



# भारतीय समुद्रीय विश्वविद्यालय Indian Maritime University

(केन्द्रीय विश्वविद्यालय, भारत सरकार / A Central University, Govt. of India)  
कोलकाता परिसर / Kolkata Campus

No. IMU-KC/Mechanical Lab/18-19

Date: 12.09.2018

Sub: Quotation for procurement of Mechanical Lab. Equipments at IMU-Kolkata Campus

Sealed quotations are invited for one following Mechanical Lab. Equipments for at IMU-Kolkata Campus:

Sl. No.	Equipment	Specification	Quantity
01.	To determine Hydrazine content of boiler water	Range 0-5 mg/ Ltr of Hydrazine.	01 Set
02.	Boiler water tests and kits as found in latest types of ships	Hardness Total LR- 0 – 50ppm Alkalinity P,M,OH - 0 to 2,400ppm Chloride - 0 – 3,000ppm Sulphite- 0 – 150ppm Phosphate - 0 – 80ppm pH – 0 to 14	01 Set
03.	Study sludges and scale deposit – Silica, volatile and non-volatile suspended matter	Range - 0 to 40 mg/L (ppm) SiO <sub>2</sub> ; 0 to 800 mg/L (ppm) SiO <sub>2</sub> Resolution - 1 mg/L (0 to 40 mg/L range); 40 mg/L (0 to 800 mg/L range)	01 Set
04.	To determine Absolute Viscosity and Kinematic Viscosity of Heavy oil, Diesel oil, Fresh Lubricating Oil & Used Lubricating oil by Red Wood Viscometer	220V,50 HZ,AC SUPPLY/50 ML capacity, rating-IP70	01 Set
05.	To determine the Flash Point of a given sample of Fuel & Lubricating oil	Semi automatic,220v, IP-34/ASTM D-93 & IS 1209-1978 Method B.	01 Set
06.	To determine water content of used Lubricating oil	Range 0 - 10% Range 0.02 - 1.0% Range 200 - 10,000ppm Range 0 - 20%	02 sets
07.	Conduct spot test for L.O and analyse result	Spot testing kit ppm of range from 15 to 30	01 Set
08.	To determine the percentage of CO <sub>2</sub> . CO and Oxygen in the flue gases	CO – 0.2000 ppm (IR Sensor) CO <sub>2</sub> – 0.1000%(IR Sensor) O <sub>2</sub> – 0.25% (Electrochemical Sensor)	01 Set

Sl no	Reagent Required	Qty
1	Wanklyn's soap solution	01 Ltr
2	Phenolphalein indicator	01 Ltr
3	Sulphuric acid (N/50)	01 Ltr
4	Dropper(Small+Big)	15 Nos. + 15 Nos.

Bidders are requested to submit their rates in the following format:

Sl. No.	Name of Items	Quantity	Rate per unit (in Rs.)	Applicable Taxes per unit	HSN Code	Total rate per unit (including taxes)	Total amount (Rs.)
A	B	C	D	E	F	G = D+E	H = C x G

**Terms & Conditions:**

1. Bidders are to quote their rates strictly as per above format in their letterhead with official stamp and signature.
2. The rates quoted should be inclusive of delivery but excluding Taxes which should be stated separately as mentioned above.
3. The bidder should submit the GST certificate.
4. Items should be delivered preferably within 4 (four) weeks of placing order.
5. Rate quoted should be valid for a period of two months from the last date of submission of quotation. IMU-KC may place further orders during the said period depending on requirements.
6. Bidders are requested to contact Shri Tapas Kr. Barua, Section-In-charge (Lab.) of IMU-KC during 10:00 Hrs & 16:00 Hrs on working days for any clarification regarding the required materials.
7. Submission of multiple bids by a single firm will lead to rejection of the bids and IMU-KC may black list such firms from future participation.
8. Last date of submission of quotation is 03.10.2018.
9. The quotation is to be submitted in sealed envelope clearly subscribing "Quotation for Mechanical Lab Equipments".
10. The envelope should be addressed to the Director, Indian Maritime University, P – 19 Taratala Road, Kolkata — 700 088 and is to be deposited in tender box kept at Dy. Registrar's office (1<sup>st</sup> floor, Room No. 130) or to be sent by post within due date and time.
11. Payment will be made through Bank Transfer after successful delivery of the items and their acceptance.
12. The envelopes are to be sealed properly with gum and not by stapler pin.
13. The order can be split, if felt required, by IMU-KC.
14. Expiry date or for best use before due dates of chemicals, if any, should have at least 1 year validity.
15. Preference will be given to bids with equipments/items with greater warranty period.

*Anushir 12/9/18*

O.I.C. - Purchase