

**OFFICE OF THE PRINCIPAL**  
**GOVERNMENT POLYTECHNIC, BALODABAZAR, DISITT – BALODABAZAR-BHATAPARA**  
**(C.G.) 493228**

e-mail Address:- [gpbalodabazar@gmail.com](mailto:gpbalodabazar@gmail.com)  
Contact No.: 8986892089 / 9926657849 / 9827972266



**TENDER - DOCUMENT**  
**FOR**  
**PURCHASE OF MACHINE & EQUIPMENTS**  
**MECHANICAL ENGINEERING DEPARTMENT**

(2020 - 2021)

निविदा सूचना क्रमांक / शा0पॉ0बबा0 / स्टोर / 2021 / 122      बलौदाबाजार, दिनांक:-13/01/2021

- |                              |   |
|------------------------------|---|
| 1. Value of work             | Approx Rs 2289325/- (Rs. Twenty Two Lacs Eighty Nine Thousand Three Hundred Twenty Five only) |
| 2. Tender document issued to | M/s-----<br>-----   |
| 3. Cost of Tender            | Rs 500-00 (Rs Five Hundred only)  |
| 4. Money receipt & Date      | -----   |
| 5. Date of issue of tender   | -----   |

Issued by

Principal,  
Government Polytechnic Balodabazar  
Disitt – Balodabazar-Bhatapara, C

**OFFICE OF THE PRINCIPAL**  
**GOVERNMENT POLYTECHNIC, BALODABAZAR, DISITT – BALODABAZAR-BHATAPARA**  
**(C.G.) 493228**  
**e-mail Address:- gpbalodabazar@gmail.com**

**TERMS AND CONDITIONS**

**Terms and conditions for supply of Machines & Equipments are as per following list:**

1. For participation in tender process following signed and stamped documents must be furnished in envelope A – super scribed as **“Technical Bid envelope A”**.
  - a. Income Tax returns of the last three years and Commercial Tax clearance certificate as well as PAN/TAN/TIN/GST registration No. with documental proof.
  - b. Registration of firm/company.
  - c. Sales tax/GST clearing certificate.
  - d. GST certificate from commercial tax department for the related business. GST Registration certificate must be valid and live.
  - e. ISO/BIS certificate for firm/product.
  - f. Manufacturer/dealer/distributor certificate.
  - g. Balance sheet /Turnover of firm/company of last three years duly signed by CA.
  - h. **Demand Draft for Tender fee (if downloaded from website) and Demand Draft for EMD.**
  - i. Item specifications/Literature /Brochure / leaflet regarding quoted items.
  - j. Acceptance of terms and condition (signed and stamped copy of tender document).
  - k. Any other document which you consider as necessary.
  - l. The bid shall be accompanied by Proforma for Technical bid in Annexure-I.
  - m. The bid shall be accompanied by Proforma for DECLARATION FOR NOT BLACK LISTED in Annexure-III.
  - n. The bid shall be accompanied by affidavit in prescribed format as given in Annexure-IV on non-judicial stamp paper or Rs 50 certified by Notary.
  - o. Properly filled vendor information form given in Annexure-V (Valid Email-id should be furnished in so that order can be placed via email id)
2. Envelope B should contain Financial bid in Proforma as given in Annexure-II along with taxes and discount if any and super scribed as **“Financial Bid envelope B”**.
3. Both envelope A & B should be put in a third big envelope and Super scribed as **“Tender for supply and installation of machine & equipments” –Mechanical Engineering Department** on the top of the envelope. All envelope should be signed and should be sealed on all joints.
4. All Sealed envelope for the tender should be super scribed as **Tender Notice No. GPBB/STORE/2021/122, Balodabazar, dated- 13/01/2021** should be addressed to Principal, Government Polytechnic, Balodabazar Vill.-Sakari, District – Balodabazar-Bhatapara(CG) Pin No. 493228.
5. Envelope-A of Technical bid and documents will be opened first and if it is found worth

- consideration then only the Financial bid Envelope –B will be opened.
6. The tender is liable to be rejected if not submitted as per the prescribed conditions and in the prescribed format in envelope A and B .as given in point 1 & 2 .No further clarification will be entertained.
  7. The suppliers should quote their offer/ rate in clear terms without any ambiguity. Discount if any must be clearly specified.
  8. The tender will be opened on the date and time given above in the presence of tenderer(s) or their representative who desire to be present.
  9. Tender received after due date and time will not be entertained.
  10. Tender form is nontransferable.
  11. The tender document is also available on the website <http://gpbalodabazar.com> tenderer can download the document from the website, in that case he has to deposit DD of Rs 500=00 in favor of **Principal, Government Polytechnic, Balodabazar Distt – Balodabazar-bhatapara (C.G.)** at the time of submission of tender in Envelope-A. Otherwise his tender will not be entertained.
  12. A soft copy of the tender should be submitted along with the tender document.
  13. Item no. and page no of the tender form should be strictly in chronological order. Make/model, name of the manufacturer with complete address should be mentioned against each item and equipment.
  14. The tender should be sent in firms own letter pad along with terms and conditions. Printed condition on the back of the tender will not be binding unless separately mentioned.
  15. The tenderer must furnish complete and detailed technical specification supported by printed literature/catalogue/leaflet of the equipment offered. Item no. and page no. of the equipment should be mentioned in it. Incomplete specifications/ absence of printed literature support may result in to the rejection of the tender.
  16. The rate should be FOR destination (**Govt. Polytechnic, Balodabazar, Village – Sakri & P.O. – Amera, Tehsil - Pallari, Distt – Balodabazar-Bhatapara (C.G)**) including all taxes, packing forwarding, transportation etc. Warranty/Guarantee installation if any on any item it should also be stated clearly.
  17. Taxes, (whichever is applicable state clearly item wise) if leviable extra, should be clearly indicated, failing which the rate quoted in the tender will be considered as inclusive of all taxes.
  18. There should be no alterations / corrections made in the Tender. The tenderer may quote the rate of any or all the items listed in the tender form. Rates should be quoted separately for individual item and not in lump-sum for all taken together.
  19. An Earnest Money Deposit (EMD) of amount Rs 3% in form of Demand Draft must be given in favor of **Principal, Government Polytechnic, Balodabazar** payable at **Balodabazar Disitt – Balodabazar-Bhatapara (C.G.)**. Tenders received without EMD will be rejected. Exemption of EMD will be provided to those tenderer who comes under Chhattisgarh Store Purchase Rules 2002, clause-4 sub clause-4.7.However the tenderer needs to provide sufficient documentary evidence in support of the exemption along with the tender document to avail the same.
  20. In case of non- acceptance of the tender the EMD will be refunded to the tenderer in due course of time without interest. The EMD will be treated as security deposit in case of selected tenders EMD/ security deposit will be forfeited in case of breach of agreement of supply by the tenderer/supplier. The order shall stand cancelled and security deposit forfeited if.

- (I) Supplier expresses his inability to execute the order for the quoted items within the validity of supply order period at the rate quoted in the tender and for makes/ brand quoted in the tender.
  - (II) The complete equipment is not supplied within the delivery period (approximately 20-25days) mentioned in the order or within the extended period permitted.
21. Delivery period with installation for the items will be approximately 20-25days only.
  22. Any Equipment/ Trainers/ Hardware or software breakdown must be attended within 48 hours during the valid warranty period of the equipment/ software, free of cost.
  23. Payment shall be released after the successful installation and demonstration/testing of the machine equipment at the institution.
  24. The training for at least two persons for handling the machine/equipments shall be testing provided by the supplier at his own cost.
  25. The tenderer has to give demonstration/testing of the machine/ equipments software at **Government Polytechnic Balodabazar Disitt – Balodabazar-Bhatapara(C.G.)** wherever necessary at his own cost.
  26. Equipment received after the delivery period or dispatched after the delivery period mentioned in the order will not be accepted and will be taken back by the supplier at his own cost and risk,.
  27. In case of any default in execution of the order, the undersigned reserves the right to forfeit the EMD/Security deposit. The undersigned also reserves the right to cancel the order and forfeit the EMD/Security deposit in case the tenderer fails to adheres strictly to all terms and condition of the order/ tender.
  28. If defects of any kind or deviations from the specification are detected and reported to the supplier, the supplier should make replacement or rectify the defects free of cost within 10 days from the date of report, failing which the equipment will not be accepted and will be taken back by the supplier at his own cost and risk, and the EMD will be forfeited, In case the equipment is sent for repairs to the firm, it should be repaired within 10 days. From the date of receipt of equipment failing which the same will not be accepted and EMD will be forfeited, however the undersigned may consider the delay in deserving cases at his/her discretion.
  29. The undersigned reserves the right to increase/ decrease the quantity of the equipment to be supplied. If equipment supplied are not according to the ordered specifications and are not of proper quality, the same will not be accepted .Similarly second hand, reconditioned, damaged, repaired and substandard equipments and equipment having poor workmanship would not be accepted. Only brand new equipment calibrated in SI unit and with fine workmanship will be accepted.
  30. The submission of the tender will be deemed to be the acceptance of all the terms and condition of the tender as stated herein and/ or elsewhere in the tender document.
  31. Exact and earliest possible time of delivery should be indicated in the tender against each item. The delivery period given in the order will be the date of receipt of the equipment in the institute and not the date of dispatch of the equipment by the supplier.
  32. No advance payment will be made. The successful tenderer will have to execute in the form as approved by Government of Chhattisgarh.
  33. If tenderer has supplied these items to any PSU/ Government/reputed Private firm/deptt. Then submit last three years PSU/ Government/ Private Supply record as far as possible.

34. The minimum guarantee/warranty period for the equipment supplied by the supplier should be mentioned clearly and should not be less than one year from the date of installation. The tenderer will be required to undertake repair/ replacement of defective parts free of cost at the institution during the guarantee period.
35. All the disputes with regard to the contract of purchase of equipment etc. is subjected to **Balodabazar Chhattisgarh** Jurisdiction only.
36. In the event of the order, supplier who is the manufacturer of the equipment will be required to furnish a certificate to the effect that they are manufacturers of such and such make whereas the authorized dealer/distributor will have to furnish certificate issued by the manufacturer certifying that tenderer is their authorized dealer/distributor of that product/item. Without this certificate tender will not be accepted.
37. The tenderer shall guarantee that after sales services will be provided as and when required. Replacement or repair of part should be done and delivered free of cost at this institution within guarantee/warranty period.
38. The supplier will render necessary assistances, if required, in the installation of the equipment/ machinery in the institute/ site free of charge.
39. No. offer should be made for imported item for which import license has to be arranged by the supplier. The entire imported item will have to be delivered in the institute and payment will be made in rupees.
40. The payments shall be released only after satisfactory and successful commissioning and installation of the equipment/ machinery at the designated site/ institute and on submission of bill by the firm.
41. In the event of any dispute arising out of the tender or from the resultant contract, the decision of the Principal, **Government Polytechnic, Balodabazar Disitt – Balodabazar (C.G.)** will be final.
42. The Tender document/ resultants contract will be interpreted under Indian laws.
43. The undersigned is not responsible for any loss or damage to the equipments during transit irrespective of the fact that they are insured or not insured or delivery is ex- go down or factory station.
44. No claim shall be entertained in respect of interest on Earnest Money/Security deposit/ Tender Deposit.
45. Inspection of the equipment will be carried out at the institution after receipt of the equipments. Any request for the inspection of the same at the firm's factory/ go down/ showroom etc. will not be accepted.
46. Illustrated operation manuals, pamphlets/catalogue/literature/working instructions, trainers, software and hardware, erection/ wiring details as the case may be of the ordered equipments must be supplied in suitable damp proof cover. Without operational/ instruction manual no equipment/machinery will be accepted.
47. If there is any variation of specification of any machine /equipment from tendered specification, it should be clearly mentioned. Specification nearest can also be considered if it is as per technical norms for the given equipment/machinery.
48. Tenderer should mention list of spares, tools and accessories provided along with equipment without any extra cost.
49. Only actual manufacturer or their authorized dealer/distributor may submit the tender .It is mandatory to have ISO/BIS certification for supply/manufacture of the item/equipments/ machineries. Only BIS/ISO /ISI certified item has to be quoted.
50. The bidder shall submit a signed and stamped (on each page) copy of tender document as testimony of acceptance of T&C of tender document.

51. No octroi/excise duty shall be paid by the institution.
52. All prices quoted and other information in this regard having a bearing on the price shall be written both in figures and words in the prescribed offer form. If there is a discrepancy between words and figures, the amount mentioned in words will prevail. All prices should be in Indian National Rupees (INR).
53. Tenderer shall be entirely responsible to pay all Government. (Central and State) GST Taxes & DUTIES, custom duties and levies, sales tax, payable on components, raw materials any other items used for their consumption or dispatched directly to respective location of **Government Polytechnic, Balodabazar Disitt–Balodabazar-Bhatapara (C.G.)**.
54. **In case of supply order value is 2.5lacs or more in this case supplier will have to deposit 2% GST TDS of Net Value in the form of Demand Draft(DD) in favor of Principal, Government Polytechnic, Balodabazar payable at Balodabazar, Disitt – Balodabazar-Bhatapara (C.G.)**.
55. **Delivery and Documents**  
The suppliers shall notify the purchaser & delivery the following documents to be Purchaser-
  - 1) Three Original copy of the suppliers Invoice, showing Purchaser, The Purchaser order number, Goods Description, quantity, unit price and total amount. Invoice must be signed in original and stamped or sealed with the company stamp/seal.
  - 2) One original of the manufacturers warranty certificate (if any) covering each item supplied.
  - 3) Invoice should be raised in the name as “PRINCIPAL, GOVERNMENT POLYTECHNIC BALODABAZAR (CG)
56. **OTHER IMPORTANT CONDITIONS**
  1. The purchaser shall have all rights to modify, addition, subtraction of any term(s) and condition(s) of the tender and different bids therein during any time of tender process, which shall be communicated to the tenderer.
  2. Any condition imposed by the firm/ Manufactures/company/Supplier will not be accepted.
  3. No change in the Quoted price shall be allowed to any reason.
  4. In case the item installed by the supplier/tenderer not meets the specifications of quoted equipment/item, the purchaser shall have all rights to cancel the item’s purchase order, and the supplier/tenderer shall be responsible to take back the installed item at his/her own cost after getting the order of purchaser.
  5. In all the above conditions the decision of the Government Polytechnic Balodabazar(CG) Purchase Committee or any officer authorized by the committee shall be final and binding.
  6. Principal, Government Polytechnic Balodabazar(CG) will be the final authority for any changes in tender terms.
57. All provisions of Chhattisgarh Store Purchase Rules 2002, with all amendments upto the date of publication of this tender, shall be applicable.

Principal,  
Government Polytechnic Balodabazar  
Disitt – Balodabazar-Bhatapara (C.G.)

**ANNEXURE - I**

**Format for Technical Bid to be put in envelope A only**

**(Please provide hard copy as well as soft copy (CD) in MS. Words/M.S. Excel Format in the envelope)**

S. No.	Name of Items along with Make and model	Specifications given in the Tender	Technical Specification the bidder wants to supply as per catalogue/ brochure	Deviation (If any)	Brochure/ literature/ catalogue attached Yes/No	Remark
1	2	3	4	5	6	7

**Signature:**  
(Name & stamp of the Firm/Tenderer)

**ANNEXURE - II**

**The Price offer should be submitted in the following format Envelope-B only**

**(Please provide hard copy as well as soft copy (CD) in MS. Words/M.S. Excel Format in the envelope)**

Sl. No.	Name of Items along with Make/ Model	Specifications	Price of the Equipment excluding (GST) In Rs.	(GST) %	GST In Rs.	Cost of the Equipment Inclusive of all taxes & charges (8=5+7)	Remark
1	2	3	4	5	6	7	8

**Signature:**

(Name & stamp of the Firm/tenderer)

**ANNEXURE - III**

**DECLARATION FOR NOT BLACK LISTED**

Date.....

To,  
The Principal,  
Government Polytechnic Balodabazar,  
Disitt – Balodabazar-Bhatapara,(C.G.).

Dear Sir,

Ref.:- Tender No.

I/We ..... hereby confirm that our firm has not been banned or blacklisted by any Government organization/Financial Institution/Court/Public sector Unit/ Central Government.

Place .....

Signature of Bidder .....

Date .....

Name .....

Designation .....

Seal .....

## ANNEXURE-IV

(On Non Judicial Stamp Paper of Rs. 50/-)

## निविदाकर्ता Bid के साथ दिए जाने वाला शपथ-पत्र

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

1. मैंने/हमने निविदा की सारी शर्तें ध्यानपूर्वक पढ़ी हैं और उनसे सहमत हैं तथा उन्हें मानने के लिए वचनबद्ध है।
2. मेरे/हमारे द्वारा संलग्न किए गए सभी दस्तावेज सही हैं और उनमें किसी प्रकार की कांट-छांट नहीं किया गया है एवं गलत जानकारी नहीं दी गई है।
3. मेरे/हमारे द्वारा कामर्शियल बिड में सामग्रीयों के लिए जो स्पेशिफिकेशन दिया गया है। और उनके सपोर्ट में जो भी संबंधित दस्तावेज, कैटलॉग/ब्रोशर्स आदि संलग्न किए गए हैं उनमें लिखा विवरण निर्माता द्वारा जारी किया गया है एवं मूल रूप में है, और उनमें कोई फेरबदल या कांट-छांट नहीं किया गया है।
4. मेरे/हमारे द्वारा निर्माता से मुझे/हमें जारी अथॉराइजेशन प्रमाण-पत्र जो कि बिड के साथ संलग्न किया गए है। वे सही एवं मूल रूप में है और उनमें कोई फेरबदल नहीं किया गया है।
5. मैं/हम दिए गए क्रयादेशानुसार सामग्रीयों को निर्धारित समय सीमा में स्पेशिफिकेशन के अनुसार सप्लाई करने के लिए बाध्य है। देर होने या सामग्रीयों के स्पेशिफिकेशन में अन्तर होने पर मुझे/हमें दिए गए क्रयादेश को निरस्त किया जा सकता है, एवं शासन को होने वाले नुकसान की भरपाई मेरे/हमारे द्वारा की जावेगी।
6. टेण्डर के तहत प्राप्त क्रयादेश द्वारा प्रदाय की जाने वाली सामग्रीयों में लगने वाले सभी शासकीय (केन्द्र व राज्य) GST Taxes & DUTIES, custom duties and levies, sales tax इत्यादि का भुगतान करने की सम्पूर्ण जिम्मेदारी मेरी/हमारी होगी कृपया कर सहित राशि का भुगतान करें इस आशय से मेरे द्वारा निवेदन पत्र करुंगा।
7. मेरे/हमारे द्वारा दी गई जानकारी असत्य पाए जाने पर मुझे/हमें एवं हमारी फर्म को निविदा में भाग लेने से वंचित किया जा सकता है।
8. उपरोक्त बिन्दुओं की जानकारी गलत पाये जाने अथवा टेण्डर के नियमों का पालन नहीं करने पर हमारी फर्म को **BLACK LIST** किया जा सकता है। जिसकी सम्पूर्ण जिम्मेदारी मेरी/हमारी होगी।

दिनांक .....

हस्ताक्षर .....  
 नाम .....  
 धारित पद .....  
 फर्म का नाम .....  
 (सील सहित) .....

**ANNEXURE-V**

<b>Vendor Information</b>	
<b>GST NO.</b>	
<b>TIN No.</b>	
<b>PAN NO.</b>	
<b>Vendor Name</b>	
<b>Address</b>	
<b>Mobile No.</b>	
<b>State</b>	
<b>District</b>	
<b>Bank Name</b>	
<b>Branch Name</b>	
<b>Bank A/c No.</b>	
<b>Bank IFSC Code</b>	
<b>Vendor Code</b>	
<b>Valid Email ID.</b>	

I hereby certify that the above particulars are correct to the best of my knowledge and I will responsible for the consequences that may arise due to wrong information if any in the above.

Vendor Signature

## List and Specification of Equipments for Mechanical Engineering

No	Name of the Equipment's to be Procured	Specification
<b>Machine Drawing Lab</b>		
1	Models of various type of coupling and joints	01 Screw Jack 02 Flexible Coupling Model 03 Single Stage Helical Gear Model 04 Single Type Hook Coupling Model 05 Oldham Coupling Model 06 Sellers Coupling Model 07 Universal Coupling Model 08 Box or Muff Coupling Model 09 Flanged Coupling Model 10 Riveted Joint Model 11 Knuckle Joint Model 12 Cotter Joint Model 13 Sleeve Joint Model

### Strength of Materials Lab

No	Name of the Equipment's to be Procured	Specification
1	UTM	Capacity 1000 kN (10 ton) Model Computerized Systems consist of: Signal conditioner with indicator, Microprocessor
2	Rockwell Hardness Tester	Automatic weight selection with automatic zero setting dial gauge. Load- 10, 60, 100 and 150 kgf
3	Impact Testing Machine	Small-scale, bench-mounting, notched-bar impact tester is to be designed for conducting CHARPY, IZOD AND IMPACT Test. •Capacity: Up to 300Joules. • Release angle of Pendulum: 150 degree.
4	Fatigue Testing Machine	Light weight, compact size. Simple lever system for changing load. Key Specifications: Max. Bending Moment- 200kg/cm Testing Dia of Specimen-8mm

No	Name of the Equipment's to be Procured	Specification
<b>Thermal Engineering Lab</b>		
1	Model of Babcock & Wilcox Boiler	Water tube type boiler.
2	Model of Lancashire Boiler	The boiler is complete with valve and gauges.
3	Model of Turbine	De-Lavel Turbine (Velocity Compounded)

No	Name of the Equipment's to be Procured	Specification
<b>Fluid Mechanics &amp; Hydraulic Machines Lab</b>		
1	Pelton Wheel	Model of Pelton Wheel Model.
2	Kaplan Turbine Test Model	Model of Kaplan Turbine Test.
3	Francis Turbine Test Model	Model of Francis Turbine Test.
4	Cut Sectional Model of Reciprocating Pump	Model of Reciprocating Pump.
5	A. Manometer, B. Venturimeter, C. Orifice Meter D. Pitot Tube	

No	Name of the Equipment's to be Procured	Specification
<b>Material Technology Lab</b>		
1	Metallurgical Microscope	This microscope is used for the inspection of metallurgical samples & metal parts. Magnification: 500x-1000x
2	Models	Models of different mechanical structures

No	Name of the Equipment's to be Procured	Specification
<b>Workshop Practice -II</b>		
1	Lathe Machine	<ul style="list-style-type: none"> <li>• Height of Centre- 175mm</li> <li>• Distance B/w Centre – 750mm</li> </ul>
2	Mechanical Drive Shaper	<ul style="list-style-type: none"> <li>• Stroke- 305mm</li> <li>• length of Ram – 660mm</li> <li>• Working surface of Table – 300x228mm</li> <li>• Max Horizontal table Travel - 419mm</li> <li>• Max Vertical table Travel - 140mm</li> <li>• Angular Movement table – 600</li> </ul>
3	Pedestal Grinding Machine	<ul style="list-style-type: none"> <li>• Grinding Wheel Dia- 300mm</li> <li>• Grinding wheel Thickness -40(+/-2)mm</li> <li>• Grinding Wheel One Rough &amp; One Medium grade.</li> </ul>
4	Moulding Box	The cast iron Box Box Sizes: 400mm x 520mm
5	Accessories & Tools	Hand riddle, Shovel, Rammers, Sprue pin, Trowels & Bellows

No	Name of the Equipment's to be Procured	Specification
<b>Theory of Machine Lab</b>		
1	Cut section of Automobile Differential Gear box	Actual cut-Sectional model of four wheels
2	Sectional model of Four Stroke Four Cylinder engine assembly	The engine sectioning of maximum parts and accessories like Cylinder, Cylinder Head, and Valve ports, etc. Manual Driven Actual Cut Section Model
3	Gear Models	Single stage Spur Gear, Single stage Bevel Gear, Single stage Helical Gear, Rack & Pinion
4	Cam & Followers	Metallic Cam & Follower working Model

No	Name of the Equipment's to be Procured	Specification
<b>Metrology &amp; Instrumentation Lab</b>		
1	Vernier callipers	Analog Vernier Calliper: Chrome Finish, SS Thread Schedule with fine adjustment (Range: 150 mm, Resolution: 0.02 mm) Analog Vernier Calliper: Chrome Finish, SS thread Schedule with fine adjustment (Range 300 mm, Resolution: 0.02 mm)
2	Micrometer	Analog Micrometer: Analog micrometers to cover measuring range 0-25 mm, 25-50, and 50-75 mm, Resolution 0.01 mm
3	Three-wire Thread measuring system	Bench micrometer with 3-wire thread measuring system: Model 313-101: ranging pitch from 0.25 - 4 mm
4	Slip gauge or Johnsons gage block	M81 Grade 0 standard Slip gage or Johnsons gauge block made of steel with calibration Certificate
5	Sine Bar	Distance between the rolls: 150-250 mm; Diameter of rolls: 25-30 mm, Accuracy of length: $\pm 0.002$ mm
6	Spirit Level	

No	Name of the Equipment's to be Procured	Specification
<b>Auto CAD Lab</b>		
1	Auto CAD	Auto CAD Software (Educational Purpose-20user)

No	Name of the Equipment's to be Procured	Specification
<b>Automobile Engineering Lab</b>		
1	Model of Air Brake system (working)	The model is made out of Original parts such as Air compressor, Unloader valve, foot valve, Booster, Wheel assembly, air tank, control valve etc The Brake system will be fitted with two frontwheel assembly complete and the drum will be suitably sectioned to show the working of the brake shoe.
2	Sectional model of Steering Gear box with Wheel & Axle	This model is made out of full size original parts, suitably sectioned and to demonstrate the working of Steering wheel worms, Steering arm, etc.
3	Hydraulic Brake Chassis Trainer	Brake- Two Disc and two Drum. Unit should come complete with operational manual and student job sheets which provide detailed exercises.
4	Auto Repair Tool set with Tool Box	Long Ball Point Hex Key, Adjustable Wrench Extension Bar, Universal Joint, Spark Plug Socket, Sliding Bar, Through Screwdriver Slotted, Spinner Handle, Bits Slotted, Bits Hex, Bits Torx, Flat File, Aluminum Flashlight, Auto Voltage Tester, Knife, L-Type Wrench, Tire Gauge, L-Type Torx Wrenches, Punch Set & Tool Box size approx.: 505 x 360 x 90mm
5	Grease Gun	Capacity: 500cc Finish: Chrome plated Size app.: 352mm(L) x 62.5mm(D)
6	Oil Gun	Plug should be provided a flexible hose app. 330mm long Capacity app.: 500cc.
7	Carburettor	Actual Cut Section –Car Type
8	Carburettor	Actual Cut Section –Solax Type
9	Carburettor	Actual Cut Section –Scooter Type
10	Carburettor	Actual Cut Section –Motor Cycle Type
11	Fuel Injector	Actual Cut Section model

No	Name of the Equipment's to be Procured	Specification
<b>Refrigeration &amp; Air Conditioning</b>		
1	Air Conditioning Test Rig	Key Specifications <ul style="list-style-type: none"> <li>• Cooling Capacity–1.0 T</li> <li>• Refrigerant – R22</li> <li>• Condenser Cooling Fan – 1/10HP</li> </ul>
2	Refrigerator	Use to study Identification and location of refrigeration system and components in application systems as Household refrigerator. Hermetically Sealed Compressor. <ul style="list-style-type: none"> <li>• Storage capacity-190L</li> <li>• Energy Rating – 4star</li> </ul>
3	Refrigeration Tool set with Tool Box	Tube Cutter, Bending Tools, Flaring tools & Swaging Tools