Make of the equipments offered in the tender must be mentioned and duly supported with the original printed catalogues/leaf-lets/ photographs of the equipments without which, the offer will be rejected.
- (ii) For the proprietary items the relevant certificate must be enclosed.
- (iii) In case any of the equipment is available on DGS & D/MPLUN rate contract and offered in the tender, the tender, the supplier should furnish a copy of the rate contract.
- (iv) If any of the equipment of required specification is not available, then nearest higher specification to the required specification may be considered.
- (v) Printed terms & conditions on the letterhead will not be binding unless separately mentioned.
- (vi) Equipment & machinery calibrated in MKS/SI system only be quoted
- (vii) The better or higher specifications than the required specification will be considered.

III RATES AND TAXES

- (a) The rates must be quoted F.O.R. Indira Gandhi Engineering College, Sagar (M.P.) 470021.
- (b) If the rates are quoted excluding excise duty, then the firm must specify clearly the name of equipment on which excise duty is payable extra and rate Applicable.
- (c) Other taxes and duties, if payable extra, should be clearly stated in the offer failing which the

rate quoted will be considered inclusive of all taxes and duties and no claim for the same will be entertained.

- (d) The quoted rates must be inclusive of installation/demonstration of the equipment/ machines in perfect working condition after delivery. No extra payment will be made for the installation and/ or demonstration.

IV EARNEST MONEY

(a) The tenderer is required to furnish earnest money deposit laboratory wise as follows:

For PART 1. DC DRIVE	EMD Rs 7,000/-	Approx Cost Rs 3.50 Lac
PART 2. PMSM(Permanent Magnet Synchronous MOTOR DRIVE	EMD Rs 6,700/-	Approx Cost Rs 3.35 Lac
PART 3. PMBLDC Motor Drive with Measuring instruments	EMD Rs 6,000/-	Approx Cost Rs 3.00 Lac
PART 4. POWER ANALYZER	EMD Rs 11,100/-	Approx Cost Rs 5.55 Lac

- (b) Earnest money should be sent through Bank Draft only drawn in favor of Principal, I.G. Engineering College Sagar (M.P.) payable at Sagar. Earnest Money in the forms, other than the Bank Draft (e.g. Cheque, FDR, IPO etc.) will not be accepted.
- (c) The earnest money of previous tenders, not refunded to the firm, will not be adjusted in this tender.
- (d) The SSI firms registered with the industry Department of Govt. of MP. only or Govt. of India undertaking firms are exempted to furnish earnest money. The said firms will be required to enclose a certificate to this effect. The SSI firms registered in other states of the country will not be able to avail such exemption

V CONDITIONS TO FORFEIT EARNEST MONEY

The entire amount of earnest money or security deposit will be forfeited due to any one of the following :

- (a) The supplier either expresses his inability or does not execute the order for quoted items mentioned in the tender.
- (b) If the complete equipment is not supplied within the delivery period mentioned in the order or within the extended period from time to time.
- (c) If the supplier executes only part of the order.
- (d) In case of any default in the execution of order the undersigned will have discretion to forfeit the entire amount of earnest money.
- (e) If defects of any kind or variation from specifications are reported to the supplier, the Supplier will have to rectify the defects or replace the equipment/machine free of all charges within 30 days from the date of report, failing which the items will be returned to the supplier at his own risk and entire amount of earnest money will be forfeited.
- (f) If supplier fails to fulfill the terms and conditions of the tender partly or fully.

VI Payment :

Payment in full will be made after physical installation of the equipment in perfect working condition and complete demonstration in the institute. No part payment for the defective/ incomplete equipment will be made. If the undersigned feels that the equipment supplied is grossly defective and cannot be repaired or the supplied material/equipment is of substandard quality; the supplied equipment will be rejected & returned to the supplier at his risk. No payment or part thereof will be made to this effect to the supplier and the order will be cancelled.

VII WARRANTY: 2YEARS Warranty period will start from the date of installation and satisfactory commissioning.

VIII OTHER CONDITIONS

Tender will only be considered if following conditions have been mentioned in the tender, otherwise the tender will be rejected

- (a) Validity period: Validity period must be at least 6 months from the date of opening of the tender.
- (b) Delivery period: The delivery period for supply of equipment should not be more than 30 days (may be extended on specific request with the discretion of the undersigned). However ex-stock offer will be preferred.
- (c) Any decrease in the taxes at the time of supply if occurs, then the benefit of the same should go to the Intuition.
- (d) The renderer should undertake to repair or replace free of cost/ charges the defective parts due to faulty design and/ or bad workmanship during the period of one year from the date of installation of the equipment in perfect working condition and demonstration at the Institute.
- (e) The undersigned does not pledge him to accept the lowest or any tender and also reserves the right of rejecting all or any of the tender without giving any reason for the same.
- (f) No request for the supply of any details in respect of tender or the comparative chart or any other enquiry in respect of the tender already received in this office, will be entertained in any case.
- (g) All disputes with regard to the contracts fort the purchase of materials etc. will be subject to the jurisdiction of courts at Sagar (M.P.) only.

IX Sealed tender should be submitted in 3 envelopes as mentioned below:

Envelop A Pre Bid Qualification : Envelope comprising of EMD /Manufacturer/Dealership certificate, CT/ST, PAN/TIN No.

Envelop B Technical Qualification:- Envelope comprising technical specification Brochures of equipment /printed catalogue / leaflets.

Envelope C Financial Bid:- Envelope comprising rates of equipments/machines.

All the three envelopes (A, B and C) should be sealed separately and then enclosed in another outer envelope D addressed to the Principal I.G. Engineering College, Sagar (M.P.) 470021.

Note:- Envelope C (Financial Bid) will not be opened if the suppliers, who do not qualify for Envelop A pre bid and Envelop B Technical Qualification.

The envelope D must be super scribed as Tendered Documents Against Tender

Notice No.-----

Above procedure of tender in point VIII must be strictly followed otherwise the tender will be rejected.

Technical qualification envelope will be opened only for those offers that clear pre bid qualification and financial bid envelope will be opened only for those offers that qualify in technical qualification.

Enclosures: detailed specifications of the equipments.

**Principal,
I.G. Engineering College
Sagar(M.P.)**

Technical Specification	
1	<p>DC Drive</p> <ul style="list-style-type: none"> (i) 415V, 15A, 3KW (with motor), 4Quadrant operation, Overload capacity suitable for class IV i.e 200% of rated current for 2-minutes repeated every 15 mins., Power loss at DC current less than 70W, Operational ambient temp. 0- 45⁰C, Chopper fed Converter (ii) 1-Phase and 3-Phase committing reactor with PC (iii) The converter will be Thyristor converter with 12 thyristors. (iv) A digital field controller suitable for minimum 16 Amp field current should be in built and must operate on digital communication with the armature controller. (v) Field weakening feature should be available. (vi) Interfacing with PC through MODBUS or ETHERNET. (vii) Windows based software to modify and monitor at least 3 motor parameters should be displayed at a time. (viii) The drive should have its own operator panel with digital display to indicate Speed, Torque, Voltage, Current, Power. (ix) The Panel board must be supplied in such a way that all the electrical and operational safety is inbuilt and should be IP 42 standard. (x) DC Motor suitable for the above with external cooling and provision for digital speed feedback. (xi) Required software for speed control analysis (Four quadrant) (xii) Digital display of Speed, Torque, Voltage, Current, and Power. (xiii) Consisting in sheet enclosure all necessary protection and o/p connectors and independent speed controller switch. (xiv) Training jig consisting of necessary operating and safety accessories. (xv) User friendly operator panel
2	<p>PMSM (Permanent Magnet Synchronous Motor) Drive</p> <ul style="list-style-type: none"> (i) 415V, 3.2A, 1.2 hp, Permanent Magnet Synchronous Motor with sinusoidal back e.m.f. (with motor) (ii) Speed: 6300 rpm (iii) 1.5 - 2.0 N-M continuous torque (iv) Eddy current loading arrangement (v) Interfacing with PC through MODBUS or ETHERNET. (vi) Required power module and software for speed control analysis (Four quadrant) (vii) Digital display of speed, Torque, Voltage, Current, and Power. (viii) Training jig consisting of necessary operating and safety accessories.

	(ix) Panel board must be supplied in such a way; student can perform various practical smoothly.	
3	<p>PMBLDC Motor Drive with measuring instruments</p> <ul style="list-style-type: none"> (i) 1.1 hp Permanent magnet brush less DC motor with Trapezoidal back EMF, 4-pole rotor & 3 phase stator, Speed 6000 rpm, Loading arrangement. (ii) PMBLDC Motor suitable for the above with provision for digital speed feedback. (iii) Analog meter to be provided for DC Voltage measurement (iv) FRC connectors provided to interface to any controllers (v) Interfacing with PC through MODBUS or ETHERNET. (vi) Training jig consisting of necessary operating and safety accessories. (vii) Programming software & connecting cable. (viii) Interfacing module (with PC) (xvi) Digital display of Speed, Torque, Voltage, Current, and Power. (xvii) Training jig consisting of necessary operating and safety accessories. (xviii) User friendly operator panel 	
4	<p>Power Analyzer</p> <p>Input element- Four Voltage range- 7.5/15/30/50/150/300/500V Current range- 0.25/0.5/1/2.5/10/20/30A Accuracy range (V, I, Power, power factor, freq.) - 0.5% Operating temperature- 0-50⁰C Humidity- <90% RH Non-condensing Display- 160X160 mm Pixel LCD Overloading capacity- upto 500V & 850V (Phase to Phase) Sensing- 1-Phase/3-Phase/3-Phase, 4-wire</p> <p>Measurement- True RMS Parameters - (Active/Reactive/Apparent) power / Frequency/Efficiency/Phase angle/Motor evaluation/FFT spectral analysis/Harmonics/User defined function</p> <p>Measurement Function - Harmonics, Compensation, Delta calculation, DA output, synchronized operation, Internal memory, communication command capability interfacing, and printer facilities.</p>	