

INDIAN INSTITUTE OF TECHNOLOGY GOA

At Goa Engineering College Campus
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GSTIN: 30AABAI1653D1ZF
PAN: AABAI1653D
TAN: BLRI08261B

Enquiry No: IITGOA/2018-19/091

Date: 04/02/2019

IIT Goa invites sealed quotations for the supply of below mentioned items.

Sl. No.	Description of Item	Qty
1.	Cam Analysis Apparatus (Detailed specifications attached)	01 No.
2.	Motorized Gyroscope Apparatus (Detailed specifications attached)	01 No.
3.	Static and Dynamic balancing Apparatus (Detailed specifications attached)	01 No.

Terms and conditions:

1. Quotation must be valid for at least 60 days.
2. The GSTIN should invariably be mentioned in your offer.
3. Kindly attach a compliance certificate along with the technical quote.
4. Prices should be quoted in Indian Rupees inclusive of taxes and any shipping charges.
5. Supplier should provide minimum two-years warranty for the above stated items.
6. The bidder should provide a list of the previous supplies of the similar/same range of equipments to IIT's/ NIT's/CFTI's/Institutes/Universities with contact details. Copies of the orders received need to be submitted.
7. Supplier should provide free delivery and installation at IIT Goa.
8. Delivery and installation should be made within 3 weeks of getting a confirmed order.
9. Payment: Within 30 days after the delivery and installation of the items at IIT GOA.
10. The suppliers shall provide the banking details along with their quote on their letterhead duly signed and stamped.
11. IIT Goa reserves the right to accept and/or reject any/all bids without assigning any reason.
12. For any clarification, you may kindly contact Dr. Ashish Bhateja (e-mail: ashish@iitgoa.ac.in) and Stores & Purchase Department (email: purchase@iitgoa.ac.in) till 12/02/2019.
13. All sealed quotations must reach to the Assistant Registrar (Stores & Purchase), IIT Goa, at Goa College of Engineering Campus, Farmagudi, Ponda - Goa by 17:00 Hrs on or before 18th February, 2019.

Sd/-

Asst. Registrar (S&P)

Technical Specifications

1. Cam Analysis Apparatus

- (1) The apparatus should be a bench-mounted product
- (2) Minimum three different types of Cams (Material: Alloy Steel with surface hardening)
- (3) Minimum three different types of followers (Material: Alloy Steel with surface hardening)
- (4) Minimum three compression springs (Material: Stainless Steel) with different spring stiffness values lying between 1000 N/m – 3000 N/m. Two sets should be supplied.
- (5) Minimum three weights (Material: Stainless Steel) with different values lying between 0.2 Kg and 1 Kg. Two sets should be supplied.
- (6) Camshaft material: Stainless Steel
- (7) Variable speed FHP DC motor drive. Maximum speed: 1500 RPM - 2000 RPM
- (8) Power supply: Should be compatible with 220 V/50 Hz power line.
- (9) Speed control unit with digital speed (RPM) display
- (10) One dial gauge for measuring lift
- (11) A detailed user manual clearly outlining the instructions/procedures for conducting the experiments must be provided.

2. Motorized Gyroscope Apparatus

- (1) The apparatus should be a bench-mounted product
- (2) Variable speed FHP AC/DC motor drive. Maximum speed: 5000 RPM - 6000 RPM
- (3) Speed control unit with digital speed (RPM) display
- (4) Power supply: Should be compatible with 220 V/50 Hz power line.
- (5) The apparatus should have a provision for accurately measuring the precession rate
- (6) Stainless Steel disc rotor. Diameter: 250 mm - 300 mm; Thickness: 10 mm - 12 mm.
- (7) A detailed user manual clearly outlining the instructions/procedures for conducting the experiments must be provided.

3. Static and Dynamic Balancing Apparatus

- (1) The apparatus should be a bench-mounted product
- (2) Variable speed FHP AC/DC motor drive. Maximum speed: 5000 RPM – 6000 RPM
- (3) Speed control unit with digital speed (RPM) display
- (4) Power supply: Should be compatible with 220 V/50 Hz power line.
- (5) Four Stainless Steel balancing weights with a provision for changing the amount of unbalance
- (6) Rotating shaft material: Stainless Steel
- (7) Provision for accurate measurements of the balancing weights' angular and longitudinal positions
- (8) **Optional accessories:** Transparent safety cover (Material: Acrylic glass, thickness: at least 6 mm) integrated with the apparatus
- (9) A detailed user manual clearly outlining the instructions/procedures for conducting the experiments must be provided.