

॥ सा विद्या या विमुक्तये ॥ ಭಾರತೀಯ ತಂತ್ರಜ್ಞಾನ ಸಂಸ್ಥೆ ಧಾರವಾಡ

भारतीय प्रौद्योगिकी संस्थान धारवाड

Indian Institute of Technology Dharwad

Near High Court, PB Road, Dharwad-580011 TEL NO: +91 836 2212 839

TENDER FOR DESIGN, MANUFACTURING, SUPPLYING, INSTALLATION, TESTING AND COMMISSIONING OF ONE NUMBER 10 PASSENGER ELEVATOR IN THE MAIN BUILDING ADMIN BLOCK AT IIT DHARWAD

Tender No.: IITDH/MMD/IPS/2018-19/02

INDIAN INSTITUTE OF TECHNOLOGY DHARWAD Near High Court, PB Road, Dharwad-580011 TEL NO: +91 836 2212 839

Name of work: Tender for design, manufacturing, supplying, installation, testing and commissioning of One number 10 passenger elevator in the Main Building Admin Block at IIT Dharwad, Karnataka.

Tender no.: IITDH/MMD/IPS/2018-19/02

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Tender no.: IITDH/MMD/IPS/2018-19/02

Nome of the mode	Tenden for design manufacturing annulating installation	
Name of the work:	Tender for design, manufacturing, supplying, installation,	
	testing & commissioning of One number 10 passenger	
	elevator in the Main Building Admin Block at IIT Dharwad.	
Type of Tender:	Open Tender	
Estimate Value:	Rs.25,00,000/-	
Cost of tender documents	Free of cost	
EMD:	Rs.50,000/- (DD/PO in favour of Dean, IIT Dharwad) to be	
	attached with the tender as separate sealed envelope.	
Issue of tender:	18 th January, 2019	
Pre-bid Meeting & Site Visit:	Date: 28 th January 2019	
	Time: 14:00 Hrs.	
	Place: IIT Admin Building Meeting Room	
Last date for submission of tender:	Date: 11 th February, 2019	
	Time: 10:00 Hrs.	
Opening of tender:	Date: 11 th February, 2019	
	Time: 10:30 Hrs.	
Contacting Authority:	Assistant Registrar	
	Near High Court, P B Road Dharwad-580011	
	E-mail: <u>armm@iitdh.ac.in</u>	
	Telephone: 91-836-2212-839	

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2. GENERAL CONDITIONS OF CONTRACT

Sealed tenders are hereby invited on behalf of the Indian Institute of Technology, (IIT) Dharwad, for the following work:

i)Description (Name of work)	Design, manufacturing, supplying, installation, testing & commissioning of one number10 passenger elevator in the Main Building Admin Block at IIT Dharwad
ii)Estimated cost	Rs.25,00,000/-
iii)Earnest Money Deposit	Rs.50,000/-
iv)Cost of tender documents	Free of cost
v)Time for completion	12 Weeks

2. QUALIFICATION CRITERIA:

Only those bidders fulfilling the following Eligibility Criteria should participate in the tender: -

- 2.1 The Bidder must be a reputed suppliers/manufacturers/authorized dealers/ authorized distributor/ authorized stockiest in the similar business of designing, manufacturing, supplying, installation, testing & commissioning of passenger elevator for a period not less than 5 years (i.e. must be in above said business from January 2014 or earlier). A certificate to this effect is required to be enclosed in the form of incorporation certificate/registration certificate etc.
- 2.2 The Bidder must have carried out minimum 5 or more similar works in reputed organizations/IITs/IIMs/Govt. offices/PSUs/Central Universities etc. during a period of last 5 years (i.e. must have successfully completed the work during January 2014 till date). Completion certificates etc. to this effect is required to be enclosed.
- 2.3 A Certificate/Undertaking on the letter head of the Company to the effect that the bidder/Manufacturer had not been blacklisted anywhere in India or abroad by any organization. A self-certification to this effect is required to be enclosed.
- 2.4 The Bidder should be registered with concerned statutory authorities for GST/Income Tax etc. The bidder should furnish relevant GST registration documents and PAN/TAN copies along with the bank details of the firm.

Any prospective bidder, not satisfying any of the above mentioned qualification criteria shall be disqualified on technical grounds and the price bid of such disqualified bidder will not be considered for this tender.

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3.Tender documents can be obtained from IIT Dharwad website: http://iitdh.ac.in/announcements_tenders.php

It may also be noted that Pre-bid discussion for this tender will be held on 28.01.2019 at 02:00 PM in the Meeting Room at IIT Admin building. It is requested that the interested bidders/firms may indicate their willingness to participate in the pre-bid meeting by sending an e-mail to the id pro@iitdh.ac.in for making suitable arrangements at the venue.

4. Tenders are to be submitted in a serially numbered & bounded manner. Tender should be placed in sealed cover super-scribed with the name of the work and the same will be put in the **tender box by the tenderer kept in Office of Assistant Registrar up to 10:00 hrs.** on or before 11.02.2019 and will be opened by Assistant Registrar or his authorized representatives in his office / any other place in the Institute at 10:30 hrs. on 11.02.2019 in the presence of such tenderer who desire to attend.

5.The Tenderers or their agents are expected to be present at the time of opening of tenders. The tender receiving Officer will on opening each tender, prepare a statement of the attested and unattested corrections therein and hand it over to the Tenderers concerned and initial all such corrections in the presence of the Tenderers. If any of the Tenderers or their agents find it inconvenient to be present at the time, then, in such case, the tender receiving Officer will on opening the tender of the absent tenderer make out a statement of the unattested corrections. The absent tenderer shall then accept the statement of corrections without any question whatsoever. It may also be noted that one representative from each firm holding the authorization letter will be allowed to attend the pre-bid, technical bid opening & commercial bid opening meeting.

6.Tenders must be submitted in sealed covers and should be addressed to Assistant Registrar Indian Institute of Technology Dharwad, Near High Court, PB Road Dharwad 580011. The name of the tenderer and the name of the work must be noted on the above. If an individual makes the tender, it shall be signed with his full name and his address shall be given. If it is made by a firm it shall be signed with the co-partnership name by a member of the firm, who shall also sign the own name and address of each member of the firm shall be given. If the tender is made by a corporation, it shall be signed by a duly authorized officer who shall produce with his tender, satisfactory evidence of his authorization. Such tendering corporation may be required, before the contract is executed to furnish evidence of its corporate existence.

7.Each tenderer must also send a certificate of income-tax verification from the appropriate income tax authority, in the form prescribed therefore. This certificate will be valid for one year from the date of issue for all tenders submitted during the period.

Income Tax PAN number & GST registration number is to be mentioned.

8. In the case of proprietary or partnership firm, it will be necessary to produce the certificate above mentioned for the proprietor or proprietors and for each of the partners as the case may be.

9.The tenderers should write in figures as well as in words for the rates quoted by them on the proper form of the tender. All corrections / over writings must be attested by the dated initials of the contractor. The tenderer is advised to avoid offering discount /rebate in the covering page or at the end of the schedule. Instead the same can be incorporated in the unit rate by reducing the unit rates. If at all offered, the discount / rebate percentage offered is to be written in words such as Five percent / point Five percent etc.

10.All tenders received without a certificate as above-mentioned will be summarily rejected.

11.a. The tenderer should submit the requisite interest free Earnest Money Deposit (E.M.D.) by

pay order or Demand Draft in favour of the **Dean, IIT Dharwad**. No other form of EMD such as Deposit at call receipt, Bank guarantee etc. is acceptable which may be noted. The same shall be submitted in a separate envelope marked as 1 detachable from the main envelope marked as 2 of the sealed tenders containing the prices (tender priced). Tenders not accompanied by the Earnest Money Deposit shall not be considered. The EMD of unsuccessful tenderers will be returned within one month of award of work. In case EMD exemption is sought under SME/MSME/NSIC, Valid certificate from MSME explicitly mentioning the tender work herein, is required to be submitted.

11.b. The contractor whose tender is accepted will be required to furnish security deposit for the due fulfillment of his contract. Security deposit shall be 10% (Ten percent) of the amount of work order for DLP (Defect Liability Period) of 24 months (Twenty-Four months) from the date of commissioning / handing over of the work. The Earnest money deposit paid at the time of tender, will be released after payment of final bill.

12. The full value of Earnest Money Deposit is to be absolutely forfeited to the Director, IIT Dharwad or his authorized representative, without prejudice to any other rights or remedies to the Director, IIT Dharwad or his authorized representative, if the contractor fails to commence the work within 30 days continuously from the schedule date of commencement specified.

13.Defect Liability period will be 24months from the date handing over the lift for IIT beneficial use.

14. No part of the contract shall be sublet without written permission of IIT Dharwad nor shall transfer be made to power of Attorney authorizing others to receive payment on contractor's behalf.

15.If further necessary information is required, Assistant Registrar of the Institute will furnish such information but it must be clearly understood that tenders must be received in order and according to instructions.

16.Assistant Registrar or other sanctioning authority reserves the right to reject any tender or all the tenders without assigning any reason therefore.

17. The Contractor shall comply with the provisions of all Acts, Statutes, Rules, Regulations etc. of the Central and State Government as the case may be that may apply to his case and if necessary, get himself duly registered as required by the said Acts, Statutes, Rules, Regulations etc.

18. The contractor for the work shall be liable to pay applicable tax (including Taxes on works contract to state Government) if any that may be levied by the State or Union Government. Any request contrary to this will not be accepted.

19.Agreement: Agreement for the contract is to be made in a non-judicial stamped paper of Rs.100/- by the successful contractor as per standard format of the Institute. However, till the same is signed, the tender, work order and the tender documents signed by the contractor will be a binding contract between the contractor and the Institute. It is therefore impressed upon all tenderers to fill up the tender properly duly signed in all pages with stamp including the witness wherever required. The successful tenderer is to make his own arrangement for making the preparation of the agreement document complete.

20.Completion period: 12 Weeks after handing over the work order.

21.Terms of payment:

The following percentage of contract rates for the various items included in the contract shall be Page 6 of 30

payable against the stage of work as shown herein.

- (i) 75% of contract value on receipt of all materials & equipment's at site in good condition against submission of an indemnity bond.
- (ii) 10% on completion of installation, testing & commissioning and certification by Office of Dean (IPS).
- (iii) 5% on taking over by IIT Dharwad along with all statutory documents.
- (iv) 10% after taking over by IIT Dharwad against submission of a Bank guarantee for equivalent amount from a Nationalized bank, with validity till the end of free maintenance period of 24 months.

The offer should be valid for 120 days from the date of opening for the purpose of issue of acceptance letter. The amount quoted must be firm and inclusive of all Duties, GST, Levies, etc. of any kind and inclusive of any kind of liability from / to any authority. There will be no extra payment or payment of escalation in the amount under any circumstances whatsoever.

22.Other Terms and Conditions:

It shall be open to the Institute to abandon or give up at any stage of the construction of any of the said works or any part thereof. In the event of such abandonment or giving up or in the event of termination of the agreement, the Contractor shall be paid up to the work performed till occurrence of such event.

23.Termination of contract

If the Contractor fails to perform any of his obligations under this agreement or if Institute is dissatisfied with the services of the Contractor, Institute may issue seven days' written notice intimating the Contractor of their failures or deficiencies and calling upon Contractor to rectify within such time as may be specified in the notice and if the Contractor fails to perform such obligation or make good such deficiencies

as pointed out to the Contractor in the notice, Institute may terminate the services of Contractor under this agreement. Institute may also terminate the Contract hereunder:

i)if the firm is adjudged bankrupt or

ii)if they make a general assignment for the benefit of their creditors or iii)if a receiver is appointed on account of their insolvency or

iv)they disregard law, ordinances, rules, regulations or orders of any public authority having jurisdiction on the works.

The termination shall be without prejudice to all rights, liabilities and remedies that have arisen or accrued till date of such termination or that may arise on account of such termination and Institute may get the project completed by whatever method they may deem expedient. In such case, the Contractor shall not be entitled to receive any further payment, if due, until the loss, damage or expense incurred by Institute due to breach of this agreement by Contractor have been settled.

In case the Contractor abandons the work during the course of the project, the Institute has the right to appoint an alternate Contractor or make an arrangement for carrying out the work of Contractor, at the risk and cost of the Contractor. Traveling / daily allowances shall not be payable to the Contractor, its representatives, officials and consultants engaged by it for their visit to construction site, offices of local authorities, Employer's office or any other place in Dharwad.

The scope of work broadly described herein and assigned to Contractor, as their area of responsibility is inclusive of all consultancy and other services required in connection with the completion of work whether specifically mentioned herein or not and rendering such consultancy services will not entitle the Contractor to charge any additional fees in as much as the same are included in the overall professional fees payable to them.

24.Liquidated Damages Clause:

If any delay in execution of the works is attributable to the acts or omissions and commissions of Contractor Institute shall be entitled to recover liquidated damages at the rate of 0.5% of the total fees per week of delay limited to maximum of 10% of the total actual fees payable.

25.Professional indemnity:

Contractor warrants that it shall exercise high degree of care and diligence in rendering the services pursuant to this agreement and that; such services shall be of a quality and standard satisfactory to Institute. The Contractor shall indemnify Institute from any damage or loss arising from such lack of care and diligence or arising out of any unsatisfactory performance of service by Contractor. The contractor is required to obtain a Contractor All Risk (CAR) policy for successful and safe completion of project. Contractor shall provide a copy of this policy to Institute showing that such insurance has been taken and being maintained and that all the premia thereon have been paid. A certified copy of such insurance policy shall be deposited with Institute.

26.Dispute Settlement:

In case of any dispute or difference arising between the parties during the progress of or after construction of this contract or touching or relating either to the said buildings or works, or to any other matter or thing arising directly or indirectly under this contract, then and in such an event the same shall be referred to Director, IIT Dharwad as the SOLE ARBITRATOR who shall alone consider and determine the same, whose decision / award shall be binding and conclusive upon both the said parties and this clause shall be deemed a submission within the meaning of Arbitration and Conciliation Act 1996 or Statutory modification or re-enactment thereof. It is specifically agreed that the Contractor shall continue to render its services provided herein with all the due diligence, professional skill and tact not withstanding that any matter, question or dispute has been referred to arbitration. The venue of Arbitration proceedings shall be Dharwad. It is further agreed between the parties as hereto that the Dharwad Courts alone shall have the exclusive jurisdiction.

27. Site:

The contractor shall remove all surplus materials, debris etc. out of the IIT Campus from the site of work on completion work and will hand over the site clean before the bill is processed for final payment. Dismantled materials if any (declared by Engineer-in-charge of the work) shall be returned to the Estate/ Electrical stores by the contractor at his own cost. The disposal of material shall be done in environmental friendly way and complying with the local rules and regulations.

28.Security

a. Movement of contractor's materials:

Any materials which are removed from the site of work and are required to be taken out from the IIT campus, the contractor should follow the following procedure:

The contractor shall apply in writing to the Engineer- in-charge the details of the materials to be removed including which are rejected etc. This application shall be endorsed by the engineer in charge or his authorized representatives. The materials shall only be allowed to go out of IIT campus after counter signature of the security officer and checked at the gate. No materials/tools will be allowed to be brought on holidays/Saturdays/Sundays inside the campus. Contractors can bring the materials/tools/between 0900 hours and 1700 hours on any working day (Monday to

Friday). This may please be noted.

b. Search:

Thorough search of all persons and transport shall be carried out at each gate and for as many times as gate is used for entry or exit and may also be carried out at any time or any number of times at the works site within the restricted area.

c. Working Hours:

The units controlling restricted areas usually work during five days in the week and remain closed on Saturday and Sundays. The working hours available to contractor's labour and staff are however appreciably reduced because of the time of entry and exit during working hours. The exact working hours, working days and non-working days observed for the restricted areas where works are to be carried out shall be deemed to have been ascertained by the contractor before submitting the tender. The tenderer's attention is invited to the fact that the total number of working hours for units are prescribed in regulations and no work beyond the prescribed working hours shall be permitted.

d. Entry and Exit:

The contractor, his agents, representatives, workmen, etc. and his materials, carts, trucks or other means of transport, etc. will be allowed to enter through and leave from only such gate or gates and at such times as the concerned authorized in charge of the restricted area may, at their sole discretion, permit. Contractor's authorized representatives, if required, are to be present at the places of entry and exit for the purpose of identifying his carts, trucks, etc. to the personnel in charge of the security of the restricted area.

e. Temporary Identity Permits:

The contractor or his representatives/site in charge, overseers and other regular staff are required individually to be in possession of identity cards or temporary entry permit which will be issued by the security section on the recommendation of the Project Engineer.

f. Labour Law:

The work will be executed strictly following the Labour Laws of Central Govt & State Govt as may be applicable.

29. Evaluation Criteria

<u>The L-1 will be decided on the Grand Total amount quoted for the work</u> (required as per Schedule of work/BOQ/Price bid format at page no. 30). All levies/taxes (i.e. GST etc.) must be clearly mentioned in the row provided for the purpose (as per format of commercial bid). No interim enquiries will be entertained after submission of bids.

However, the decision of the Competent authority will be final and binding in awarding the order. In case of any clarification required, the same can be clarified from IIT Dharwad before submission of the bids.

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Tender no.: IITDH/MMD/IPS/2018-19/02

Name of work: Tender for design, manufacturing, supplying, installation, testing & commissioning of one number 10 passenger elevator in the Main Building Admin Block at IIT Dharwad

Location: Main Building Admin Block at IIT Dharwad

<u>3. Technical Specifications</u>

	Specifications	Remarks of bidder
Application	Passenger, handicap friendly	
Туре	Machine Room less	
Motor	Permanent Magnet, Gearless,	
Capacity	680kg (10 passenger)	
level/stops	G+2	
Speed	1.0 meter per second with jerk less acceleration, deceleration and stopping with 3mm level accuracy	
Drive	Full Collective, AC VVVF Compatible for BMS	
Power supply	AC 400/440V, 3 phase and single phase, 50cycles/sec.	
Car design	Stainless Steel Hair Line finish of 304 Grade SS (Equivalent not accepted) or non-glossy finish Stainless steel	
Car door	Automatic glass door Centre opening Car door panels	
Vision panel	To be provided	
Car door protection	Multiband full height infra-red detector.	
Landing doors	Stainless steel Car door panels with vision panel. Door shall match to the Car door	
Direction & Position indicators	Large display LCD Car Position	
	Indicator in COP at lower height	
Car Flooring	Anti-skid flooring slip resistant material having a slip resistance value of 45–70 (optimally 50–65), as measured with 4S to sugar rubber on a pendulum test.	
Car lighting	Lighting levels in the lift are a minimum of 100 lux (approximately 50–75 lux at floor level and shall be confirmed using Luxmeter) (only LED fittings shall be used)	

Ventilation	Side corner blower ventilation	
	arrangement	
Travel	As per drg.	
COP suitable for physically handicap & Visually impaired	Protruding type Brail encrypted Car buttons at a height easily accessible by wheelchair bound or visually impaired passenger.	
Hall Fixtures	LED/LCD hall position indicators to benefit visually impaired and physically handicap users Hall lanterns with car arrival gong at a height not more than 1200mm from floor	
Car size of	As per standard	
door opening	As per standard (Centre)	
pit depth	As per standard – Available on site- 1.90mtrs. Internal Shaft Size – 1.85x2.15mtrs.	
overhead height	As per standard	
hoist way dimensions	As per standard	
entrance height	As per standard	
inside car height	As per standard	
Special features	Full Height 2D electronic cross beam detectors Large display LCD Car Position Indicator in COP at lower height Hand rails on three sides with height not more than 900mm from floor Voice announcement for all COP operations for visually impaired user Overload Warning with audio visual indicators Auto fan and Light Cutoff, Automatic Rescue Device. Door open/Door close button in car. IP Addressable CCTV provision in the lift 2MP, fixed dome type, 120dB WDR, ON board storage with 128GB memory stick, vandal proof housing for the Lift Cabin – This shall be integrated with the existing Surveillance system of the Institute. Anti-Nuisance Travel	

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Location: Main Building Admin Block at IIT Dharwad

4. PARTICULAR INSTRUCTIONS TO BIDDERS

TECHNICAL SPECIFICATIONS

1.IIT Dharwad proposes to erect one number 10 passenger elevator in the Main Building Admin Block at IIT Dharwad.

2. SCOPE

The scope of Bid is to cover design, manufacture, supply, install, test, commission, obtain all necessary statutory approval and maintenance of Lifts during the Guarantee Period in the Building complex as per the Bid documents and Bid drawings. The scope also includes minor Civil and Structural steel works connected with the installation of Lifts.

All electrical works connected with Lifts beyond power supply point shall also be included in the scope of the Bid as per this document. During the guarantee period of Two years after successful commissioning, handing over of Lift and taking over by the Employer, the Bidder shall carry out comprehensive maintenance of Lift free of cost. After this guarantee period, the Employer will reserve the right to enter into Annual Maintenance Contract as described in the Bid document.

The make of materials mentioned in the Bid document are indicative only and are, by and large, of Indian Origin. Any other equivalent product of International Repute will be acceptable subject to the products satisfying the specified Technical and Operational parameters and subject to prior approval of the Consultant / Employer.

Employer reserves the right to select different agencies for the above works and award the work either directly or through the Main Contractor by nomination as specified elsewhere in the Bid.

3. The equipment supplied and erected shall be in accordance to updated version of IS-4666/1968, 1860/1968 & 1980 and IS:14665-2001, IS:3534/1979. Fire protection requirement as per IS and local authority's requirement shall also be complied with. The Lifts in accordance with any other International Standards, which are superior than IS standard, shall also be considered.

4. The Bidder shall note the following in the Lift Service particulars covered herein.

a) Capacity & Numbers.

b) Travel height, number of stops and

openings. c)Type of Drive,

d) Type of Safety Gear, door safety

e) Type of Control and operation.

f) Interface leads to be left for Building Management / Automation System.

g) Amenities and finishes in Lift Car.

5. The Bidder shall furnish any other details relevant to the work and not covered in the Bid with financial bearing, if any, explicitly.

6.As the Bid documents shall form part of the Agreement, the provisions covered therein should be noted carefully and any deviation felt necessary therefrom shall be highlighted at the time of bidding only and not after. For this a statement of deviation, if any shall be prepared by Bidder and shall be enclosed in the first envelope super-scribed "Technical Bid". If no deviation is proposed, still this form shall be submitted with an entry "No deviation proposed". No deviation in commercial conditions is acceptable.

7. The Bidder shall give rates for all items given in the schedule of quantities.

8. The current statutory requirement as per Lift Rules of Local Authority as applicable shall be complied with, no extra payment shall be considered either due to escalation or amendments / modifications to Local Authority Rules issued during the contract period.

9.The Bidder/ Contractor shall be responsible to obtain necessary License from Lift Authority, Government of KARNATAKA

10. Terminal points:

The terminal point (s) Viz. Civil work and other services shall be as follows:

<u>Civil works:</u>

IIT Dharwad shall complete the Lift shaft and pit to the required dimensions including plastering and painting. Hoist way / openings and the Machine room of required sizes shall be made available by IIT Dharwad for erection of equipment's well before its receipt at site. IIT Dharwad shall be responsible for water proofing of the lift pit. IIT Dharwad shall also complete lift machine room /closed required hoist way with lockable doors and windows in all respects including lighting. All other civil activities for Lift installation shall be within the scope of the Lift Contractor and shall fall within the Lift Contractor's responsibility.

All minor Civil works are under Lift Contractor's responsibility that include Cutting, Chasing and making good of the same at all levels, conceal the conduits and boxes for Panels. etc. The minor Civil work shall also include items connected with fixing of Sill plate / Sill slab projection, fixing of buffer springs in the lift, fixing and mounting beams, bearing plate etc. at the Lift Machine room.

Electrical Works:

Power supply -1&3 Phase, 230/400 Volts 50 Hz Power supply will be provided at panel in ground floor by the Institute by a main Switch in Main panel.

The lift contractor's scope will be extending the power supply from panel at ground floor to machine room /motor with earthing (GI plate) & 2 no's 8SWG copper wire with pit etc. all as per IS 3043, MCB DB with MCBs / isolators in /at required place and further electrical works like wiring in lift shaft etc.

The signals from the Fire mode services of the Lifts shall be integrated into the overall fire alarm system, forming part of the work site / building. For this purpose, sufficient potential free leads shall be left by the Lift Contractor at appropriate locations from which the building will connect the interface to Institute.

All tenderers should visit the site before quoting. So it will be assumed that the work has been quoted considering present site condition and the work will be completed in all respect without claiming anything extra.

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Location: Main Building Admin Block at IIT Dharwad

Sr. No.	Particulars	Recommended	Offered
1	Application	Passenger, Handicap friendly	
2	Capacity	10(Ten) persons	
3	Load	680 Kg	
4	Number of Lifts	1 no. (one)	
5	Speed	1.0 meters per second. (Minimum)	
6	Level	G+2	
7	Travel	As per drawing	
8	Servicing	Lift should serve from G+2 Thus servicing 3 levels and 3 openings same side.	
9 a	Size of the lift car	To be given to suit to available & lift shaft.	
9 b	Entrance width and type of door	To be given (as per standard to enable to enter wheel chair) Center opening/telescopic automatic power operated	
10	Car enclosure & Door	Shall be of hairline finish stainless steel with mirror with handrail etc. Inner surface of Car door shall be Hairline finish stainless steel with full size vision panel all as per General specification.	
11	Car floor	Anti-skid	
12	Car fittings	LED light with auto as well as manual control	
13	Drive & Machine	A.C. variable voltage variable frequency type & Gearless, Permanent Magnet	
14	Control Operation	Elevator served and should be in simplex control with /without attendant.	
15	Safety Gear	Over speed Governor instantaneous type	

5. Particulars of Lift Service requirement

Sr. No.	Particulars	Recommended	Offered
		operating on Electro Mechanical basis.	
15a	Hoist way size in mm-	as required	
15b	Hoist way door	Stainless steel hairline finish.	
16	Lift pit depth	As required – As per standard	
17	Intercom	3-way intercom system will be provided. Additionally, there should be provision to fix IIT intercom to be mounted flush to car wall which will be connected to IIT EPABX.	
18	Car Emergency Light	Emergency Battery operated power supply (EBOPS) for light, alarm and a fan to be provided with electric power supply to the light in the car, when the main power supply is not a available. The operation to be automatic and no need of manual intervention to be required.	
19	Load weighing Device with bypass function	To be provided which senses the load. Facility to be provided for bypassing a registered landing call be a car loaded more than 80%	
20	Full length infra- red safety light curtain infra-red operated doors safety system.	To be provided. The Light Curtain to consist of infra-red-light beams passing between Car Door Entrances and one side of the Entrance the light source is being sensed by sensors. If an object cuts the light beams the receivers will sense and give door command to the door operating system. This is to sense the passenger movement without being getting in to physical contact of doors with human being or other materials like trolley .perambulator etc., which ensures the highest safety to the passenger and other items transported by Elevator This infra-red light curtain to operate as low as from 100 mm to a height of 2 meters ., so the system can even detect the movement of child pet etc., and thus ensures complete safety to users.	
21	Fireman Drive	Provision for Fireman drive to be made to bring the car to the main floor immediately after the fire switch is operated. Thereafter the car is for operation by the rescue person. All landing calls are ignored. Lift answers one car call at a time. The rescue person controls opening and closing of doors at a floor. Returns to normal when fire switch is	

Sr. No.	Particulars	Recommended	Offered
		opened. Fireman switch Drive to be provided to ground all the lifts.	
23	Automatic rescue device:	To bring the car to the nearest landing in case of power failure and also System failure.	
24	Battery operated emergency alarm bell.	To be provided	
25	Stainless steel signal fixtures:	To be provided	
26	Individual light and fan on/off switches	To enable the passenger, use the light and fan switches to his/her choice.	
27	Cooling fan for lift motor	To keep the motor in a cool condition against heating up of motor coil is increased thereby	
28	Cooling fan for lift controller	To keep all electronic components in a cool condition, all safety logic circuits are protected Lives of electronic components are increased.	
29	-	Door open/door close functions to be provided in the car to deal with the emergency situations and to have a better operation by the attendant.	
30		Direction and position indicator to be provide in car and Landings.	
31	Home floor parking selection	Lift will stay after service at the landing it last arrived. If required by client, contractor to make Home parking arrangement at the designated floor.	
32	Main entrance floor selection	This is the floor at which the fireman switch and alarm bell will be fixed. So that in case of emergency the lift can be taken control by the firemen at that floor.	
33	Variable door opening time.	The opening time of the car door and landing door can be varied according to the requirement.	
34	Full collective logic	Full collective control system to be provided to facilitate the optimum function of the elevator. Here the lift will accept the car and landing calls in both directions	
35	Inspection Clause	Contractor has to arrange inspection of factory for persons at their own cost.	

Note:

The Contractor (Lift Vendor) has to arrange at their own cost including supply, fabricate and erect in Page 16 of 301.

position structural steel required for support of machine, brackets for guide rails, fascia plates at all landings etc., including three coats of anti-corrosive paint of approved make. Client shall arrange a civil contractor for connected Civil works. The Civil works such as cutting of holes, chases etc., in brick work, concrete etc., including necessary scaffolding in/out of lift wells, floors on partitions together and making good holes for fixing brackets in lift walls, grouting of all bolts, sills, brackets / control board/button boxes, limit switches etc., all in position for all lifts together. The Contractor shall supervise the work executed by civil contractor. Approved Drawings related to these works shall be submitted based on which the civil contractor shall execute the job under the supervision of Lift Vendor.

- 2. Provision shall also be made available in the controller and wherever necessary for the lift(s) to directly travel to ground floor on any signal from Fire Alarm Control Panel having led to lift machine room, automatically, ignoring direction of travel and other pending commands as per special condition of the Bid.
- 3. The offer shall include identification of Fireman's Lift, having break glass panel and other specific functional requirement. Requirements indicated in the National Building Code of India (Equivalent to BS) in respect of Fire Protection requirements of lifts (Clause 'D-1.5' Latest Issue) shall be fully complied with in respect of Design, Manufacturing and Erection of the Lifts.
- 4. Contractor shall provide full set of tools required for maintenance of lifts in the Lift Machine Room.
- 5. Notice required from the statutory authority shall be obtained.
- 6. Cost Includes; Factory inspection is to be arranged for two persons.

QAP for factory inspection may be submitted with tender document.

Signature of Tenderer

INDIAN INSTITUTE OF TECHNOLOGY DHARWAD Near High Court, PB Road, Dharwad-580011 TEL NO: +91 836 2212 839

6. SPECIAL CONDITIONS FOR TENDER

A. FOR LIFTS.

1)The lift shall be suitable / compatible for integration with fire alarm system signals and capable of entering into 'Emergency Fire Mode Service' by operation of break glass panel of the Fireman's lift.

"FIRE MAN SWITCH" shall be provided to ground the lifts and use them as "FIRE LIFT" as per local statutory regulation.

2)The doors of Lift car and Hoist way landing openings shall have safety device of both Mechanical safety edge protective system and infrared curtain Electronic Door detector device) to retract door operation in case of intrusion if any.

3)Lift car shall have in built load measuring (weighing) device required for adjustment of starting torque to keep the car jerk free at start apart from sensing overload and stopping movement of the car in that load condition by keeping its door open and sounding the buzzer in the car or bypassing further hall calls if the car is loaded to designed capacity.

4)The techniques of Variable Voltage Variable frequency type drive shall be of to limit motor starting current to less than 1.8 times the nominal motor current.

5)The operation control shall have device for car landing at floor level (s) without creeping speed while levelling which accuracy shall be within ± 3 mm

6)Better quality of installation shall be ensured preferably by adopting scaffold less erection.

7)The Lift control system shall also have the following features in addition to those otherwise specified in the Bid.

a.Bypass load function to cancel hall calls in the intermediate floors in case lift in nearly to its capacity temporarily without jeopardizing the call registered till the floor is served.

b.Automatic cancellation of down calls during up-peak traffic service of the lifts.

c.Redundancy & reliability for efficient functioning of Lifts of a group in case of any one or more lift(s) is / are out of operation due to maintenance or otherwise without sacrificing any features of the functioning lifts.

d.Flashing of hall lantern to indicate arrival of a particular Lift car at landing.

e.Flexible choice of multiple parking zones.

f. Cancellation of false calls by counting stops through photocell in the lift door.

8.Door Open Time:

The door opening time at any floor shall be capable of being set at site depending on the site conditions. Also, the door open time at the main floor can be set differently to suit the need.

9.Special Function floors:

The system shall have software facility to select or designate different type of floors depending on the requirement of the building to match the lift service effective under different conditions.

10)The lift safety mechanisms shall include the provision of Automatic Rescue Device (ARD) to rescue the stranded lift passengers in the event of a power failure, operated on dry maintenance - free batteries/UPS of required capacity to continuously monitor the normal power supply in the main elevator controller and activate rescue operation within ten seconds of a power failure by which the lift is brought to the nearest landing and doors remain open.

11)The CCTV installed in the lift shall be integrated with the existing surveillance system.

Signature and stamp of the tenderer

7. <u>GENERAL / DETAILED SPECIFICATIONS FOR LIFT</u>

1. a) Drawings:

The work shall be proceeded with the preparation of the general arrangement drawings based on the site/building plans handed over for the purpose and submission of the same for approval of the Architects according to the time Schedule specified. Any doubt on dimensions shall be got cleared by verifying at site/building under construction.

Detailed drawings of all items/components, which are to be provided for in the construction by other agencies such as IIT Dharwad for Civil and associated works or Electrical Contractor, shall also be furnished well ahead of the requirement. Approvals of the drawings shall be sought from the Project Engineer before handing over to the agencies for execution.

b) Project information / data: Design ambient for electrical equipment is 40°C.

c)Technical:

i) Variations in Power supply:

All equipment's shall be capable of working efficiently under conditions of Voltage and frequency variations. The range of variation is as below: Voltage \pm 10% Frequency: - \pm 5% Combined Voltage & Frequency: -+ 10%

2.Lifts

a) Lift Car

(i)Car Frame: The Car frame shall consist of suitable Structural shape, properly braced and securely fastened together.

(ii) Car Enclosure:

Car enclosure shall be of Stainless Steel of suitable thickness which shall be mentioned.

(iii)Car Platform:

The Lift Car Platform shall consist of an outside metal frame, which will have steel sheet / Aluminum cheered plate flooring. The steel sheet flooring shall be covered with Granite Tile flooring.

The platform shall rest on rubber pads supported on an ancillary steel frame fastened to the car frame, thus forming an isolated cushion between the Car and the Steel Car frame.

(iv)Car Door:

The Car entrance shall be provided with a Center opening flush type for 5 passenger lift and Center/side opening flush type, horizontal sliding door which shall be hung on rubber-tired sheave hangers with a steel track and guided at the bottom by non-metallic shoes sliding in a thresh hold groove. It shall also be of solid type with fire resistance of at least one hour. The inside surface of the Car door shall be of hairline finish stainless steel.

(v)Car Fittings:

The lift Car shall be provided with a LED, battery operated Emergency light and a fan/blower.

Lift Operation:

The type of operation offered shall be as per Clause 2.42.3 of I.S. 1860 with one button in Car for each landing level served and up and down buttons at the intermediate landings and a single button at such terminal landing.

All stops registered by the momentary pressure of the Car buttons shall be made in the order in which the landings are reached after the buttons have been pressed, irrespective of the sequence in which calls were registered.

The type of operation offered shall also cover the provision for operation with attendant.

Provision for manual raising or lowering of lift in case of emergency shall also be made.

A home landing shall be established at the main floor to which the Car shall automatically return when all calls have been cleared and park.

Provision shall also be made in the controller and wherever necessary for the lift(s) to directly travel to ground floor on any signal from Fire Alarm Control panel having led to controller, automatically, ignoring direction of travel and other pending commands as per special condition of the Bid.

c)Car Operating Panel:

One number car-operating panel shall be provided.

The Car operating panel shall be flush mounted in the Car enclosure and fitted with the following: -

i. A bank of buttons including braille buttons to correspond to the various landing levels served.

ii. An emergency stop switch for stopping the Car independently of the regular operating service.

iii. An alarm button connected to an alarm bell located at the main floor landing outside of and adjacent to the hoist way.

iv. A 'Door Close' button and a 'Door Open' button shall be provided. The door open button shall be capable of reversing the doors while closing.

v. The panel shall also include a non-stop switch for by passing landing calls, which shall however remain registered till they are answered.

vi. The following provision shall be covered in the operating panel for use of the attendant.

1)A buzzer for notifying the attendant when an up trip should be made in answer to hall bells.
2)Key operating switch for cutting in and out the additional equipment for "WITH ATTENDENT OPERATION".
2)Up and down light involution for indicating the direction of the Connect to travel

3)Up and down light jewels for indicating the direction of the Car, set to travel.

vii)A plainly marked push button shall be provided in the Car operating panel with wiring connected to an emergency alarm bell.

viii)The following shall also be included in the car-operating panel. i)up' push button, (ii) 'Down' push button, (iii) Braille plate on the side of each button. ix)The following operating devices shall be included.

In the machine room/control room – 'UP' push button, 'DOWN' push button, 'STOP' push button, Hand cranking device, Slow speed operation.

On the top of the car: 'UP' push button, 'DOWN' push button, 'STOP' push button (Emergency PUSH to

lock), 230 V, 1 Phase Receptacle.

x) The following indicating devices shall be included.

In the landing: 'UP' direction of travel, 'DOWN' direction of travel, Location of the position indicator, call registered 'UP' indicator, call registered 'DOWN' indicator, Lift out of order / under maintenance.

xi) The following car accessories shall also include the following.

a Hand rail b. Car Operating Panel (COP)

(c) Car Position Indicators:

A LCD/TFT Digital Car position indicators shall be provided with Stainless Steel face plate in each elevator Car which will indicate the landing at which the Car is stopping or passing.

Illuminating direction arrows to indicate the direction of travel shall also be provided along with Car position indicator referred above.

(e)Call Registered Lights:

Each hall button faceplate in Stainless Steel shall be provided with registered lights, which shall illuminate when Corresponding button in the faceplate is momentarily pressed (Luminous buttons) and remain illuminated until call is answered.

(f) Hall Position Indicator:

A Seven Segment Digital position indicator shall be provided on side of entrances at all landings indicating the position of the Car in the hoist way at all times.

(g) Hoist way Entrance:

Centre opening/telescopic Steel doors with provision for emergency key opening at all landings shall be provided. The door shall be of solid type with fire resistance of at least one hour. The outside surface of Hoist way door to be hair line finish Stainless Steel as specifically provided for.

(h) Alarm Bell:

An emergency alarm bell including wiring shall be provided at a location adjacent to the hoist way on inside at ground floor landings and at the top of the car.

(i) Automatic Terminal Stops:

The elevator shall be equipped with an automatic stopping device arranged to bring the Car to a stop at the terminal landings independent of the regular operating device in the Car.

The final limit switches shall be provided in the hoist way separated by the Car and arranged to stop the Car and prevent normal operation should it travel beyond the zone of the normal stopping device.

(j) Fireman's Switch:

A Fireman's switch of two-button housed in a glass fronted box adjacent to the lift shall be provided at the entrance level in Ground Floor.

The switch in 'On' condition shall not cause landing call-points operative.

(k) Car and Hoist Way Door Operation:

Doors on the Car and at each hoist way landing (Side opening / Centre opening sliding doors) shall be operated quietly and smoothly by an Electric Operator which shall open the Car door and hoist way door simultaneously. All electric contact for the Car door shall be provided which shall prevent elevator

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movement away from the landing unless the door is in the closed condition.

Each hoist way door shall be equipped with a positive electro mechanical interlock and auxiliary door closing device so that the elevator can be operated only after interlock circuit is established. In case of power interruption or failure of the operator, it shall be possible to open the doors manually from within the Car.

(1) Door Safety:

The Car and landing doors shall be provided with mechanical as well as electric / electronic safety device (Infra-red) to instantly stop the closing of the doors on sensing an obstruction and to retract.

A protective device, effective along the front edge of the car door to its full height shall be provided in such a way that doors of the car and hoist way shall return to their position on touch of a person or object while the Car door is on move for closing. The doors shall remain open until the expiration of a pre-determined interval and then close automatically.

(m)Door Hangers and Tracks:

Sheave type hangers and tracks at each hoist way entrance shall be provided with complete Sheaves and rollers. They shall be of Steel. Adjustable ball bearing rollers shall take up thrust of the doors.

An air cord drive or suitable arrangements shall be provided for transmission of motion from one door to the other.

(n) Ropes if applicable (Not applicable in case of belts)

The Car hoist ropes shall be of traction steel of suitable size, construction and number to ensure the proper operation of the elevator and give satisfactory wearing qualities.

Governor ropes shall be of Steel. All ropes shall consist of at least Six strands, wound around a hemp core center and shall be specially designed and constructed for elevator application. The minimum factor of safety in rope capacity shall be 10.

(o) Safety Device and Governor:

The safety device shall be of friction type safety gear and mounted on the bottom members of the Car frame or otherwise as per manufacturers specification and shall be operated by an over speed governor located over the hoist way. The safety device shall be provided to stop the Car whenever excessive descending speed is attained with means to cut off power from the motor and apply the brake prior to application of the safety device.

(p)Guide Rails & Fastenings:

Pinned Steel 'T' shape elevator guide rails with ends tongued and grooved shall be provided for the car and counter weight. They shall be erected plumb and fastened securely to the hoist way framing by heavy steel brackets. The guide rails shall be connected by steel splice plates. All such ancillary steel structures shall be included in the quoted rate.

(q) Counter Weights:

The counter weights shall consist of iron weights contained in Structural Steel Frame and shall be equal to the weight of the complete Elevator Car plus 40% to 50% of the Contract load.

(r) Buffers:

Buffers shall be provided for car and Counter Weight including required pipe struts of suitable type for speed more than 1.8 m/s. Spring Buffer for goods elevator and machine room less elevator. The stroke of the buffer shall be as per the applicable IS standards.

(s) Machine:

Machine shall be of gearless.

(t) Motor:

Motor shall be of A.C. Type having variable Voltage Variable frequency motion control system, specially designed for lift duty and of design such that there should be proper lubrication possible if required.

The motor shall be Class-F insulated and shall be sized for 125% of contract load. An alternative method of motor and / or motor control which gives better performance, proven system may also be submitted by Bidder along with Bid.

(v)Levelling Accuracy:

 \Box ±3 mm at all load

condition. (w)Electric Wiring:

Insulated wiring with conduit or tubing together with necessary fittings, metal boxes, troughs and ducts shall be provided.

Separate conduits shall be used for carrying conductors of different voltage ratings. In all, International standards and Rules of B.S /Indian Electricity rules shall be followed. Copper wire of 1100 volts rating only shall be used.

(x)Power Supply:

400V, 3 Phase, 4Wire, 50 Hertz Alternate Current and Single Phase 230V, 50 Hertz Alternating Current will be made available at a convenient point in the ground floor on a distribution board arranged along with the main work. Lift shall operate under voltage fluctuation of +10% (i.e. between 360 to 440V)

(y)Steelwork & Civil Works:

All Structural Steel fabrication, supply and delivery to site, erecting it in place, including painting, making necessary holes, chases in concrete masonry etc., aligning and grouting steel members in Cement Concrete of approved proportion including curing shall be done unless otherwise considered separately.

The Structural Steel work shall cover all items necessary for efficient and safe functioning of the lifts such as Machine beams, hoisting beams, guide rails, strut angles at every landing, rail brackets, bearing plates, hitch beams, stretchers, separators, buffer supports, cleats, bolts, etc. All guide rail brackets shall be provided with adequate supports. No claim for extra payment shall be admitted on account of missing out any of these aspects while quoting for the work.

Also, all Civil works necessary for the installations and commissioning of the lifts such as beams, pedestal for lift buffer springs grouting of all the pockets, holes etc., including fixing in position of indicator call bell and other boxes, grouting of sill and patching around the entrance etc., shall also be covered in the quoted price unless otherwise considered separately. Making good of cutting of walls etc. and rectification of repair works shall be carried out using specifically fire retarding material of approved make.

Suitable and adequate Scaffolding required for the erection of the lift(s) and hoisting of all machinery and equipment to the required heights shall be arranged by the Client.

(z) Work Co-ordination:

The Work shall be coordinated based on the approved working drawings well in advance with Architects, Consultant, Civil Contractor, and Electrical Contractor in all respect for satisfactory installation of lifts including location of lift wells and supporting structures etc.

Safe storage and protection of all equipment and accessories shall be made at no extra cost and loss or damage of the equipment or the accessories until handing over of the lift(s) shall be made good without claiming any extra.

8. OTHER PARAMETER FOR LIFTS:

1. GENERAL:

a) The manufacture, supply and installation of Lifts shall be complete in all respect in a first class workmen like manner and shall cover all work including Structural Steel work necessary for the supporting structures for the Lift machine room and other minor Civil works such as scaffolding etc., required for installation and materials, all complying the requirement of local body if any, and in accordance with the I.S. specifications I.S. 1860, 2365, 14665, 3534, 9878 and 4666 and I.S 4951-1968. (Re-affirmed – 1991) and fire protection requirement as per National Building Code of India.

b) Quality Assurance Plan (QAP) in respect of Lift shall be submitted before commencement of work for approval of the Architects/Project Engineer.

2. PARTICULAR:

(a)Salient features of the Equipment provision as to manufacture, furnishing, finish etc. shall be highlighted with reference to the material input and operational supremacy.

(b)Necessary working drawings showing the general arrangements of the equipment etc. shall be furnished. The drawing shall also detail out all items/components, which shall have to be provided by other agencies such as the Main Contractor for Civil and Associated works or Electrical Contractor during the execution of the main work/installation.

(c)The materials and workmanship of the Lifts and its installations shall be guaranteed and the guarantee shall cover making good of any defects, not due to any ordinary wear and tear or improper use and care, which may develop within One year from the date of handing over of installations duly tested and commissioned. Test certificates of the material used on site for installation and operation of the lift shall be submitted.

(d)The Lifts installations shall be maintained for a period of 24 (Twenty-four) months commencing from the date, the Elevator equipment's are taken over to use and the maintenance shall include periodical lubrication of the equipment and adjustment thereof, if any, under supervision and direction of Competent Personnel and replacement of parts that become necessary due to normal wear and tear during the guarantee period. All Operation / Maintenance shall be performed during regular hours of regular working days.

(e)The Lift service particular and General Specification/Condition appended shall be adhered to in all respect, except for specific change contemplated otherwise in the offer.

(f)The equipment supplied and erected shall be in accordance to IS-4666/1968, 1860/1968 & 1980, 3534/1979, I.S. 4591-1968. (Re-affirmed – 1991).

(g)The local statutory Lift Rules for Lift Control as applicable shall be complied with, no extra payment shall be considered either due to escalation or amendments / modifications to local Act / Rules issued during the contract period.

(h)Bidder / Contractor in co-ordination with client shall be responsible to obtain necessary License from the Electrical / Lift Inspectorate of Government of Karnataka for installation / operation of Lifts before handing over of the installation(s) by taking timely action in submission of prescribed application form therefor along with documents like completion drawing etc., duly making payment of required statutory fees / charges in the manner specified by the Inspectorate on behalf of the Employer and further follow up action. Payment for this special service shall be made on Lump sum basis as covered in the Schedule of quantities for both Lift installations separately.

The lump sum amount shall however be exclusive of statutory fees /charges payable to Inspectorate which shall be reimbursed by the Employer as per actual on evidence of payment.

3. Insurance: -

The work shall have adequate insurance cover as specified by the employer and the employer shall be kept indemnified from all claims unless otherwise provided for.

4. Test at Site: -

Tests on site shall be carried out as per I.S. 4666 Clause 24.3 or equivalent to BS before the lifts(s) is/are put into normal use.

5. Approval of Installations and Completion Certificate: -

Approval/Completion Certificate from the Chief Electrical Inspector to Government for installation and Commissioning of Lifts shall be obtained and made available to the Employer before handing over Lifts at no extra cost. Fees payable to the authorities shall however be made by the employer.

6. Servicing: -

The servicing facilities shall be made available at Dharwad for maintenance of Lift(s) during guarantee period of 24(Twenty-four) months, free of cost and thereafter under annual service contract.

Signature and stamp of the tenderer

9. Technical Deviation Statement

Sr.no	Item no of Bid document	Page no:	Brief description of items as required in Bid specifications	Nature deviation Reason as to	why the Bid specification cannot be met.
1	2	3	4	5	6

Signature and stamp of the tenderer

10. ARTICLES OF AGREEMENT

<u>Contract Agreement No. 02 of 2019 for the work of design, manufacturing, supplying,</u> installation, testing & commissioning of One number 10 passenger elevator in the <u>Main Building Admin Block at IIT Dharwad (tender ref. no.</u> <u>IITDH/MMD/IPS/2018-19/02).</u>

WHEREAS

AND WHEREAS

The IIT Dharwad accepted the tender of the contractor for the provisions and the execution of the said work at the rate stated in the work order or description of works (Herein after called "Schedule Rates") upon the terms and subject to the conditions of contract.

NOW THIS AGREEMENT WITNESS AND IT IS HEREBY AGREED BY AND BETWEEN THE PARTIES AND AS FOLLOWS:

1). The documents which form part of the contract will be the Work order no. description of work, specifications, drawings and other documents, constituting the quotation and acceptance thereof, it is further agreed that the above work order shall constitute the contract between the parties.

3) In consideration of the payments to be made to the contractor for the works to be executed by him, the contractor shall and will duly provide, execute and complete the work as per the time limit mentioned in the correspondences and shall maintain the same at his own cost for the defect liability period thereafter, perform all such acts and things in the contract mentioned or described or which are to be implied there from or may be reasonably necessary for the completion of the said work and at the times and the manner and subject to the terms and conditions or stipulations mentioned in the contract.

4). In consideration of the due provision, execution and completion of the said work, the IIT Dharwad does hereby agree with the contractor that the IIT Dharwad will pay to the contractor the respective amount for the work actually done by him at the rate quoted and accepted by IIT Dharwad and such other sums may become payable to the contractor under the provisions of the contract, such payment to be made at such time and in such manner as provided for in the agreement.

5). In consideration of the due provision, execution and completion of the said work and contractor does hereby agree to pay to the IIT Dharwad the sum as may be due to the IIT Dharwad for the services if any rendered by the IIT Dharwad to the contractor and such other sum or sums as may become payable to the IIT Dharwad towards loss, damage to the IIT Dharwad's equipment, material, plant and machinery including those hired to the contractor if any as set forth in the said conditions of contract, such payment to be made at such time and in such manner as provided in the contract.

6). Any dispute/difference on agreement of this contract Arbitration valuable provisions of the arbitration & Act 1996. The venue of arbitration shall be <u>IIT Dharwad</u>. The language of Arbitration shall be English or Hindi.

7). All disputes arising out of or any in connection with this agreement or concerning thereto shall be deemed to have arisen in Dharwad and the same will be referred to the sole arbitration of Director, IIT Dharwad for his decision and his decision will be final and binding.

IN WITNESS WHEREAS THE PARTIES HAVE ACCEPTED THESE PRESENT IN DUPLICATE THE DAY AND THE YEAR MENTIONED ABOVE.

SIGNED AND DELIVERED FOR	AND ON BEHALF OF THE INI	DIAN INSTITUTE OF TECHNOLOGY
DHARWAD.		

SIGNATURE	
DESIGNATION	
In the presence of witness	
1)	2)
Address:	Address:
SIGNED AND DELIVERED FOR AND ON BEHALF OF	CONTRACTOR
SIGNATURE	
DESIGNATION	
In the presence of witness:	
1)	2)

Address:

Address:

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INDIAN INSTITUTE OF TECHNOLOGY DHARWAD Near High Court, PB Road, Dharwad-580011 TEL NO: +91 836 2212 839

Tender no.: IITDH/MMD/IPS/2018-19/02

11. <u>SCHEDULE OF WORK / BOQ / PRICE BID</u> (To be quoted on the letter head of the bidder)

Bill of Quantity (to be quoted only in INR)					
Sl. No.	Description	Qty	Unit	Rate (in INR)	Amount (in INR)
1.	Design, manufacture, supply, erect at site, test, commission and maintain (During the guarantee period of two years) passenger lift with <i>hairline finish</i> stainless steel car enclosure <i>with vision panel</i> to carry 10 persons capacity of load 680 kg with minimum speed of 1.0 meter per second with/without attendant operation including all necessary safety features and in accordance with the particulars of lift service requirement and technical specifications (as per tender documents) etc., complete for servicing Ground+2 levels including getting approval/obtaining completion certificate in co-ordination with client from the Lift inspectorate of Karnataka Government for installation and commissioning of lift, before handing over the entire installation of the lift as required for IIT Dharwad (Flat hand rails). (To be read in conjunction with the complete tender document)	1	Each		
2	GST/Taxes as applicable				
3	Fully comprehensive Annual Maintenance Contract charges for 1st Year after 2 years of Defect Liability Period for item no.1	1	Each		
4	Fully comprehensive Annual Maintenance Contract for 2 nd Year	1	Each		
5	Fully comprehensive Annual Maintenance Contract for 3rd Year	1	Each		
6	GST/Taxes as applicable on AMC charges for 3 years	3	Each		
	GRAND TOTAL	I	I		
	(Sl. No. 1+2+3+4+5+6)				

Declaration: I/We do hereby accept all the terms and conditions laid down in the tender document for the above said work/supply. I/We also agree to the condition that the right to suspend the tender process or part of the process, to accept or reject any or all the tenders at any stage of the process and/or to modify the process or any part thereof at any time without assigning any reasons thereto is reserved by the Competent authority of the Institute without any obligation or liability whatsoever.

Signature of the Bidder/Manufacturer with date and seal