

BID DOCUMENT

NATIONAL COMPETITIVE BIDDING

FOR

SUPPLY, INSTALLATION, COMMISSIONING & MAINTENANCE OF
APPLIED THERMODYNAMICS LABORATORY EQUIPMENT OF
MECHANICAL ENGINEERING
FOR

I.K.G.PUNJAB TECHNICAL UNIVERSITY, KAPURTHALA AND
ITS OTHER CONSTITUENT CAMPUSES (PUNJAB)

Bid No. : EdCIL/PROC/PTU-2017/LAB-MTECH-MECH/MECH-PKG1/1

PART-II- FINANCIAL BID



EdCIL (India) Limited

(A Govt. of India Mini Ratna Enterprises)

'EdCIL House', Plot No. 18A, Sector- 16A

NOIDA – 201301 (UP), INDIA

Tel: 0120 – 2512001-006, FAX: 0120-2515372

Dated: 09.06.2017

This document serially numbered from page number 01 to 15.

FINANCIAL BID
Instructions to Bidders

1. Financial Bid shall be submitted with full price details.

Financial Bid shall contain only the prices duly filled in as per the format given in Schedule of Rates provided in the tender document. Price bid should not have any Commercial and/or Technical stipulation in addition to, what is already given in Part I – Technical bid.

Financial Bid Standard Forms (Form-1, Form-2A and /or Form-2B) shall be used for the preparation of the price quote according to the instructions provided.

2. **The Bidder should quote for all the Laboratory items / equipments listed in this document. In case, the Bidder/s does not quote for all the Laboratory items/Equipments, the Bid shall be treated as incomplete and shall be rejected summarily.**
3. The Items / equipments to be supplied / delivered / installed / commissioned at various locations of IKGPTU Campuses is as shown in the enclosed Annexure VI. The rate shall be inclusive of all taxes, octroi, transportation (as per the location), packing, loading and unloading (as designated location), Insurance etc. and nothing shall be paid extra.
4. The bid shall be evaluated on total value of all Laboratory items/Equipments as shown in summary and supply order shall be placed to a bidder as a composite bid.
5. The prices quoted by the bidder shall be fixed for the quantity mentioned for the duration of the contract and shall not be subject to adjustment on any account. Price should be firm for any positive or negative variation in quantities up to 100%.
6. The changes displayed in the corrigendum/addendum to the bid documents, particularly with the financial bid should be attached with the financial bid submission, in the same packet, duly signed and stamped by the authorized signatory of the Bidder firm.

FINANCIAL BID SUBMISSION FORM

To:

Chief General Manager (EIS & EPS)
EdCIL (India) Limited
EdCIL House, 18 A, Sector-16 A
NOIDA – 201301 (U.P.), India

Dated: ____/____/2017

Dear Sir,

We, the undersigned, offer to provide “SUPPLY, INSTALLATION , COMMISSIONING & MAINTENANCE OF APPLIED THERMODYNAMICS LABORATORY EQUIPMENT OF MECHANICAL ENGINEERING” in accordance with your Request for Proposal dated ____/____/2017.

Our attached Financial Bid is for the amount of _____ *[Indicate the corresponding to the amount(s), currency(ies) {Insert amount(s) in words and figures}]*.

Please note that all amounts shall be the same as in Form-1. Our Financial Bid shall be binding upon by us subject to the modifications resulting from Contract negotiations, if any, up to expiration of the validity period of the Proposal.

We remain,

Yours sincerely,

Authorized Signature {In full and initials}:

Name and Title of Signatory:

In the capacity of:

Address:

E-mail:

FORM-1**SUMMARY OF FINANCIAL BID**

S. No.	Description	Amount (exclusive of Tax) (Rs.)	Tax (Rs.)	Amount (Inclusive of Tax) (Rs.)
A.	APPLIED THERMODYNAMICS LABORATORY EQUIPMENT (Form-2A and/or Form-2B)			
B.	Comprehensive Annual Maintenance (Annexure-IV)			
	Total (Rs.)			
Total Price Bid (exclusive of taxes) (in Words)				
(Rupees.....)				
Total Price of Bid (Inclusive of taxes) (In Words)				
(Rupees.....)				
Signature of bidder				
			
Name & Address				
			
			
Note :	Date			
			
i)	<i>Discount or any other offers affecting the package price must be mentioned here only. Discount or any other offers affecting the package price mentioned at any other place of the bid will not be considered.</i>			
ii)	<i>In case of discrepancy between unit price and total price, the unit price shall prevail.</i>			
iii)	<i>Bids shall be evaluated based on total price without taxes.</i>			

**FORM-2A
(FINANCIAL BID)**

PRICE SCHEDULE FOR GOODS TO BE IMPORTED

ANNEXURE – I

Date:

Name of the Department:

Name of the Laboratory:

(A) Price Schedule: (Format used for imported items)

S.No.	Currency	Description and Specification of the Item	Qty. in Units	Unit Price	Agency Commission (If applicable)	Discount	Ex-works price	Packing + Handling + DOC + Inland Freight + Insurance	CIF price	Insurance + Freight	CIP Price	Total Price
			(a)	(b)	(c)	(d)	(e)=(b+c-d)	(f)	(g)=(e+f)	(h)	(i) = (g+h)	(j) = (i*a)
				(i) In Figures: (ii) In words:								

Total Price of Bid (In Words)

Signature of bidder

Name & Address

Date

Note:

- The above financial template should be strictly followed. Any deviation from the above template (in terms of description and specification of the item) may debar the bidder at sole discretion of EdCIL.*
- Discount or any other offers affecting the package price must be mentioned here only. Discount or any other offers affecting the package price mentioned at any other place of the bid will not be considered.*
- In case of discrepancy between unit price and total price, the unit price shall prevail.*
- Bids shall be evaluated based on total price including all charges as CIP Price.*
- CIP - Carriage and Insurance Paid to (named place of destination):** The seller pays for the carriage of the goods up to the named place of destination and the seller is required to obtain insurance for the goods while in transit.*

FORM-2B

ANNEXURE-II

PRICE SCHEDULED FOR GOODS (INDIGENOUS / IMPORTED GOODS TO BE QUOTED IN INR)**Price Schedule: (Format used for indigenous items/ Imported Items).**

S.No.	Description and Specification of the Item	Qty. in Units	Unit Price in Rs.	Excise Duty % /Custom Duty	CST/ VAT %	Insurance other duties and taxes if any,	Packing and Inland Transportat ion	F.O.R Destination Price	Total Price in Rs. (Excluding Taxes)	Total Price in Rs. (Including Taxes)
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)=(b*a)	(i) = (g *a)
			(i)In Figures: (ii)In words:							
Total Price of Bid (In Words)										
Signature of bidder									
Name & Address									
Date									
Note: <ol style="list-style-type: none"> <i>The above financial template should be strictly followed. Any deviation from the above template (in terms of description and specification of the item) may debar the bidder at sole discretion of EdCIL.</i> <i>Discount or any other offers affecting the package price must be mentioned here only. Discount or any other offers affecting the package price mentioned at any other place of the bid will not be considered.</i> <i>In case of discrepancy between unit price and total price, the unit price shall prevail.</i> <i>Bids shall be evaluated based on total price including all charges as F.O.R Destination Price.</i> 										

ANNEXURE – III**COMPREHENSIVE ANNUAL MAINTENANCE CONTRACT PRICES SCHEDULE**

S. No.	Item Description	2 nd Yr.	3 rd Yr.	Total Comprehensive Annual Maintenance Contract for 2 years (2 nd year & 3 rd year) after warranty period of 1 year from the date of successful installation. (E= C+D)
A	B	C	D	E
1.	Equipment: Make: Model: Qty.: (Mention Total quantity from Annexure-VI)			
SUB-TOTAL(Rs.) (Carry forwarded to Summary)				
Sub-Total Price Bid (exclusive of taxes) (in Words) (Rupees.....)				
Sub-Total Price of Bid (Inclusive of taxes) (In Words) (Rupees.....)				
Signature of bidder			
Name & Address			
Note:	Date		
i)	<i>Discount or any other offers affecting the package price must be mentioned here only. Discount or any other offers affecting the package price mentioned at any other place of the bid will not be considered.</i>			
ii)	<i>In case of discrepancy between unit price and total price, the unit price shall prevail.</i>			
iii)	<i>Bids shall be evaluated based on total price without taxes.</i>			

Note:

- The above rates shall be included in computing the total cost of the equipments.*
- Agency to use separate sheet for each equipment/Item/package.*

DETAILED TECHNICAL SPECIFICATIONS:**ANNEXURE-IV****APPLIED THERMODYNAMICS LABORATORY:-**

S.No.	Name Of Equipment/Experiment	Name of equipment	
1.	Model of cut sectioned Petrol MPFI Engine assembly with Clutch and five speed gear box	Four Stroke, four cylinders, clutch, Gear box etc.	
		The engine should be fitted with the MPFI system	
		The entire system should be visualized as controlled electronically by the electronic control unit through its supporting sensors.	
2.	Two Cylinder 4 Stroke Water Cooled Diesel Engine Test Rig With Electric Brake Dynamometer	Test rig should consist of an CI Engine, dynamometer, fuel measuring, air intake measuring and various other arrangements	
		a. Type of Engine: Twin cylinder, four strokes, vertical water cooled, crank start, diesel engine developing 10 HP @1500RPM. (Kirlosker New)	
		b. Type of Loading :- Electric Brake Dynamometer	
		c. Torque Measurement: By Brake Drum and spring balances	
3.	Models of different boilers, mountings & accessories	Models of boilers	Smoke and water tube boilers,
			Low pressure water tube boilers,
			high pressure water tube boilers with super heater,
			Package and economic boilers,
			Coil boilers and steam generators, Cochran, Lanchashire, Babcock & Wilcox.
		mountings & accessories	Lever Safety Valve
			Spring Loaded Safety Valve
			Dead Weight Safety Valve
			Combined High Steam

			and Low Water Safety Valve
			Water Gauge Model
			Stop Valve Hopkinson Type
			Feed Check Valve
			Steam Injector
			Pressure Gauge
			Blow Off Cock
			Reducing Valve
			Fusible Plugs
			Anti-Priming Pipe
			Expansion Steam Trap
			Float Steam Trap
			Green Economizer
			Sudgen Super Heater
4.	Working Model of Boiler	Working Model of Fire tube and water tube Boilers.	
5.	Miniature steam power plant	Steam Turbine (1 KW) Coupled With Eddy Current Dynamometer,	
		Separating & Throttling Calorimeter	
		Steam Condensers	
		Condensers Cooling Water Pump Arrangement.	
		Oil Fired Fully Automatic IBR 300 Kg/hr Boiler (With Chimney) Working At 10 Kg/Cm ² along with Water Softener Combined Steam Piping With Aluminium Foil Covered Glass wool Insulation.	
6.	Four stroke 4 cylinder petrol engine with Morse test	<ul style="list-style-type: none"> Four Cylinder Four Stroke Water Cooled Vertical Petrol Engine to develop 10 HP @ 1500 RPM with electric dynamometer & facility to conduct the Morse test. 	
		<ul style="list-style-type: none"> Engine should be Brand new & with MPFI system. 	
7.	4 stroke Diesel engine test rig	4 stroke 4 cylinder Diesel engine with electrical generator and variable load measurement.	
		Engine should be Brand new & with CRDI system.	

8.	2 stroke petrol engine test rig	Petrol engine with rope break dynamometer and variable load measurement	
9.	Models of steam condensers and cooling towers	Standard Models of condensers	evaporative condenser,
			air-cooled condensers
		Standard models of cooling towers	closed circuit cooling tower
			steady state cooling tower
			package type
			field erected type
			industrial cooling towers

ANNEXURE-V

TECHNICAL COMPLIANCE REPORT:

APPLIED THERMODYNAMICS LABORATORY:-

S.N o.	Name Of Equipment/Experiment	Name of equipment		Numerical values or other specification	Whether comply Yes/No
10	Model of cut sectioned Petrol MPFI Engine assembly with Clutch and five speed gear box	Four Stroke, four cylinders, clutch, Gear box etc.			
		The engine should be fitted with the MPFI system			
		The entire system should be visualized as controlled electronically by the electronic control unit through its supporting sensors.			
11	Two Cylinder 4 Stroke Water Cooled Diesel Engine Test Rig With Electric Brake Dynamometer	Test rig should consist of an CI Engine, dynamometer, fuel measuring, air intake measuring and various other arrangements			
		b. Type of Engine: Twin cylinder, four strokes, vertical water cooled, crank start, diesel engine developing 10 HP @1500RPM. (Kirlosker New)			
		b. Type of Loading :- Electric Brake Dynamometer			
		c. Torque Measurement: By Brake Drum and spring balances			
12	Models of different boilers, mountings & accessories	Models of boilers	Smoke and water tube boilers,		
			Low pressure water tube		

			boilers,		
			high pressure water tube boilers with super heater,		
			Package and economic boilers,		
			Coil boilers and steam generators, Cochran, Lanchashire, Babcock & Wilcox.		
		mountings & accessories	Lever Safety Valve		
			Spring Loaded Safety Valve		
			Dead Weight Safety Valve		
			Combined High Steam		
			and Low Water Safety Valve		
			Water Gauge Model		
			Stop Valve Hopkinson Type		
			Feed Check Valve		
			Steam Injector		
			Pressure Gauge		
			Blow Off Cock		
			Reducing Valve		
			Fusible Plugs		
			Anti-Priming Pipe		
			Expansion Steam Trap		
			Float Steam Trap		

			Green Economizer		
			Sudgen Super Heater		
13	Working Model of Boiler	Working Model of Fire tube and water tube Boilers.			
14	Miniature steam power plant	Steam Turbine (1 KW) Coupled With Eddy Current Dynamometer,			
		Separating & Throttling Calorimeter			
		Steam Condensers			
		Condensers Cooling Water Pump Arrangement.			
		Oil Fired Fully Automatic IBR 300 Kg/hr Boiler (With Chimney) Working At 10 Kg/Cm ² along with Water Softener Combined Steam Piping With Aluminium Foil Covered Glass wool Insulation.			
15	Four stroke 4 cylinder petrol engine with Morse test	<ul style="list-style-type: none"> Four Cylinder Four Stroke Water Cooled Vertical Petrol Engine to develop 10 HP @ 1500 RPM with electric dynamometer & facility to conduct the Morse test. 			
		<ul style="list-style-type: none"> Engine should be Brand new & with MPFI system. 			
16	4 stroke Diesel engine test rig	4 stroke 4 cylinder Diesel engine with electrical generator and variable load measurement.			
		Engine should be Brand new & with CRDI system.			
17	2 stroke petrol engine test rig	Petrol engine with rope break dynamometer and variable			

		load measurement			
18	Models of steam condensers and cooling towers	Standard Models of condensers	evaporative condenser,		
			air-cooled condensers		
		Standard models of cooling towers	closed circuit cooling tower		
			steady state cooling tower		
			package type		
			field erected type		
			industrial cooling towers		

ANEXURE-VI**DETAILS OF EQUIPMENTS TO BE SUPPLIED AT VARIOUS IKGPTU CAMPUSES:**

S.No.	Name of the Equipment	Kapurthala	Batala	Bhikhiwind	Hoshiarpur	Quantity
1	Model of cut sectioned petrol MPFI engine assembly with clutch and 5 speed gear box	1	1	1	1	4
2	Two cylinder 4 stroke water cooled diesel engine test rig with electric brake dynamometer	1	1	1	1	4
3	Models of different boilers, mounting & accessories	1	1	1	1	4
4	Working model of boiler	1	1	1	1	4
5	Miniature steel power plant	1	1	1	1	4
6	Four stroke 4 cylinder petrol engine with morse test	1	1	1	1	4
7	4 stroke diesel engine test rig	1	1	1	1	4
8	2 stroke petrol engine test rig with electrical dynamometer	1	1	1	1	4
9	Models of steam condensers and cooling towers	1	1	1	1	4