



Indian Institute of Science (IISc)
Bangalore – 560012
(www.iisc.ac.in)

NOTICE INVITING TENDER

under the two-cover bid system

for

**Supply of High School Science Experimental Kits for Physics IISc, Challakere
campus, Khudapura 577536**

Tender No: IISc/CHAL/KIT 1/2022

Date: 4th January 2022

Contact Details for this tender:

The Convener

HAL-IISc Talent Development Center Office

Indian Institute of Science

Bangalore – 560012

Tel : 080- 2293 2498

Email: office.cec@iisc.ac.in

Indian Institute of Science, Bangalore

Tender Inviting Authority: The Registrar, Indian Institute of Science, Bangalore -560012

Title of the Tender: Supply of High School Science Experimental Kits

(Physics) for IISc, Challakere

Tender Ref. No.: IISc/CHAL/KIT 1/2021,

Date: 4th January 2022

IISc, Challakere is interested in purchasing Science Experimental Kits for its Challakere Kudapura Campus. The required technical details including terms and conditions are provided below. Please send us technical and commercial quotes in separate sealed envelopes addressed to The Convener, Office of HAL-IISc Talent Development Center, Indian Institute of Science, Bangalore-560012, by 5 pm on 31st January 2022.

A. Item Details and its Technical specifications:

The item must consist of the following details (Complete technical details and quantity):

1. Supply of High School Science Experimental Kits (Physics) as per enclosed specifications.
2. The financial bids must be given in separately sealed covers for the above item respectively.

B. Eligibility Criteria and Terms & Conditions:

1. Please refer to GOI notification on make in India No. P-45021/2017-PP (BE-II), Government of India, Ministry of Commerce and industry, Department for Promotion of Industry and internal Trade, (Public Procurement Section) Dated: 16th September 2020. The bidder has to comply with those rules.
2. Payment terms after the Satisfactory supply of kits.
3. The vendor chosen as L1 should be able to supply 30 kits to IISc Challakere Campus and 15 kits to Orissa Government High Schools.
4. Place of delivery of bids : The Convener, Office of HAL-IISc Talent Development Center, Challakere Campus, Kudapura.
5. The bid should be submitted in the two-cover system, i.e. technical bid and commercial bid separately in sealed covers. The technical bid should contain all Technical requirement

except the price. The bids should be valid for at least 90 days from the last date of submission of the quotation.

6. The bidder must be either Indian OEM (Original Equipment Manufacturer) or its authorized Indian distributor /dealer/manufacturer of the make mentioned in the tender document and for which they are quoting. Valid certificates must be attached.
7. The bidder must have valid GSTIN. Valid certificate must be attached.
8. The bidder shall have minimum turnover of **Rs. 30 Lakhs/per annum** during the last 05 financial years (2016-17 to 2020-21). The vendor must attach last 05 years balance sheet along with CA certificate.
9. Vendor must quote for all line-items.
10. IISc will have absolute right to modify / cancel this tender and accept / reject any bid.
11. Late submission of bids is not permitted.
12. Successful bidder will be decided based on of overall (grand total of all items taken together) Lowest (L-1) of Price Bid of technically qualified bids.
13. The vendor should have an office and warehouse in Bangalore.
14. The lead time for the delivery of the kits should not be more than ONE month from the date of receipt of our purchase order. It should be clearly mentioned in the technical and commercial bids.
15. All the quotations must be valid for at least 90 days from the last date of tender submission.
16. List of customers and references: The Bidder should have supplied similar items in Central Universities preferably in centrally Funded Technical Institutes (IITs, IISc, IISER, NIT). Please provide all the details (eg: PO supplied to such institution) and contact information (name, email, mobile numbers)..
17. The Bidder must not be blacklisted/banned/suspended or have a record of any service-related dispute with any organization in India or elsewhere. A declaration to this effect should be provided.
18. Items in addition to that listed in the technical table that you would like to bring to our attention, such as data sheets, technical details etc. can be listed at the end of the compliance table.
19. Vendors are encouraged to highlight the advantage of their products over comparable products from the competitors.

20. The quoted cost must include packing, freight, loading, unloading, and on FOR- IISc Bangalore basis.

21. The Vendor who is capable of supplying all the above mention items(Physics) will be technically qualified.

Item Details and Technical Specification

For Physics Kit

SL No.	Items	Quantity	Specifications	Yes/No	Remarks
01.	Digital Balance	1 No	Digital Balance: 600g capacity; 10mg resolution with battery backup.		
02.	Digital Caliper	1 No	Stainless Steel: 150mm length; Least count:0.01mm.		
03.	Pro-pipette	1No	10 ml capacity		
04.	Beaker	2 No	Glass 50 ml capacity		
05.	Thread	1 No	sewing thread - small		
06.	Rectangular block of Metals: (Al, Cu, Fe, brass) each	1 No	Rectangular block: Length 25 mm breath 15 mm height is 11.5 mm		
07.	Cylinder of Metals: (Al, Cu, Fe, brass): Each	1 No	Cylinder: height 20 mm, diameter = 10 mm		
08.	Sphere:	1 No	Stainless Steel, diameter = 15.50 mm		
09.	Metallic bob:	1 No	Material: Stainless steel, 33 mm diameter with hook		
10.	Stand with clamp	1 No	Good quality clamp stand. Iron Stand 75 cm height from the base (retort stand). Stand should contain clamp to hold split halves cork		
11.	Split halves of a corkwith plane faces	1 No	Material: Rubber		
12.	Fine cotton thread	1 No	Cotton Piping Thread 40 m in length		
13.	Digital stop watch	1 No	Resolution: 0.01sec;100 sec total time		
14.	Meter scale	1 No	Material: wooden		
15.	Springs	1 Set	Two types of spring: iron spring: length 12 and 10 cm, spring diameter 20 and 17 mm, wire diameter 1 and 0,8 mm Spring constant k value: 12Nm ⁻¹ – 15Nm ⁻¹		
16.	Weight hanger	1 No	Weight: 100 g x 5 Nos,		
17.	Stand with ruler in cm	1 No	Heavy base stand. Stand height: 70cm (for spring constant)		

18.	IR sensor with digital Timer	1 No	Digital timer: 0.0001s to 9999.9s; Time Resolution: 100 μ s;		
19.	Solid metal sphere:	1 No	Stainless Steel, diameter = 20mm		
20.	Adjustable inclined plane (metatype)	1 No	Travel length: 50cm		
21.	Stand with Launcher	1 No	Adjustable height metal stand; Adjustable angle: 0 - 90 deg; Spring loaded launcher. Spring constant K value between 350 to 400 Nm ⁻¹ .		
22.	Metal sphere (ball)	1 No	Material: Stainless steel, diameter = 15mm		
23.	Meter scale	1 No	Wooden, 1 meter		
24.	Two tuning forks (512 and 480 Hz) with cork each	1 No	Aluminium tuning forks. 16 cm length, 2.5 cm breadth, 1 cm height		
25.	Tall measuring cylinder	1 No	Plastic, tall 1 litre		
26.	Open ended pipes with scaling	1 No	Stainless steel columns with graduation. Length = 30 cm and 60 cm		
27.	Digital Thermometer (0.1 °C) with Pt100 sensor	1 No	High accuracy digital type; -200 to +600°C range; AC operated type which doesn't require battery replacement		
28.	4 types of rods: Cu, Al, Brass, Fe each	1 No	Metal rods size: 8mm(dia) x 15cm (length)		
29.	spirit lamp	1 No	Glass spirit lamp with steel lit (100 ml fuel capacity)		
30.	Copper coil	1 No	10-15 Ω resistance with banana plugs.		
31.	Thermistor	1 No	10 Ω with banana plugs.		
32.	250 ml beaker	1 No	Material: Glass		
33.	Glass stirrer	1 No	Material Glass, 6 inch length, 7 mm diameter		
34.	Adjustable angle inclined plane	1 No	Inclination of adjustable angle $\theta = 0-30^\circ$ in steps of 5°		
35.	Digital timer with IR sensors	2 No	Adjustable sensor position: 10-50 cm Two adjustable IR sensors fixable in the range 0 to		

			50 cm with digital timer display. High speed timer with 100 μ s resolution		
36.	Metal sphere (ball).	1 No	Material: Stainless steel, diameter = 20mm		
37.	Bar magnets	2 Nos	Size: 51 mm x 7.5 mm x 12 mm		
38.	Small magnetic compass	2 Nos	20mm small compass for easy marking		
39.	Good quality drawing board	1 No	Size: 45cm x 60 cm		
40.	Drawing board and pins	1 box			
41.	Deflection Magnetometer board	1 No	1 meter length with fixable options of 4 inch magnetic compass at the centre.		
42.	Big magnetic compass	1 No	4 inch magnetic compass		
43.	Plane mirror	1 No	Size: 100 mm x 100mm x 2 mm		
44.	Protractor	1 No	Plastic		
45.	Ruler	1 No	Plastic 30 cm		
46.	Flint white glass slab	1 No	Size: 77 mm x 50 mm x 20 mm		
47.	Glass prism	1 No	Extra Dense Flint prism 32mm x 32mm size with one side opaque.		
48.	Optical bench	1 No	Metal type comprising Bright LED source (9 W) with IISc logo image .. Adjustable lens holder and image stand Powder coated metal channel wooden scale on either side and image screen. The size of adjustable lens holder and powder coated metal channel are according to the optical bench dimension. Metal optical bench should be 1 meter in length		
49.	Convex lens	1 No	Glass, 2 inch diameter, f = 10 cm, 15 cm		
50.	Concave lens	1 No	Glass, 2 inch diameter, f = 10 cm, 15 cm		
51.	Convex mirror	1 No	Glass, 2 inch diameter, f = 10 cm, 15 cm		
52.	Concave mirror	1 No	Glass, 2 inch diameter, f = 10 cm, 15 cm		
53.	Digital Voltmeter, Digital Ammeter with Bourns potentiometer; Easy plug-in Resistors	1 No	Digital Voltmeter: 0-20V; 10mV Resolution; Digital Ammeter: 0-200mA Resolution: 100 μ A Voltage adjustability:		

			10 Turn Bourns potentiometer.		
54.	Components Demo board	1 No	Transistor, Diode, LED, Resistor, Capacitor		
55.	Carbon Resistors values: Each 300 numbers		100 Ω , 220 Ω , 470 Ω , 560 Ω , 1000 Ω . (all are $\frac{1}{4}$ Watt)		
56.	Digital Multimeter (3½ digit) Multi-Range	1 No	Digital Multimeter: V830A (Voltage-Current-Resistance-Continuity-Diode)		
57.	6 V Power supply (not variable) with bulb board	1 No	Easy to fit or remove bulbs with holders; three 6.2 V bulb with holder. Voltage measurement across bulbs possible.		
58.	Meter bridge board	1 No	Size: 1 meter length meter bridge board.		
59.	Metal wires (Cu, Fe, Kantal), Each	1 No	Cu wire (0.38 diameter) of 5 meter - 4 to 6 Ω ; Fe wire (0.5mm diameter) of 5 meter - 4 to 5 Ω ; Kanthol wire (0.5 dia meter) of 0.5 meter-100 to 120 Ω . (Kanthal - An alloy of Fe Cr Al)		
60.	Standardresistance box, DC power Supply, galvanometer, Jacky	1 No	Precision resistance up to 10 Ω in steps of 1 Ω , Integratedbox for all controls		
61.	CD Grating	1 No	1 inch x 1 inch DVD disc		
62.	CFL lamp	1 No	11 Watt CFL bulb		
63.	Mechanical mount with view port, mains cable	1 No	View port with slit; operates on AC230V mains		
64.	Glass Prism	1 No	1 inch x 1 inch x 1 inch		
65.	LED lamp	1 No	Bright light(LED bulb of 4W)		
66.	Mechanical mount with prism table, mains cable	1 No	Adjustable prism table and source; image screen stand: 19 x 14 cm along with base.		
67.	Absolute pressure sensor	1 No	Pressure Range:15 – 115 kPa; Resolution:0.1kPa. Integrated silicon sensor with temp. Compensation. + 2.5% full scale error; Digital readout		
68.	DC power supply	1 No	0-200mA Adjustable Current SourceResolution: 100 μ A. 10 Turn Bourns potentiometer.		
69.	Acrylic tub	1 No	Dimension 15 cm x 15 cm x 15 cm cuboid,		

70.	Measuring cylinders	1 No	Graduated Glass cylinders (25ml) and 1cm breadth x 7 cm length,		
71.	Metal strips	1 No	1 mm thickness of Nickel strips		
72.	Electrical Conductivity Tester	1 No	9V Battery size PP3, stainless steel rod 1mm diameter and 5 cm length, 1 K Ω carbon Resistor, Red colour 5mm 2mA LED		

Other requirements (as appropriate):

1.	Kit should be packed in transportable condition with individual items picture with name
2.	The cost of shipping to IISc, Challakere Campus should be included.
3.	One kit should be produced for approval
4.	The payment terms will be specified in the commercial proposal which should be consistent with IISc's domestic purchase policies.

Important Dates: -

IISc Tender for Supply of High School Science Experimental Kits for IISc Challakere campus

Date of publication of tender	January 4, 2022
Last Date of pre-bid query to be sent by email only to: office.cec@iisc.ac.in	January 12, 2022 5 pm
Pre-bid meeting (Online)	January 18, 2022 (time will be intimated to vendors who request for a pre-bid meeting)
Last date & time of submission of bids	January 31, 2022 5 pm
Opening of Technical Bids	February 2, 2022 11 am
Opening of Price Bids (Price Bids will be opened of only those bidders, whose technical bids will be declared qualified by the Technical Committee of IISc for the procurement. Decision of the Committee will be final and binding.)	This date will be intimated to technically qualified vendors after scrutinizing the technical bids

Note: IISc will have absolute right to change the date / time.

Contact Details for this tender:

The Convener
Office of HAL-IISc Talent Development Center
Indian Institute of Science
Bangalore - 560012
Tel : 080- 2293 2498
Email: office.cec@iisc.ac.in



Technical Bid

Techno-Commercial Compliance Sheet - 1

Sl. No.	Eligibility Criteria	Fulfil this criterion (Yes / No)	Details and Proof Attached on page no.
1.	The bidder must be either Indian OEM (Original Equipment Manufacturer) or its authorized Indian distributor/dealer of the make mentioned in the tender document and for which they are quoting. Valid certificates must be attached as per the OM		
2.	The bidder must have valid GSTIN. Valid certificates must be attached.		
3.	The bidder shall have minimum turnover of Rs. 30 Lakhs/per annum in any three years during the last 5 financial years (2016-17 to 2020-21). The CA certificate to be attached.		
4.	Minimum Warranty of Two Years		
5.	List of customers and references: The Bidder should have supplied similar items in Central Universities preferably in centrally Funded Technical Institutes (IITs, IISc, IISER, NIT). Please provide all the details (Eg: Po supplied to such institution) and contact Information.		
6.	The Bidder must not be blacklisted/banned/suspended or have a record of any service- related dispute with any organization in India or elsewhere. A declaration to this effect should be provided.		
7.	Items in addition to that listed in the technical table that you would like to bring to our attention, such as data sheets, technical details etc. can be listed at the end of the compliance table.		

Technical Bid (BOQ)

Techno-Commercial Compliance Sheet – 2

Details of Make / Model /quoted (Only can be quoted by one vendor): -

Sl. no.	Item	Unit	Qty.	Make / Model) (only one model should be clearly mentioned here)
1.	Supply of High School Science Experimental Kits for Physics as per enclosed specs.	Nos.		

INDIAN INSTITUTE OF SCIENCE,
BANGALORE

PRICE BID

(to be submitted by the bidder in separate sealed cover superscribed as
Price Bid)

Name, GSTIN & Address of the Bidder:

Name of work: Supply of Physics for IISc Challakere kudapura campus.								
Sl no.	Item of work	Unit	Qty.	Basic rate per unit (in INR)	GST Rate in 5 %	Total rate Per Unit with GST (in INR)	Total amount (INR)	Make / Model (only one model should be clearly mentioned here)
			"A"	"B"	"C"	"D"	A * D	
1	Supply of High School Science Experimental Kits (Physics) as per enclosed specs	Nos.						
Grand Total Amount in Figures in INR (Rs.)								
Grand Total Amount in words in INR (Rs.)								

Note: 1. The quoted cost must include packing, freight, loading, unloading, and on FOR-IISc Bangalore basis.

2. All pages must be properly sealed (stamped) and signed by the bidder with name & date.
