

Volume-II

CENTER OF INNOVATIVE & APPLIED

BIOPROCESSING

DEPARTMENT OF BIOTECHNOLOGY

(Govt. of India)

Knowledge City, Sector-81, Mohali

FINANCIAL BID DOCUMENT



Construction of Parking Shed at Main Campus, CIAB, Knowledge City, Sector-81, Mohali.

TECHNICAL SPECIFICATIONS

1.0 STANDARD SPECIFICATIONS TO BE FOLLOWED

The work should be executed as per following CPWD specification and also the specification laid in tender document. In case, above specifications are not available for certain item, then the material should conform to ISI and BIS standards.

1.1 Civil Engineering Works

CPWD Specification 2009 Vol. I & II along with latest correction slips. These Specifications have replaced CPWD Specifications 1996 along with Correction Slips issued on them. These Specifications cover all types of Works. The specifications are available as a printed document issued by CPWD and also in soft copy PDF Format in CPWD website.

1.2 Electrical Engineering Works

- (A) CPWD General Specifications for Electrical Works Part I Internal - 2013.
- (B) CPWD General Specifications for Electrical Works Part II External - 1994.
- (C) CPWD General Specifications for Electrical Works Part IV Sub Stations – 2013.

The above specifications shall be read with upto date correction slips (if any).

(A) CIVIL WORKS

WORKMANSHIP FOR THE ENTIRE PLUMBING WORK.

The workmanship shall be best of its kind and shall conform to the specifications, as below or Indian Standard Specifications in every respect or latest trade practices and shall be subject to approval of the Engineer-in- Charge. All materials and/or Workmanship which in the opinion of the Engineer-in- Charge is defective or unsuitable shall be removed immediately from the site and shall be substituted with proper materials and/or workmanship forthwith.

1. Polycarbonate sheet

Polycarbonate sheet should be of double layered multiwall design/shape of minimum 12 mm thickness, with light & solar transmission of 75-80%, U value 3.56 W/msq K, self-extinguishing, UV & chemical resistant of colour including cutting, hoisting, sealing with appropriate sealant etc. The aluminium profiles shall be used for fixing of polycarbonate sheet. The sample of same should be got approved from Engineer-in- Charge before execution of work. The work should be carried out as per design/drawing by skilled workers. Shop drawing of same shall be got approved from Engineer-in-charge before execution of work. All the joints, connection points with structural members should be sealed properly with silicon sealants etc.

WARRANTY AND HANDOVER

The Contractor shall warrant that all plant, materials and equipment supplied and all workmanship performed by him to be free from defects of whatsoever nature before handover to the Engineer-in-Charge. All the Guarantee/Warranty certificates of all the items shall be in the name of Institute i.e., CENTER OF INNOVATIVE & APPLIED BIOPROCESSING (CIAB), Mohali.

HANDING OVER OF DOCUMENTS

All testing and commissioning shall be done by the Contractor to the entire satisfaction of the Engineer-in- Charge and all testing and commissioning documents shall be handed over to the Engineer-in-Charge.

NOTE: In case of any contradiction between the specifications, the contractor shall take the prior approval of the Engineer- In - Charge before executing the same at site.

LIST OF MAKES TO BE ADOPTED

S. No	Item	Make
1.	Cement	J K Lakshmi/ ACC/ Ultratech/ Ambuja
2.	Steel Reinforcement (TMT bars)	Tata/JSW Jindal/ Sail/Vizag
3.	Mild steel tubular/section work/Tubes	Jindal/Apollo/Tata/SAIL
4.	Enamel Paint	Asian Paint/ Berger/ICI
5.	Hot Dip Galvanized Iron	Tata/Jindal
6.	Polycarbonate Sheet	Tuflite/Gallina India/Lanax/Lexan

Note: - Any other material makes not mentioned above shall be ISI marked & got approved from Engg-in-charge

NAME OF WORK: - CONSTRUCTION OF PARKING SHED IN CAMPUS OF CIAB

ABSTRACT SHEET

S.NO	PARTICULARS	AMOUNT (In INR)
1	ESTIMATED VALUE OF WORK (INCLUSIVE OF TAXES, LABOUR CESS ETC)	Rs 13,38,523/-
2	PERCENTAGE (% AGE) QUOTE PLUS/MINUS (+/-) BY BIDDER ON ESTIMATED AMOUNT (IN FIGURES)	
3	PERCENTAGE (% AGE) QUOTE PLUS/MINUS (+/-) BY BIDDER ON ESTIMATED AMOUNT (IN WORDS)	
4	NET AMOUNT AFTER UN- CONDITIONAL PERCENTAGE REBATE OR QUOTE ABOVE ESTIMATED VALUE ((IN FIGURES)	
5	NET AMOUNT AFTER UN- CONDITIONAL PERCENTAGE REBATE OR QUOTE ABOVE ESTIMATED VALUE ((IN WORDS)	

Stamp & Signatures of bidder

BOQ for Construction of Parking Shed in CIAB, Main Campus

S.N.	Description of Item	Unit	Quantity	Rate	Amount
1	Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including getting out and disposal of excavated earth lead upto 50 m and lift upto 1.5 m, as directed by Engineer-in-charge. All kinds of soil cum	Cum	72.00	125.95	9068.40
2	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead upto 50 m and lift upto 1.5 m.	Cum	58.09	125.75	7304.47
3	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level				
a	1:5:10 (1 cement: 5 coarse sand (zone-III): 10 graded stone aggregate 40 mm nominal size).	Cum	4.02	4209.75	16906.27
b	1:3:6 (1 Cement: 3 coarse sand (zone-III): 6 graded stone aggregate 20 mm nominal size).	Cum	5.60	4927.00	27600.86
4	Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level				
a	1:1.5:3 (1 cement: 1.5 coarse sand (zone-III): 3 graded stone aggregate 20 mm nominal size).	Cum	4.29		
			1.09		
			5.38	6215.35	33440.72
5	Centering and shuttering including strutting, propping etc. and removal of form for all heights				
a	Foundations, footings, bases of columns, etc. for mass concrete	Sqm	67.16		
			11.34		
			78.50	193.95	15225.39

6	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level				
a	Thermo-Mechanically Treated bars of grade Fe-500D or more	Kg	700.00	56.60	39620.00
7	Steel work in built up tubular round hollow tubes including providing, cutting, hoisting, fixing in position and applying a priming coat and 2 Coat or more of Structure Enamel Paint of approved paint, including welding with base plate or ISA 4mm thick etc. complete as per Drawing and direction of Engineer				
a	Hot finished seamless type tubes nominal bore 25mm thick 2.46mm	Kg	88.56		
b	Hot finished seamless type tubes nominal bore 50mm thick 3.65mm	Kg	985.93		
c	Hot finished seamless type tubes nominal bore 90mm thick 4.05mm	Kg	2300.81		
d	Hot finished seamless type tubes nominal bore 175mm thick 5.40mm	Kg	3101.39		
			6476.69	93.90	608161.17
8	Providing and fixing of ISA and Plate steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete as per drawing and Direction of Engineer	Kg	200.00	67.60	13520.00
9	Providing 12mm thick multiwall polycarbonate sheet (Approved Color and Shade) solar transmission 80% & 85% with aluminium edge covering channel and 1" aluminum covering at joints fixed to purlin for roofing up to any pitch and fixing with polymer coated J, or L hooks, bolts and nuts 8 mm dia. G.I. plain and bitumen washers or with self-drilling fastener and EPDM	Sqm	285.00	1387.60	395466.00

	washers etc. complete (excluding the cost of purlins, rafters and trusses, Aluminum Covering), including cutting sheets to size and shape wherever required as per Drawing and direction of engineer				
10	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately)				
a	Anodised aluminium (anodised transparent or dyed to required shade according to IS:1868, Minimum anodic coating of grade AC 15)	Kg	50.00	355.20	17760.00
11	Providing and fixing Stainless Steel grade 304 Wire mesh of mesh size 25mm*25mm hole 16gauge firmly anchored to Steel Tubes with welded or bolting including the cost of materials, labour, tool & plants as approved by engineer-in-charge and drawing	Sqm	131.25	818.61	107442.56
12	Labour Charges for Laying 60mm thick factory-made cement concrete interlocking paver block of M -30 grade available at Site which dismantle during excavation of foundation, laid in required color and pattern over and including 50mm thick compacted	Sqm	72.00	265.70	19130.40

	bed of coarse sand, filling the joints with line sand etc. all complete as per the direction of Engineer-in-charge				
13	Dismantling Interlocking Paver Block in floors laid in cement mortar or Sand Filling including stacking material within 50 meters lead	Sqm	72.00	49.20	3542.40
14	Labour Charges for laying at or near ground level factory made kerb stone available at Site which dismantle during excavation of M-25 grade cement concrete in position to the required line, level and curvature, jointed with cement mortar 1:3 (1 cement: 3 coarse sand), including making joints with or without grooves (thickness of joints except at sharp curve shall not to more than 5mm), including making drainage opening wherever required complete etc. as per direction of Engineer-in-charge	Cumec	5.00	1258.24	6291.20
15	Dismantling existing fixed Kerb Stone near Ground level and stacking material within 50 meters lead	Cumec	5.00	958.25	4791.25
	Sub-Total				1325271.09
	Add 1 % labour cess				13252.71
	Net Total Amount				1338523.80

NOTE: - Payment shall be released item wise based on actual measurement examined at site by Engineer- In- Charge. Rate quoted shall be deemed to be inclusive of GST/other taxes.

Signature/Stamp of Bidder