

**DEPARTMENT OF GEOLOGY  
PANJAB UNIVERSITY, SECTOR-14,  
CHANDIGARH 160014**

**TENDER DOCUMENT FOR THE PURCHASE OF  
INTEGRATED TOTAL STATION**



<b>Last Date and Time for receipt of Tender:</b>	20.01.2017, 5.00 p.m.
<b>Date &amp; Time of opening of Technical bids in the department of Geology</b>	24.01.2017, 12.00 p.m.
<b>Date &amp; Time of opening of the Price bids in the department:</b>	Date and time will be intimated
<b>Date &amp; Time of demonstration of the Product in the department</b>	Date and time will be intimated

**Tender Fee Rs. 1000/**

**Note:**

1. Tender fee of Rs.1000/- is to be submitted along with the Tender in the form of demand draft of Rs.1000/- payable at Chandigarh in favor of the Registrar, P.U. Chandigarh.
2. If date of opening of technical bids is changed, the same will be intimated on our website <http://geology.puchd.ac.in/>

## General Terms and Conditions

Dr. Mahesh Thakur, Principal Investigator, Ministry of Earth Sciences project (**Active Fault, Paleoseismic and crustal deformation in NW and Central Himalaya, India: An integrated approach towards Seismic Hazard Assessment**) and Assistant Professor, Department of Geology, Panjab University Chandigarh is interested in the procurement, installation and commissioning and training of the use of **INTEGRATED TOTAL STATION** as per the prescribed technical specifications (Annexure A) so as to reach Dr. Mahesh Thakur (Assistant Professor, Department of Geology, Panjab University, Chandigarh) as per following schedule:

- |  |   |
|--|---|
| (a) Last Date and Time for receipt of bids:    | 20.01.2017, 5.00 p.m.                     |
| (b) Date & Time of opening of technical bids:  | 24.01.2017, 12.00 p.m.                    |
| (c) Date & Time of opening of Price bids:      | <b>Date &amp; time will be intimated.</b> |
| (d) Date and Time of demonstration of product: | <b>Date &amp; time will be intimated.</b> |

**Note 1:** In case the date of opening of the bids fall on the day which is declared public holiday, these shall be opened on the following day at the appointed time.

- (i) Only manufacturers or their authorized distributors/agents are eligible to submit the bids. All offers other than those from the manufacturers should be supported by an authority letter from the manufacturers or attested copy thereof authorizing the firm to tender on their behalf.
- (ii) The tenderer must be a manufacturer or his authorized agent (specifically against this tender for the subject goods) and should have successfully executed contracts for similar and/or identical goods in the past.
- (iii) The detailed technical specifications are available for each item in Annexure A.
- (iv) Technical specifications are intended to be descriptive and not restrictive. The bidder may substitute alternative standards, in its bids, provided they are demonstrated to be equivalent or superior substitutes and are to the purchaser's satisfaction.
- (v) Clarifications, if any could be sought from Dr. Mahesh Thakur (Assistant Professor, Department of Geology, Panjab University, Chandigarh) in writing within the stipulated last date of submission of the tender.
- (vi) That the substitutions are substantially equivalent or superior to those designated in the "Technical Specifications".

## GUARANTEE / WARRANTY

- (a) The warranty period should be two years (with spares) from the date of installation with satisfactory performance as per specifications.

## **BID, GUARANTEE AND SECURITY**

The tenderer is required to furnish Bid Guarantee and Security as per Annexure 'D'.

## **CONVERSION TO SINGLE CURRENCY:**

To facilitate evaluation and comparison, the purchaser will convert all bid prices expressed in the amounts in various currencies in which the bid price is payable, to the Indian rupees at the RC selling market rate of exchange established by the State Bank of India, Chandigarh for similar transactions as on the last date of submission of tenders.

## **MERGER / ACQUISITION OF FOREIGN PRINCIPAL:**

In case of merger of Foreign Principal with another Firm or acquisition of Foreign Principals by another firm, it shall be obligatory for the New Entity so formed after the merger or the Acquiring Firm, as the case may be, to take over all the duties and obligations / liabilities of the Foreign Principals and the New Entity / Acquiring Firm would *ipso facto* become liable for all acts of commission or omission on the part of original Foreign Principals.

## **CHANGE OF INDIAN AGENT:**

In case the Foreign Principal changes the Indian Agent then it shall be obligatory for Foreign Principal to automatically transfer all the duties and obligations to the new Indian Agent, failing which the Foreign Principal would *ipso facto* become liable for all acts of commission or commission on the part of new Indian Agent.

## **DETAILED INSTRUCTIONS FOR SUBMISSION OF TENDER**

1. Only Manufacturers or their Authorized Distributors/Agents are entitled to submit the Performa Invoices.
2. The tender shall be prepared and submitted as per Para 20 of the existing instructions.
3. A person signing the tender form or any other document forming part of the contract on behalf of another shall be deemed to warranty that he has authority to bind such others and if on enquiry it appears that the person so signing had no authority to do so, the purchaser, may, without prejudice to other civil and criminal remedies against the contract, hold the signatory liable for all costs and damages and forfeit Earnest Money.
  - 3.1. **Rates should not be quoted in the Technical bid. If the rates are quoted in Technical Bid, the tender will be rejected.**
  - 3.2. All pages of the Technical Bid/Price Bid shall be page numbered.
4. Tenders/Proforma Invoices not accompanied by detailed information as required, are liable to be rejected.
5. **EARNEST MONEY DEPOSIT AND PERFORMANCE BANK GUARANTEE**

- 5.1. The tender must be accompanied with **Earnest Money\* of Rs. 40,000/-** in a lump sum Amount, in the form of **Demand Draft in favor of Registrar, Panjab University, Chandigarh)** *Earnest Money in any other form will not be accepted.*
- 5.2. Bids not accompanied by Earnest Money as stated above or less than the amount stipulated above shall be summarily rejected.
- 5.3. The successful tenderer shall be required to furnish a Contract Performance Guarantee Bond in the shape of Bank Guarantee (as per Annexure-D) or FDR/TDR (pledged in favor of Dr. Mahesh Thakur (Assistant Professor, Department of Geology, Panjab University, Chandigarh) (along with the undertaking as at Annexure-D1), for an amount equivalent to 5% of the value of the INTEGRATED TOTAL STATION towards the execution of the agreement and the warranty. The Bank Guarantee or FDR/TDR should be valid for a period 60 days beyond the warranty/guarantee expires. The Bank Guarantee for 5% of the value shall be submitted immediately but not later than 7 days after the placement of the Supply order failing which the order will be liable to be cancelled and the earnest money forfeited.
- 5.4. The Purchaser would return the earnest money mentioned in Para 5 (1) above to the successful tendering firm on the submission of the Bank Guarantee to cover the period mentioned in Para 5 (3) above.
6. The Purchaser does not pledge itself to accept the lowest, or any tender, and reserves to itself the right of acceptance of the whole or any part of the tender, or portion of the quantity offered, and the tenderers shall be required to supply the same at the rate quoted. The Purchaser reserves to itself the right to accept or reject any; or all the tenders without assigning any reason thereof.

#### **CUSTOM CLEARANCE:**

The equipment requiring import from abroad will be imported/high sea sales under the OGL (or relevant) scheme, for which tenderer will ensure before shipment takes place, that the equipment, in question, can be imported under the said scheme.

- I. The equipment will be got cleared from the Custom by the tenderer at their own cost. Demurrage charges, if any, will be borne by the tenderer.
- II. It will be the responsibility of the tenderer to pursue any claims with the customs authorities/Insurance company /cargo operators and transporters, as may arise, at any stage.
- III. The N.M.I.C. (Not Manufactured in India Certificate), the CDEC (Custom Duty Exemption Certificate) and all other documents required for custom clearance will be provided by the Department.

#### **7. INSURANCE**

- 7.1. The manufacturers will ensure that the equipment is properly insured for the full C.I.F. value to cover the transit upto site of installation and the further period of storage etc. Up to end of the period of installation as agreed upon. If the installation is delayed beyond the agreed date of satisfactory installation, commissioning and handing over of the equipment, then in that event any transit and storage damages which come to light after such delays, shall be at the risk and cost of the tenderers.

The Tenderers/Indian Agent shall provide to the Purchaser, after due inspection, a

detailed list of any loss or damage to the stores that may have occurred so as to enable the purchaser to file appropriate claims with the Insurance company. However, it shall be the responsibility of the Purchaser to prepare, lodge and pursue any claims that may arise with the Insurance Company. The manufacturers shall provide all assistance in pursuing any such insurance claims expeditiously. The manufacturers shall make free replacement, if required, in lieu of damaged/lost items etc., regardless of the fact whether the claim is settled by the underwriters or not. The manufacturers' liability shall be restricted to making free replacements/rectifications and any local expenses such as custom duty/clearance, etc. connected with such replacements.

- 7.2. It should be noted that if, in consideration of offer of earlier delivery, the contract is placed with a higher tenderer in preference to the lowest acceptable offer, and in case of failure to complete supplies in terms of such contract within the date of delivery specified and incorporated in the contract, the tenderer will be liable to pay to the purchaser the difference between the contract rate and that of the lowest acceptable tender on the basis of the final prices FOB destination including all elements of freight, sales tax, local taxes, duties and other incidentals. This is in addition to and without prejudice to other rights of the purchaser to recover all other losses and damages resulting from delayed supplies, cancellation of contract and risk purchases required to be made in case of failure to supply the stores.

## **8. GUARANTEE/WARRANTY**

- 8.1. The guarantee/warranty against defects of manufacture / workmanship and poor-quality of components for the entire equipment and the work conducted under the contract shall be for a period of 24 months from the date of satisfactory installation, commissioning and handing over the equipment at site. The term satisfactory commissioning and handing over wherever used in terms of tender and Agreement will mean satisfactory and faultless functioning of the equipment for 30 days, and of works conducted therewith covered under the contract in working order. During the guarantee/warranty period, the replacement of any part of the equipment or rectification of defects of works will be free of cost. Further, the defective parts/equipment shall be returned by the purchaser to the Indian Agent after making replacement.
- 8.2. The tenderer will be required to furnish guarantee/warranty as under:
- a. The tenderer should submit a written guarantee/warranty from the manufacturers stating that the equipment being offered is the latest model as per specifications and that spares for the equipment will be available for a period of at least 10 years after the guarantee/warranty period. The manufacturer should also warranty/guarantee that it will keep the Institute informed of any up-date of the equipment over a period of next 5 years and undertake to provide the same to the Institute at no extra cost.
  - b. Guarantee/warranty that they will supply regularly any items of spare parts requisitioned by the purchaser for satisfactory operation of the equipment till the life span, to be decided mutually of the equipment, if and when required on agreed basis for an agreed price. The agreed basis could be an agreed discount on the published catalogue price or an agreed percentage of profit on the landed cost.
  - c. Guarantee/warranty the effect that before going out of production of spare parts, the manufacturers and /or tenderers will give adequate advance notice to the purchaser of the equipment so that the latter may undertake to procure the balance of the life time requirements of spare parts.
  - d. The guarantee/warranty to the effect that the manufacturers will make available to the

Purchaser. The blue-prints and drawings of the spare parts if and when required in connection with the equipment.

8.3 The tenderer shall furnish the following warranty/ guarantee in case the contract is placed on him:-

- a. The tenderer hereby declares that the instrument supplied to the buyer under this contract shall be of the best quality and workmanship and shall be strictly in accordance with the specifications and particulars contained/mentioned in the clauses here of and the tenderer hereby guarantee/ warranty that the said instrument conform to the description and quality aforesaid. The purchaser will be entitled to reject the said instrument thereof as may be discovered not to conform to the said description and quality. Such rejection of instrument will be at the seller's risks and all the provisions herein contained relating to rejection of goods, etc. shall apply. The contractor/seller, shall, if called upon to do so, replace within a period of fourteen days or such further period as may be extended from time to time by the purchaser at his discretion, on an application made thereof by the tenderer, the instrument thereof as rejected by the purchaser. In such an event, the above mentioned warranty/guarantee period of the entire equipment shall be extended by the time taken for these replacements. Otherwise the tenderer shall pay to the purchasers such damage as may arise by reason of breach of the conditions herein contained. Nothing herein contained shall prejudice any other right of the purchaser in that behalf.
- b. Tenderers should state categorically whether they have fully trained technical staff for installation/commissioning of the equipment and efficient after sales service.
- c. Tenderers should categorically confirm that they will give free "After sales services" during guarantee/ warranty period as stipulated above from the date of installation, satisfactory commissioning and handing over of the project/equipment. Warranty for a period less than as stipulated above or with conditions may render, the tender invalid.
- d. It is required that the tenderer will supply all the operating and service manuals along with blue-prints and drawings including circuit diagrams of the equipment supplied as well as its components.

#### **9. MODE OF DESPATCH, DELIVERY AND COMMISSIONING OF EQUIPMENT:**

The equipment, if imported, with all its accessories should be dispatched by air to Delhi (INDIA) duly insured, freight and insurance charges pre-paid. The tenderer is required to undertake to deliver, install, commission and handover the equipment within the stipulated period. The installation of the equipment shall be completed and handed over within the time

Schedule given in the tender. This stipulated period should be strictly adhered to for implementation.

#### **10. SUBMISSION OF PBG/AGREEMENT AND DAMAGES FOR DELAY IN SUPPLIES/ INSTALLATION**

- 10.1. The supplier shall ensure submission of duly executed agreement and the desired Performance Bank Guarantee (PBG) immediately on issue of Supply Order but not later than 7 days of issuing of supply order, failing which and without prejudice to its remedy under the contract the Supply Order shall stand cancelled. If Agreement/PBG is not supplied within the stipulated period, action under Para 5 above will be applicable and EMD shall be forfeited.
- 10.2. If the supplier fails to deliver instrument or to perform the services within the time period(s) specified in the contract, the purchaser shall, without prejudice to its other remedies under the contract, deduct from the contract price, as liquidated damages, a sum equivalent to 0.5 percent (0.5%) of the contract price for each week of delay or part thereof until actual delivery or performance, upto a maximum deduction of ten percent (10%) of the contract price. Once the maximum is reached, the purchaser may consider termination of the contract. The acceptance of the equipment will be based on demonstration of the satisfactory working of all modes of the equipment as tested by the Purchaser. The Certificate will be issued by the Purchaser for the satisfactory completion of the supply; installation and commissioning of the equipment in format given in Annexure-‘F’. The suppliers will inform the purchaser in writing intimating the reasons for delay in supplying and for installing the equipment. The purchaser in his sole discretion may consider a reduction/waiver of the penalty for a period to be stipulated in writing. The material, etc. required for demonstration of satisfactory functioning of the equipment shall be arranged by the suppliers.

#### **11. CONTRACT:**

The successful bidder will be required to enter into an Agreement (please see Annexure-‘C’), with the Institute on a non-judicial paper of Rs.30.00 for the supply and satisfactory installation of the equipment as defined above as per specifications and terms and conditions listed in the document and agreed upon.

#### **12. SUPPLY, INSTALLATION AND COMMISSIONING OF THE EQUIPMENT**

The supply, installation and commissioning of the equipment shall be as per terms and conditions given in this document and those given in the Agreement (Annexure-‘C’) to be signed by the successful tenderer. The scope of work includes the installation and satisfactory commissioning of the equipment by the firm.

13. Tenderers are required to quote for C.I.F. up to New Delhi Airport for items to be imported. CIF Chandigarh including insurance and freight from New Delhi Airport to the Department of Geology, Panjab University, Chandigarh.  
For equipment produced in India, cost including carriage, insurance etc. upto Department of Geology, Panjab University, Chandigarh should be mentioned.

#### **14. PACKING AND MARKING:**

Best trade packing suitable for safe Rail/Road/Air transit shall be used subject to packing and marking being acceptable to the Inspecting Authority.

#### **15. VOLTAGE STABILIZERS, ISOLATION TRANSFORMERS/U.P. S. SYSTEMS**

15.1 Voltage stabilizers, Isolation Transformer or U.P.S. system, as may be required, should form part of the equipment although separate quotations for the same from indigenous sources shall also be submitted. The voltage range in the Department varies from 175-260 V. Any defect occurring in the equipment because of the defects in voltage stabilizers, Isolation Transformer or U.P.S. system as the case may be shall be attributable to the suppliers and the cost of repairs and the replacement, if any, shall be borne by the suppliers during the guarantee/warranty period as well as the service contract period.

15.2. If any part of the equipment goes defective on account of inherent fault in the machine or in any component of the equipment and needing replacement shall be replaced by the supplier during the contract period free of cost i.e. to say any defect caused in a part of the machine on account of non-maintenance of the main machine during the contract period shall be attributable to the supplier and the cost of replacement thereof shall be borne by them.

15.3 The equipment supplied must be compatible with power supply system being followed in India, viz. 240VAC, 50Hz

#### **16. LATEST HOUR FOR RECEIPT OF TENDERS**

Your tender must reach this office not later than 5.00 p.m. on the due date for receipt of the tender. Tenders sent by hand delivery should be submitted to the Dr. Mahesh Thakur (P.I.) (Assistant Professor, Department of Geology, Panjab University, Chandigarh)

#### **17. OPENING OF TENDER**

The technical bids shall be opened at 12.00 noon on the due date of opening of the tender. You are at liberty to be present, in person or through your authorized representative, at the opening of the tender at the time and date as specified in the tender notice. The name and address of the representative who would be attending the opening of the tender on behalf of tenderer should be indicated in statement to be furnished along with the technical bids. The representative should carry due authorization from the tenderer. P.I. – MoES (Principal Investigator), Department of Geology, Chandigarh in its discretion may not allow any representative, who does not earn authorization for being present in bid opening. In the event of the day of receipt and opening of tender being a holiday for the University, then due date of receipt/opening of the tender will be the following working day at the same hour.

#### **18. PERIOD FOR WHICH THE OFFER WILL REMAIN OPEN**

The tendering firms should keep their offers valid for acceptance for a period of 90 days from the date of opening of the technical bids. If the firms are unable to keep their offers



open for the above said period, they should specifically state the period for which their offers would remain open but they must realize that such a provision may result in the rejection of their offers, provided, however, that in the event that the day upto which the offer is to remain the offer shall remain open for the following day.

## **19. PAYMENT TERMS**

Given in the attached Annexure C

## **20. PREPARATION AND DELIVERY OF TENDER:**

This document and other Annexures comprising the Tender documents viz. Annexure 'A'(Detailed technical specifications), Annexure 'B' (General Questionnaire), Annexure-'C'(Agreement containing terms and conditions), Annexure 'D' (format of Bank Guarantee), Annexure D1 (Undertaking in case of Bank Guarantee is being submitted in form of FDR/TDR), Annexure 'E' (authorization letter), and Annexure 'F' (certificate of successful completion of equipment), Annexure 'G' (Proforma for Performance Statement) should be returned intact along with the Technical bid.

Each page of this tender document and Annexures 'A to G', duly signed by the tenderer, should be returned intact along with the Technical bid.

### **20.1.**

- a. No tender will be considered until and unless all documents are properly signed.
- b. The tender is liable to be ignored if complete information is not given therein.
- c. All corrections must be signed by the tenderers in full.
- d. The offers should be typed or written in ink. Offers in pencil shall be ignored.
- e. Any tender which is not made out in the proper form or is received late after 5.00 pm on the due date shall not be considered.
- f. Offers with any price variation clauses shall not be accepted.
- g. Any conditional tender or any deviation from the terms and conditions of the Tender notice shall render the tender liable to rejection.
- h. Tender qualified by such vague and indefinite expressions as 'subject to immediate acceptance', subject to prior sale shall not be considered.
- i. Telegraphic/Telex/Fax offers shall not be accepted.

**20.2** Only manufacturers or their authorized distributors/Agents are entitled to submit their tenders in accordance with the technical specifications as per Annexure "A". All offers other than those from the manufacturers should be supported by an Authority letter from the manufacturer authorizing the firm to tender on their behalf.

**20.3** In the case of partnership firms where no authority to refer disputes concerning the business of the partnership to arbitration has been conferred on any sole partnership, the tenders and all other related documents must be signed by every partner of the firm.

### **20.4 Delivery of Tender**

**Tenderers should submit their tenders in these parts**

- (a) Technical Bid**
- (b) Price Bid &**
- (c) Earnest Money; (each part in separate sealed cover) and**

**(d) Tender Fee of Rs. 1000/-, in the form of Demand Draft in favor of The Registrar, Panjab University, Sector 14, Chandigarh, Payable at Chandigarh.**

- **EMD, Technical Bids and Price Bids should be placed in separate sealed covers and superscribed as EMD, Technical Bid, and price bid respectively for Supply of INTEGRATED TOTAL STATION Due on . . . . . , 2016.\*\***

**\*\* Due date as per First (Title) Page of this tender notice.**

- The above said documents viz., Technical bid, Financial bid and EMD covers prepared as above, along-with Tender Fee Draft of Rs. 1000/-, in favor of The Registrar, Panjab University, Sector 14, Chandigarh, should be enclosed in a single sealed cover marked as under:

Tender for the supply of INTEGRATED TOTAL STATION Due on  
..... (Last date for submission, as above)\*\*.

Name & Address of the Tenderer.....

**Note: Price should not be indicated in the Techno-Commercial bid otherwise the Tender will be rejected**

- All the envelopes should bear the name and postal address of the Tenderer and shall bear the address of the office, where tender is submitted. Both the bids shall be kept valid for acceptance for a period of 90 days after opening of the technical bids. The purchaser will not be responsible for any postal delay or any other cause that may lead to delay in the receipt of the documents beyond the stipulated date and time stated in the tender document.

## ANNEXURE A

### Technical specification for the INTEGRATED TOTAL STATION (ITS)

#### Integrated Total Station

<b>INSTRUMENT TYPE</b>		
1	TOTAL STATION INTEGRATED WITH GNSS-Global Navigation Satellite System (Total station with detachable Antenna).	
2	Provision to mount GNSS Antenna on Total Station (TS) for logging of data directly to TS.	
3	Provision to mount GNSS Antenna on Prism Pole for surveying.	
<b>TPS PERFORMANCE</b>		
<b>1</b>	<b>ANGLE MEASUREMENT</b>	
<b>(a)</b>	Least Count	0.1" or better
<b>(b)</b>	Angle Accuracy as per DIN 18723	3" or better
<b>2</b>	<b>TELESCOPE</b>	
<b>(a)</b>	Telescope Magnification	30X or more
<b>(b)</b>	Field view	1°30' (2.5m to 3m at 100m )
<b>(c)</b>	Minimum Focusing Distance	1.7 m
<b>(d)</b>	Track light	In built
<b>3</b>	<b>DISTANCE MEASUREMENT</b>	
<b>WITH REFLECTOR</b>		
<b>(a)</b>	Single Prism	7500m or better with single prism
<b>(b)</b>	Accuracy	1 mm +1.5 ppm
<b>(c)</b>	Least Count	.1 mm
<b>WITH OUT REFLECTOR</b>		

	<b>(a)</b>	Accuracy < 500 mtr	2 mm + 2 ppm
	<b>(b)</b>	Range	1000 m or better
	<b>(c)</b>	Measuring Time	1 second or better
<b>4 ANGLE MEASUREMENT</b>			
	<b>(a)</b>	Method	Absolute continuous Encoders (No Indexing Reqd.)
<b>5 MEASURING TIME</b>			
	<b>(a)</b>	Reflector less	3 to 15 Second
	<b>(b)</b>	With Reflector	Upto 2.5 Second or better

<b>6 MEMORY</b>			
	<b>(a)</b>	Memory	Internal Memory of 1 GB and external memory support using SD card and Pen drive.
<b>7</b>	<b>(a)</b>	<b>PROGRAMMES INBUILT</b>	<b>Following On Board Programs Should be Present</b>
			Set Station and Orientation Setting out Free Station Remote Height Ties Distance Area Missing Line Measurement Reference Line Rapid measure code list Resection COGO
	<b>(b)</b>	<b>PROCESSING ENGINE</b>	

	The hardware of the Total station should be capable of processing the GPS signals and should be capable of Handling both GPS and TPS without any additional attachments. The TPS Should be able to start the Logging of GPS Data without any external Sensor or Receiver and should have inbuilt of option for the same.	
<b>8</b>	<b>COMPENSATOR</b>	
	<b>(a)</b>	Dual Axis Dual Axis or better
	<b>(b)</b>	Compensating Range $\pm 4'$ with resolution of 0.5"
<b>9</b>	<b>TEMPERATURE</b>	
	<b>(a)</b>	Operating -20 °C to + 50°C
	<b>(b)</b>	Storage -40 °C to + 70°C
<b>10</b>	<b>DIGITAL LEVEL</b>	Graphical display on screen
<b>11</b>	<b>PLUMMET</b>	
	<b>(a)</b>	Laser Plummet Inbuilt Laser Plummet from the Instrument.
<b>12</b>	<b>DRIVES</b>	
	<b>(a)</b>	Horizontal & Vertical Drives Should have Endless movements with friction drives.
<b>13</b>	<b>DISPLAY</b>	
	<b>Resolution</b>	Should have graphic LCD with VGA(640 * 480 Pixels)
	<b>Graphics</b>	The Total Station should display complete graphics of Lines, Polygons, Points to be displayed on the screen, the same should be downloaded into the PC and when exported the data should be exported in the same field created maps in different layers.

		<b>Illumination</b>	Should have capability of Illuminating the Display
<b>14</b>		<b>DATA OUTPUTS</b>	Should be capable of outputting the data in all standard formats like CAD/xml/ASCII/txt. Should download the surveyed maps as it is to the software and should export the same map to CAD without any processing or editing of the data.  DXF and other customized formats, the instrument should be programmable.
<b>15</b>		<b>SURVEY DATA</b>	Graphical Display of the surveyed points, Lines & Areas with Codes & Symbols
<b>16</b>		<b>KEY BOARD</b>	
		<b>Type</b>	Both side identical full Alphanumeric color graphical display
		<b>Illumination</b>	Both Key Pad and the display could be illuminated
<b>17</b>		<b>COORDINATE SYSTEM</b>	
			Should be Capable of Choosing Ellipsoid, Projection and other parameters, and also for triangulating other Lat, Long once the coordinate system is applied  Should be capable of determining coordinate system for given number of Geodetic/Grid points at any distance.
<b>18</b>		<b>GPS COMPATABILITY</b>	The Total station should have on line compatibility with GPS with facility to mount GPS antenna directly on top of TPS connection. GPS device for the same should be offered with Total Station.
<b>19</b>		<b>UPLOAD OPTIONS</b>	Should have be Capable of Uploading AutoCAD,

			dxg and shp file maps
<b>20</b>	<b>POWER OPTIONS</b>		
	<b>(a)</b>	Battery	Lithium Ion Batteries
	<b>(b)</b>	Operation Time	Should be minimum of 6 - 8 hours
	<b>(c)</b>	Charging Time	Less than 1 hour
<b>21</b>		<b>WEIGHT</b>	Should not be more than 7 Kg
<b>22</b>	<b>CAMERA inbuilt with total station</b>		
	<b>(a)</b>	Sensor	5 M Pixels CMOS Sensors
	<b>(b)</b>	Focal Length	21mm
	<b>(c)</b>	Frame rate	21 frame per seconds
	<b>(d)</b>	Image Storage	JPEG upto 5Mpixels
	<b>(e)</b>	Zoom	1x,2x,4x
<b>LIST OF REQUIREMENT</b>			
<b>1</b>		<b>Tripod</b>	Wooden Telescopic Tripod 2 numbers
<b>2</b>		<b>Prism</b>	Suitable Reflector 2 nos. with each Total Station Should be supplied.
<b>3</b>		<b>Poles</b>	Suitable poles for mounting the prism 2 nos. should be supplied with stands for Poles to be supplied for station shifting
<b>4</b>		<b>Power Supply</b>	2 nos. of battery should be supplied for each total station.
<b>5</b>		<b>Charger</b>	1 no of charger should be supplied for each total station charging one battery at a time.
<b>6</b>		<b>Batteries</b>	Two nos. of battery with each Total Station
<b>7</b>		<b>Carriers</b>	Carriers with inbuilt optical plummet for each back sight with tribrach without optical plummet

<b>8</b>	<b>Software</b>	Combined Software to process TPS data
<b>9</b>	<b>Mounting Kit</b>	Mounting kit to Mount GPS antenna on TPS

<b>Multiconstellation RTK GNSS RECEIVER AND ANTENNA</b>			
<b>1</b>	<b>Type</b>		
	<b>(a)</b>	Multifrequency and Multiconstellation support receiver	
<b>2</b>	<b>Signal Tracked</b>		
	<b>(a)</b>	Receiver capable of tracking the following signals: GPS L1C, L2C and L2P GLONASS L1 and L2, upgradeable to Galileo, beidou SBAS Gagan.	
<b>3</b>	<b>Measurement Technology</b>		
	Low Noise multiple correlator, with phase tracking precision of better than 0.5 mm, inbuilt multipath mitigation and low elevation tracking receiver		
<b>4 ANTENNA</b>			
	<b>(a)</b>	Base Station	Dual Frequency GNSS Antenna with combined antenna and receiver with capability to track signal as mentioned earlier
	<b>(b)</b>	Rover Station	Dual Frequency Geodetic Grade Antenna with combined antenna, receiver, integrated UHF and GSM radio simultaneous, with high gain tracking signals as mentioned earlier. The antenna and receiver should be Capable of orienting the Total Station with facility to mount GPS on top of total station. It should have facility to log the GNSS data directly to Total station when mounted.
<b>5 RECEIVERS</b>			
	<b>(a)</b>	Base station	Base station should be Multifrequency frequency RTK Reference combined antenna and Receiver with



		integrated GSM antenna
	<b>(b)</b>	Rover Station should be Multifrequency frequency combined antenna and receiver with integrated GSM antenna
<b>6 SPECIFICATIONS BASE AND ROVER</b>		
	<b>(a)</b>	Channels More than 440 (up to 60 satellites simultaneously on two frequencies)
	<b>(b)</b>	Static Accuracy Horizontal Vertical Accuracy 3 mm + 0.1 ppm, 3mm+ 0.4 ppm
	<b>(c)</b>	RTK Horizontal Accuracy Vertical accuracy 8 mm + 1ppm 15mm + 1ppm
	<b>(d)</b>	Update Position update rate of 20 Hz
	<b>(e)</b>	Operating Temperature -20 °C to + 50°C
	<b>(f)</b>	Storage Temperature -40 °C to + 70°C
	<b>(g)</b>	Measuring Modes Static, Real Time Kinematic
<b>7</b>		<b>RTK Interface</b>
	<b>(a)</b>	<b>Base Station</b> GSM/ GPRS and UHF inbuilt
	<b>(b)</b>	<b>Rover Station</b> GSM/ GPRS and UHF inbuilt
<b>8 For Both Base and Rover</b>		
	<b>(a)</b>	<b>Port</b> Should have minimum of 1 RS232 port, Bluetooth integrated, Internal Micro SD card slot of 1 GB

			minimum.
	<b>b)</b>	<b>Internal memory of receiver</b>	1 GB or More
	<b>(c)</b>	<b>LED's</b>	Well defined status LED's for transmission, reception, Bluetooth, tracking and power.
	<b>(d)</b>	<b>Web Interface</b>	The receiver should have integrated web interface for checking the status in internet explorer of the receiver connected to PC.
	<b>(e)</b>	<b>GPS &amp; TPS Interface</b>	It should be possible to do the configuration of GPS from TPS key board.
<b>9</b>	<b>SOFTWARE</b>		
	<b>(a)</b>	<b>OFFICE SOFTWARE</b>	A combined software capable of handling both the total station and GPS data should be supplied
	<b>(b)</b>	<b>DATA TRANSFER</b>	The software should be capable of transferring the field created maps directly in to the PC
	<b>(c)</b>	<b>REPORTING</b>	The software should be capable of generating the HTML styled reports for the field survey directly with single key click during import.
	<b>(d)</b>	<b>AREA AND LINE</b>	The software should be capable of creating Lines and Areas at any later time also for the field survey.
	<b>(e)</b>	<b>COGO CALCULATIONS</b>	The software should be capable of doing COGO(Coordinate Geometry) calculations for the field surveyed data
	<b>(f)</b>	<b>CAD EXPORT</b>	The software should be capable of transferring the Field created Field created maps directly to the CAD software directly with all symbology attached.

	<b>(g)</b>	<b>SHAPE EXPORT</b>	The software should be capable of transferring the field data directly into the shape file format.
	<b>(h)</b>	<b>PROCESSING</b>	The software should be capable of fixing the orientations for the smart station setups at any time in the office even though if not done in the field. The software should be capable of processing GPS and GLONASS phase data with support for network adjustment, datum transformation, RINEX import and export.
	<b>(i)</b>	<b>IMAGE REFERENCING</b>	The software should be capable of Referencing an image for supplied control point coordinates.
	<b>(j)</b>	<b>UPLOAD</b>	The software should be capable of creating the RAW upload files for any *.dxf or XML file directly to the GPS
<b>ACCESSORIES FOR GPS</b>			
<b>40</b>		<b>Tripod</b>	Wooden Telescopic Tripod 1 no. each for base and rover
		<b>Controllers</b>	One controllers should be provided to configure both base and rover having color graphical display with full VGA support. Should have alphanumeric Hard Keypad. The controller should be compatible with total station. Integrated Bluetooth communications. Necessary software should be bundled.
<b>41</b>		<b>Tribrach</b>	Centering System with optical plummet 1 no. for Base.
<b>42</b>		<b>Carrier</b>	Mounting system for Antenna on total station with suitable adaptors if required 1 no. for base. The Tribrach and carrier should be detachable and separate.
<b>44</b>		<b>Power Supply</b>	Internal Battery 2 no and for Base and Rover with external power supplies cables for car batteries
<b>45</b>		<b>Charger</b>	Suitable External Chargers for Charging 2 nos. of Batteries with two batteries being charged simultaneously should be supplied provided. One for each base and rover units
<b>46</b>		<b>Software</b>	Complete Software with capabilities as above 1 nos. of License for post processing.

**Other Criteria:**

- Comprehensive Warranty for 2 years should be provided for all items.
- Training:- Three training as below
  - (i) Three training sessions of three days each shall be conducted by experts of the supplier.
  - (ii) The expert will explain every aspect like operation, data collection, processing, and interpretation of data at desired site of the purchaser.
  - (iii) The period between trainings shall be at the discretion of the purchaser.

If demo desired at our site before procurement, should be provided free of cost.

## **GENERAL TERMS AND CONDITIONS:**

- Instrument Supplier should have Manufacturer's Authorized /Certified service center in India with Adequate spare parts and accessories for Minimum 10 years ,Latest authorization to be attached
- Supplier shall have existence in survey business for more than 5 years, Documentary evidence shall be attached.
- List of Government/PSU organization/agencies to whom the vendor has supplied Total station in India earlier with performance certificated shall be enclosed, failing which offer will be rejected.
- Make, Model & origin of the offered product should be quoted clearly.
- Detailed technical brochure/leaflet from OEM has to be enclosed with the tender.
- All accessories offered should be original from OEM only.
- Tenderer should be given adequate OEM service setup in India, i.e. trained technical personals from OEM and machineries installed at Service Centre, which has to be physically verified at their service center.

Suppliers must supply along with the quotation:

- A detailed compliance statement in tabular form giving particulars as per specifications given in the tender document.
- Literature/brochures/manual in support of compliance statement. The relevant sentences/paragraph in the literature that supports the specifications should be highlighted and numbered according to the numbering of the specifications in the tender.
- A detailed description of the technical support they will be able to provide in Chandigarh for installation, service and maintenance of each of the components of the system.

**ANNEXURE B**  
**(To be returned, fully complete, with the Technical Bid) GENERAL QUESTIONNAIRE**

- i. This Annexure must accompany the Technical Bid.
- ii. The tenderers must give specific answers against each of the following questions.
- iii. Equivocal or evasive replies will render the tender liable to be ignored.

**QUESTIONS:**

- 1) Name and address of manufacturer:
- 2) Station/Place of manufacturer:
- 3) Whether the tendering firm is/are:
  - a. Manufacturer
  - b. Manufacturer's authorized agents
  - c. Holders of stock of the stores tendered for
- 4) If stores offered are manufactured in India, please state whether all the raw materials, components etc. used in their manufacture are also produced in India. If not, give details of materials, components etc. that are imported and their break-up of the indigenous and imported components together with their value and proportion it bears to the total value of the stores.
- 5) State whether raw materials are held in stock in India sufficient for the manufacture of the stores.
- 6) Please state specifically whether the price tendered by you is to the best of your knowledge and belief, not more than the price permissible for you to charge a private purchaser for the same class and description of goods under the provisions of any law for the time being in force and not more than the prices you would charge from other Govt.Depts./Institutions in India. If not, state the reasons as well as the margin of profit included.
- 7) Please indicate the following:-
  - a. The precise relationship between the Foreign Manufacturers/Principals and their Indian Agents/Associates.
  - b. The mutual interest which the Manufacturer/Principals and their Indian Agents/Associates have in the business of each other.
- 8) Business name and construction of tendering firm is the firm registered under:
  - a. The Indian Companies Act, 1956.
  - b. The Indian Partnership Act, 1932 (please give the name of partner).
  - c. Any other act.

- d. If the firm is not registered please give the name(s) and address of the owner(s)
- 9) a.** Do you agree to various clauses of Para of the Agreement (Annexure 'C') regarding arbitration.
- b.
- i. In case of partnership firms, whether registered under Indian partnership Act, 1932.
- ii. In case the answer to question at 9(a) by the partnership firms be in the affirmative please state further:-
- iii. Whether in the partnership Agreement, authority to refer disputes concerning the business of the partnership to arbitration has been conferred on the partner who has signed the tender.
- iv. If the answer(s) to question 9(b) (iii) is in the negative, whether there is any general power of attorney executed by all the partners of the firm authorizing the partner who has signed the tender to refer disputes concerning business of the partnership to arbitration.
- c. If the answers to either 9(b) (iii) or 9(b) (iv) is in the affirmative, please, furnish a copy of either the partnership Agreement or the general power of attorney, as the case may be.

**NOTE:** Please attach to the technical bid a copy of the Partnership Agreement or the General Power of Attorney on either of which reliance is placed for authority of partner or the partner signing the tender to refer disputes to arbitration. The copy should be attested by a NOTARY PUBLIC or its execution should be admitted by an affidavit drawn on properly stamped paper by all the partners.

- 10)** Indicate clearly the guaranteed delivery/commissioning and handing over period.
- 11)** Please state clearly the period for which your offer will be valid for acceptance beyond the date of opening of the Technical Bids (please see note below):

**IMPORTANT NOTE:** Tendering firms are requested to keep their offers valid for acceptance for a period of 90 days from the date of opening of the Technical Bids. If the firm is unable to keep its offer open for the specified period of 90 days, then they should specifically state the period for which their offers would remain open but they must realize that such a provision may result in the rejection of their offers.

**12)** Please furnish the following details:

1. Indian Agent (If any)
2. Income Tax Return
3. Permanent Account Number:

## ANNEXURE C

### (To be returned with the Technical Bid)

#### Terms and Conditions of the Agreement, to be executed by successful Tenderer.

1. This Agreement regarding the supply and maintenance of INTEGRATED TOTAL STATION made this day

\_\_\_\_\_ by and between Dr. Mahesh Thakur (Assistant Professor, Department of Geology, Panjab University, Chandigarh) (hereinafter referred to as the First Party) and M/s \_\_\_\_\_ and their agents \_\_\_\_\_

(Hereinafter referred to as the Second /Third Party respectively) which expression shall unless specifically excluded by or repugnant to the context include their Heirs, Executors, Administrator, Legal representatives and Assignees. The second party- may nominate their agent if they so desire and inform the First Party in writing about such appointment. It is further stipulated that notwithstanding anything else in this Agreement, the Second Party shall inform the First party in writing about the change of such agency. Further, the new agency shall remain bound by the present Agreement irrespective of any arrangement written or otherwise between the Second Party and its agents to which agreed that this Agreement will be binding on all parties collectively and separately.

#### 2. THE AGREEMENT:

2.1. This Agreement concerns the supply installation and commissioning of INTEGRATED TOTAL STATION on turnkey basis to be supplied by the Second Party / Third Party according to Supply Order No. \_\_\_\_\_ Dated \_\_\_\_\_ and their Proforma Invoice No \_\_\_\_\_ dated \_\_\_\_\_ a copy of which is appended (Annexure \_\_\_\_). Further, the equipment is to be installed by the Second Party / Third Party at the designated premises of the first party according to the schedule agreed upon as stated below.

2.2. The Second Party / Third Party agree to supply, install and commission the entire equipment within the period of 50 days in case of imported items and 30 days in other cases after placing the supply order.

#### 2.3. MODE OF DESPATCH

The equipment if imported, with all its accessories should be dispatched by air to Delhi (India) duly insured up to Chandigarh, freight and insurance charges prepaid.

2.4. The Second / Third Party shall ensure submission of performance Bank Guarantee and duly executed Agreement immediately but not later than seven days after issue of Supply Order failing which and without prejudice to its remedy under the contract, the Supply Order shall stand cancelled, except when specific extension is granted by the head of the department. If the PBG and Agreement is not supplied, as called for within the stipulated period, the Supply Order shall be liable to be cancelled and EMD forfeited.

a. Further, the equipment will be supplied, installed, commissioned and handed over to the First Party in complete working order within a total period as specified above.

If the supplier fails to deliver any or all of the goods or perform the services within the time period(s) specified in the contract, the purchaser shall, without prejudice to its



other remedies under the contract, deduct from the contract price, as liquidated damages, a sum equivalent to 0.5 % of the contract price for each week of delay or part thereof until actual delivery or performance, up to a maximum deduction of 10%(ten percent) of the contract price. Once the maximum is reached, the purchaser may consider termination of the contract by which the supplies or their satisfactory installation, commissioning and handing over is delayed. The Second Party / Third-party will inform the First Party in writing, intimating the reasons for delay in supplying, commissioning and handing over of the equipment in satisfactory working order. The First Party at its sole discretion may consider a reduction or waiving of the penalty for a period to be stipulated in writing.

- 2.5. The system operational efficiency and concepts would be fully demonstrated after job completion by the Second/Third Party for which nothing extra shall be payable by the Institute. The materials etc. required for demonstration of satisfactory functioning of the equipment shall be arranged by the Second /Third-party.
- 2.6. Through inspection of the equipment system will be carried out by the First Party only on completion of the entire job of installation and commissioning of the equipment. The acceptance of the equipment will be based on demonstration of the satisfactory working of all modes of the equipment as tested by the Inspecting Authority.
- 2.7. This Agreement comes into effect from the date of issue of supply order in favor of Second/Third Party. The Agreement will remain valid for a period till the rights and liabilities of the parties are finally disposed of.
- 2.8. On expiry of the initial period of 1 year, this Agreement may be renewed for a further period by mutual Agreement between the parties in writing. However, notwithstanding anything else stated here, the Second Party undertakes to continue to provide service and required spare parts at an agreed price for the entire life of the equipment. Further, the Second Party undertakes to provide all the circuit diagrams of the entire equipment, including all its accessories, in the event the particular model is phased out of production. It further agrees to provide and sell to the First Party all spare parts that may be needed for the remaining life of the equipment.

### **3. PRICES:**

3.1. Prices of the equipment(s) is/are \_\_\_\_\_  
with the break-up for freight & insurance, agency commission, installation charges payable at actual as below

### **4. PAYMENT TERMS:**

- 4.1. For imported items, FOB value may be paid through irrevocable Letter of Credit established in favor of the foreign supplier through State Bank of India, Panjab

University, Chandigarh on a bank in the supplier's country, on submission to the bank of the documents specified in the Letter of Credit and further following documents

- a. Foreign supplier's certificate that the amounts shown in the invoice are correct in terms of the contract and that all the terms and conditions of the contract have been complied with.
- b. Foreign supplier's certificate confirming that the original documents have been Dispatched to the port consignee in accordance with the contract, and
- c. Any other document specified in the notification of award or the contract.

Or

The payment shall be released on the basis of certificate by the respective user department of successful installation of the equipment.

- 4.2. The Indian Agency Commission of Rs. \_\_\_\_\_ will be paid to the Third Party and has been included in the total value of the equipment.
- 4.3. The Purchaser shall make all reasonable and due efforts to pay the Indian Agency Commission to the Third Party at the earliest possible after satisfactory installation/commissioning and handing over of the system in good working condition and meeting any other requirements for payment of the Agency Commission. The rate of exchange applicable for covering Agency commission into equivalent Indian Rupees shall be the TT selling rate prevalent on the date of releasing the documents at the time of shipment by the bankers. The Indian Agency Commission will be paid in Indian Currency (Rupees) to the Third Party.
- 4.4. The equipment will be installed by the Second Party or the Third Party; at the designated premises of the First Party.
- 4.5. The octroi exemption certificate, if required, shall be provided by the First Party.
- 4.6. It is agreed that increase in price on account of any statutory increase or fresh imposition of customs duty, sales tax or on account of any other tax or duty leviable in respect of the stores specified in the accepted tender which takes place after the date of delivery installation, commissioning and handing over period stipulated in the contract, shall not be admissible on such of the said stores as are delivered after the stipulated date of delivery and completion. This is subject to Force Majeure clause.
- 4.7. It is agreed that notwithstanding anything stipulated in the contract for increase in price on any other grounds, such increase which takes place after the date of the delivery and completion stipulated in the contract shall not be admissible on such of the said stores as are delivered after the expiry of the delivery and completion period stipulated in the contract.
- 4.8. But, nevertheless, the Institute shall be entitled to the benefit of any decrease in price on account of reduction in or remission of custom duty, excise duty or sales tax or any other tax or duty or on accounts of any other grounds, which takes place before the date of actual delivery of the goods.

## **5. IMPORT FORMALITIES AND CUSTOMS CLEARANCE:**

- 5.1. The equipment requiring import from abroad will be imported/High sea sales under the OGL scheme, for which Second Party / Third Party will ensure, before shipment takes place, that the equipment in question can be imported under the said scheme.

- 5.2 It will be the responsibility of the Third Party to get the customs clearance of the equipment duty free where this dispensation is available. It will also be the responsibility of the Third Party to pursue any claims with the customs authorities/insurance company, cargo operators and transporters as may arise at any stage.
- 5.3 The N.M.I.C. (Not Manufactured in India Certificate) and the C.D.E.C. (Custom Duty Exemption Certificate) will be provided by the First Party. However, the Second Party /Third Party will affect the shipment only after seeking confirmation regarding availability of the above from the First Party. Delays on this account will not count towards any penalty clauses in this Agreement.
- 5.4 The First Party shall indicate in the Supply Order whether any custom duty/excise duty exemption is available. The First Party shall make available such custom / excise duty exemption certificate. However, it shall be the responsibility of the Second / Third Party, before dispatching the consignment to ensure that such exemption certificates have become available with the First Party. Failure on this part of Second / Third party; will render them liable to pay all demurrage charges which become payable.

## **6. INSURANCE**

- 6.1 Second Party will ensure that the equipment is properly insured for the full C. I. F. value to cover the transit upto site of installation (At user's premises) and to cover the further storage period etc. upto and of the period of satisfactory installation as agreed upon. If the installation is delayed beyond the agreed date of satisfactory installation, commissioning and handing over of the unit then in that event any transit and storage damages which come to light after such delays shall be at the risks and cost of the Second/Third Party. The Second Party/Third Party will provide to the First Party, after due inspection, a detailed list of any loss or damage that may have occurred so as to enable the First Party to file the appropriate claims that may arise with the insurance company(ies). The second/Third Party undertakes to provide all assistance in pursuing any such insurance claims expeditiously. In lieu of damaged/lost items etc. regardless of the fact whether the claim is settled by the underwriters or not, the Second Party's liability is restricted to making free replacement/rectifications and any local expenses such as Customs Duty Clearance etc. connected with such replacements shall be borne by the First Party.
7. It should be noted that if, in consideration of offer of earlier delivery, the contract is placed with a higher tenderer in preference to the lowest acceptable offer, the tenderer will be liable to pay to the Institute the difference between the contract rate and that of the lowest acceptable tender on the basis of the final price for destination, including all elements of freight, sales tax. Local taxes, duties and other incidentals, in case of failure to complete supplies in terms of such contract within the date of delivery specified and incorporated in the contract. This is in addition to and without prejudice to other rights of the Institute to recover all other losses and damages resulting from delayed supplies and of cancellation and risk purchase in case of failure to supply the stores.

## **8. GUARANTEE/WARRANTY**

- 8.1. Guarantee/warranty shall be for a period of 24 months.

- 8.2. The foreign suppliers and the tenderer should guarantee the entire equipment against defects of manufacture, workmanship and poor quality of components.
- 8.3. The guarantee/warranty against defects of manufactures workmanship and poor quality of components; shall be for the entire equipment and work conducted under the contract. During the guarantee period the replacement of any part(s) of the equipment or rectification of defect of works shall be free of cost.
- 8.4. The Second Party/Third Party guarantee that the equipment being offered is the latest model and that spares for the equipment will be available for a period of at least 10 years (life span).The Second Party/Third Party also guarantee that they will keep the Institute informed of any up-date of the equipment over a period of next 5 years and undertake to provide the same to the Institute at no extra cost.
- 8.5.The Second/Third Party guarantee/warranty that they will supply regularly any items of spare parts requisitioned by the purchaser for satisfactory operation of the equipment till the life span (to be mutually decided) of the equipment if and when required on agreed basis for an agreed price. The agreed basis could be an agreed discount on the published catalogue price or an agreed percentage of profit on the landed cost.
- 8.6.The Second/Third Party guarantee that before going out of production of spare parts, the Second Party/Third Party will give adequate advance notice of at least six months to the First Party so that the First Party may undertake to procure the balance of the life time requirements of spare parts.
- 8.7. The Second/Third Party guarantee that they will make available to the First Party the blueprints and drawings of the spare parts as and when required in connection with the equipment. The Second/Third Party guarantee that the goods/articles supplied to the First Party under this contract shall be of the best quality and workmanship and shall be strictly in accordance with the specifications and particulars contained/ mentioned in the clauses here of and the Second/Third-party hereby guarantee that the said goods/stores/articles conform to the description and quality aforesaid. The First Party will be entitled to reject the said goods/stores/articles or such portion thereof as may be discovered not to conform to the said description and quality. On such rejection, the goods/ stores/articles will be at the seller's risk and all the provisions herein contained relating to rejection of goods etc. shall apply. The Second Party / Third Party shall, if called upon to do so, replace within a period of fourteen days or such further period as may be extended from time to time by the First Party at his discretion, on an application made thereof by the Second Party/Third Party, the goods/stores/articles or such portion thereof as rejected by the first Party. In such an event, the above mentioned warranty /guarantee period of the entire equipment shall be extended by the time taken for these replacements. Otherwise, the second/Third Party shall pay to the First Party such demurrages as may arise by reason of breach of the conditions herein contained. Nothing herein contained shall prejudice any other right of the First Party in that behalf.
- 8.8. The Second Party / Third Party will submit a Performance Bond / Bank Guarantee (PBG) for 5% of the value of the equipment amounting to Rs. \_\_\_\_\_ towards the execution of the Agreement and the warranty valid till the expiry of the warranty period of 24 months, or extended period of warranty of months as the case may be. The PBG should however be valid for at least 60 days beyond expiry of Guarantee/Warranty period. After receipt of said bank guarantee, the First Party will return the EMD already

submitted by the Second Party / Third Party as earnest money. On expiry of the warranty period, the PBG will be returned by the First Party to the Second Party / Third Party.

## **9. INSTALLATION AND SATISFACTORY COMMISSIONING OF THE EQUIPMENT:**

- 9.1. The scope of work includes the satisfactory installation and satisfactory commissioning of the equipment by the Second / Third Party. The term satisfactory installation and commissioning and handing over wherever used in this contract/Agreement will mean satisfactory and faultless functioning of the equipment for 30 days and of works conducted there under covered under the contract in working order. The Second Party / Third Party shall in consultation with the first Party, furnish at no extra cost to the First Party within 15 days of the Supply Order, the full details of all works required to be carried out by the Institute in connection with the completion of the work within the stipulated period.
- 9.2. In case the equipment is not installed and/or put in working condition to the full satisfaction of First Party within the period stipulated in the Agreement or within such time as may be extended in writing by the First Party, or the equipment does not function properly during the period of one year from the date of its installation the First Party shall be entitled to return the equipment and seek the refund of the amount paid and the interest accrued thereon/demurrages borne by it from the Second/Third Party jointly and severally.

## **10. SPARES**

### **10.1. SPARES PARTS DURING GUARANTEE/WARRANTY PERIOD**

All spare parts required during the guarantee/warranty period of the equipment as defined in Clause 8 for the satisfactory maintenance, running and upkeep of the equipment shall be provided by the Second/Third Party at its cost, expenses and care. All such defective parts/components replaced by the Second/Third Party during the guarantee period shall be the property of the Second/Third Party.

## **11. FORCE.MAJEURE**

Any failure of omission or commission to carry out the provisions of this contract by the supplier shall not give rise to any claim by any party, one against the other, if such failure of omission or commission arises from an act of God, which shall include all acts of natural calamities such as fire, flood, earthquake, hurricane, or any pestilence or from civil strikes, compliance with any statute and/or regulations of the Government, lockouts and strikes, riots, embargoes or from any political or other reasons beyond the supplier's control including war (whether declared or not), Civil War or state of insurrection, provided that notice of the occurrence of any event by either party to the other shall be given within two weeks from the date of occurrence of such an event which could be attributed to Force Majeure conditions.

## **12. ARBITRATION:**

- 12.1. If at any time, any question, dispute or difference whatever shall arise between the two parties upon or in relation to or in connection with this Agreement, either of the parties may give to the other notice in writing of the existence of such a question, dispute or difference and the same shall be referred to two Arbitrators, one to be nominated by the

First Party and the other to be nominated by the Second Party/Third Party. Such a notice of the existence of any question, dispute or difference in connection with the Agreement shall be served by either party within one year of the beginning of such dispute failing which all rights and claims under this Agreement shall be deemed to have been forfeited and absolutely barred. Before proceeding with the reference, the Arbitrators shall appoint/nominate an Umpire. In the event of the Arbitrators not agreeing in their award, the Umpire appointed by them shall enter upon the reference and his award shall be binding on the parties. The venue of the arbitration shall be at Chandigarh (India). The Arbitrators/Umpire shall give a reasoned award.

- 12.2. The provisions of the Indian Arbitration Act in force and of rules framed thereunder and any statutory modifications thereof shall be deemed to apply and be incorporated in this Agreement. 16.3. Upon even or any such reference, the cost of any incidentals to the reference and award(s) respectively shall be at the discretion of the Arbitrators or in the event of their not agreeing, of the Umpire appointed by them who may determine the amount thereof or direct the same to be fixed as between solicitors and client or as between parties and shall direct by whom and in what manner the same shall be borne and paid.

**13. JURISDICTION:**

The courts at Chandigarh alone will have the jurisdiction to try any matter, dispute or reference between the parties arising out of this Agreement/Contract. It is specifically agreed that no court outside and other than Chandigarh court shall have jurisdiction in the matter.

## ANNEXURE 'D'

### (To be returned with the Technical Bids) PERFORMANCE BOND (BANK GUARANTEE)

In consideration for Dr. Mahesh Thakur (Assistant Professor, Department of Geology, Panjab University, Chandigarh) (hereinafter called the purchaser) having agreed to release the 100% payment of net price as per terms and conditions of a concluded Contract No.

\_\_\_\_\_ dated \_\_\_\_\_ (hereinafter called 'the contract') for supply of INTEGRATED TOTAL STATION (hereinafter called the goods) to Messrs.

\_\_\_\_\_ (hereinafter called 'the supplier') on submission of a Bank Guarantee to the satisfaction of the purchaser for the due performance of the said contract.

We, \_\_\_\_\_ (hereinafter called 'the Bank ') at the request of the supplier do, as a primary obligors and not merely as surety, hereby irrevocably, unconditionally and absolutely undertake against any loss or damage caused or suffered by the purchaser by reason of any failure of the supplier to perform or omission or negligence to perform any part of its obligations to the satisfaction of the purchaser in terms of the contract.

We, the Bank, do hereby undertake to pay the amount due and payable under this guarantee without any demur merely on a demand from the purchaser stating that the amount claimed is due by way of loss or damage caused to or would be caused to or suffered by the purchaser by reason of any breach by the said supplier of any of the terms and conditions contained in a said contract or by reason of the supplier's failure or omission or negligence to perform the said contract or any part thereof. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the bank under this guarantee, which shall not be considered as satisfied by any intermediate payment or satisfaction of any part of or obligation hereunder. However, our liability under this Guarantee shall be restricted to an amount not exceeding 5% of the value of item.

We, the Bank, undertake to pay to the purchaser any amount so demanded by the purchaser, notwithstanding,

- a. any dispute or difference between the purchaser and the supplier or any other person or between the supplier or any person or am suit or proceeding pending before any court or tribunal or arbitrator relating thereto or
- b. the invalidity, irregularity or unenforceability of the contract or
- c. Any other circumstances which might otherwise constitute discharge of this guarantee, including any act or omission or commission on the part of the purchaser to enforce the obligations by the supplier or any other person for any reason whatsoever.

We, the Bank, further agree that the Guarantee herein contained shall be continued one and remain in full force and effect during the period that would be taken for the performance of the said contract and that it shall continue to be enforceable till all the dues of the purchaser under or by virtue of the said contract have been fully paid and its claims satisfied or discharged or till the office of Dr. Mahesh Thakur (Assistant Professor, Department of Geology, Panjab University, Chandigarh) that the terms and conditions of the said contract have been fully and promptly carried out by the said supplier and accordingly discharges this Guarantee.

We, the Bank, hereby agrees and undertake that any claim which the Bank may have against the supplier shall be subject to and subordinate to the prior payment and performance in full

of all the obligations of the bank hereunder and the bank will not, without prior written consent of the purchaser, exercise any legal rights or remedies of any kind in respect of any such payment or performance so long as the obligations of the bank hereunder remain owing and outstanding, regardless of the insolvency, liquidation or bankruptcy of the supplier or otherwise howsoever. We, the Bank, will not counter claim or set off against its liabilities to the purchaser hereunder any sum outstanding to the credit of the purchaser with it.

We, the Bank, further agrees with the purchaser that the purchaser shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said contract or to extend time of performance by the said supplier from time to time or to postpone for any time or from time to time and of the powers exercisable by the purchaser against the said supplier and for bear or enforce any of the terms and conditions relating to the said contract and we shall not be relieved from our liability by reason of any such variation or extension being granted to the said supplier or for any forbearance, act or omission on the part of the purchaser or any indulgence by the purchaser to the said supplier or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

This guarantee will not be discharged due to the change in the constitution of the Bank or the supplier.

We, the Bank, lastly undertake not to revoke this Guarantee during its currency except with the previous consent of the purchaser in writing.

The disputes relating to this Bank Guarantee shall be resolved as per the terms and conditions of the contract.

Place  
Date

Signature and seal of  
the bank



**ANNEXURE 'D1'**

**(Undertaking from the Supplier on a Non-Judicial Stamp Paper of Rs 5/-  
duly attested by Notary) (To be returned with the Technical Bids)  
PERFORMANCE BOND/ GUARANTEE**

In consideration for Dr. Mahesh Thakur (Assistant Professor, Department of Geology, Panjab University, Chandigarh) (hereinafter called the purchaser) having agreed to release the 100% payment of net price as per terms and conditions of a concluded Contract

No. \_\_\_\_\_ dated \_\_\_\_\_

(hereinafter called 'the contract') for

supply of INTEGRATED TOTAL STATION (hereinafter called the goods) to us i.e. Messrs \_\_\_\_\_ (hereinafter called 'the supplier')

on submission of a Performance Bond to the satisfaction of the purchaser for the due performance of the said contract.

We, Messrs \_\_\_\_\_ (hereinafter called the Supplier) hereby submit the FDR/TDR No. \_\_\_\_\_ issued by \_\_\_\_\_

\_\_\_\_\_ (Name of the Bank) for Rs 5% of value of item pledged in favour of Dr. Mahesh Thakur (Assistant Professor, Department of Geology, Panjab University, Chandigarh) as Performance Guarantee amount and hereby irrevocably, unconditionally and absolutely undertake against any loss or damage caused or suffered by the purchaser by reason of any failure of the supplier to perform or omission or negligence to perform any part of its obligations to the satisfaction of the purchaser in terms of the contract.

We, the Supplier, do hereby authorize Dr. Mahesh Thakur (Assistant Professor, Department of Geology, Panjab University, Chandigarh) to forfeit this Performance Guarantee amount/undertake to pay the amount due and payable under this guarantee without any demur merely on a demand from the purchaser stating that the amount claimed is due by way of loss or damage caused to or would be caused to or suffered by the purchaser by reason of any breach buys of any of the terms and conditions contained in a said contract or by reason of our failure or omission or negligence to perform the said contract or any part thereof.

We, the Supplier, undertake to pay to the purchaser any amount so demanded by the purchaser, notwithstanding,

- a) any dispute or difference between the purchaser and the supplier or any other person or between the supplier or any person or any suit or proceeding pending before any court or tribunal or arbitrator relating thereto, or
- b) the invalidity, irregularity or unenforceability of the contract, or
- c) Any other circumstances which might otherwise constitute discharge of this guarantee, including any act or omission or commission on the part of the purchaser to enforce the obligations by the supplier or any other person for any reason whatsoever.

We, the Supplier, further agree that the Performance Bond/Guarantee herein contained shall be continued one and remain in full force and effect during the period that would be taken for the performance of the said contract and that it shall continue to be enforceable till all the

dues of the purchaser under or by virtue of the said contract have been fully paid and its claims satisfied or discharged or till the office of the Chairperson/Director/Coordinator of the respective Department/Centre/Institute, Panjab University, Chandigarh certifies that the terms and conditions of the said contract have been fully and promptly carried out by us and accordingly discharges this Performance Bond / Guarantee.

We, the Supplier, further agree with the purchaser that the purchaser shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said contract or to extend time of performance by us from time to time or to postpone for any time or from time to time and of the powers exercisable by the purchaser against us and forbear or enforce any of the terms and conditions relating to the said contract and we shall not be relieved from our liability by reason of any such variation or extension being granted to us or for any forbearance, act or omission on the part of the purchaser or any indulgence by the purchaser to us or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

This Performance Bond / Guarantee will not be discharged due to the change in the constitution of the Supplier.

We, the Supplier, lastly undertakes not to revoke this Performance Bond / Guarantee except with the previous consent of the purchaser in writing.

The disputes relating to this Bank Performance Bond / Guarantee shall be resolved as per the terms and conditions of the contract.

Place  
Date

Signature and seal of  
the Supplier

**ANNEXURE 'E'**  
**MANUFACTURERS AUTHORIZATION FORM**

To

**Dr. Mahesh Thakur**  
**Assistant Professor,**  
**Department of Geology,**  
**Panjab University,**  
**Chandigarh**

Dear Sir,

Tender No.

We, \_\_\_\_\_ who are established and reputable manufacturers of INTEGRATED TOTAL STATION, having factories at \_\_\_\_\_ and \_\_\_\_\_, hereby authorize Messrs. \_\_\_\_\_ [name and address of agents] to bid, negotiate and conclude the contract with you against Tender No. \_\_\_\_\_ for the above goods manufactured by us.

We shall remain responsible for the tender / Agreement negotiated by the said M/s \_\_\_\_\_, jointly and severely. No company or firm or individual other than M/s \_\_\_\_\_, are authorized to bid, negotiate and conclude the contract in regard to this business against this specific IFB as also for all business in the entire territory or India.

An agency commission of \_\_\_\_\_% included in the gross ex-works price is payable to M/s \_\_\_\_\_.

We hereby extend our full guarantee and warranty as per general terms and conditions of contract for the goods offered for supply against this invitation for bid by the above firm. Our other responsibilities include:

i. \_\_\_\_\_

ii. \_\_\_\_\_

*(Here specify in detail manufacturer's responsibilities)*

The services to be rendered by Messrs. \_\_\_\_\_  
are as under:

- i. \_\_\_\_\_
- ii. \_\_\_\_\_

*(Here specify the services to be rendered by the agent)*

In case duties of the agent are changed or agent is changed it shall be obligatory on us to automatically transfer all the duties and obligations to the new Indian Agent failing which we will ipso-facto become liable for all acts of commission or omission on the part of new Indian agent.

Yours faithfully,

[Name] for and on behalf of Messrs. \_\_\_\_\_  
[Name of manufacturers].

Note: This letter of authorization should be on the letter head of the manufacturing concern and should be signed by a person competent and having the power of attorney to bind the Manufacturer. A copy of notarized power of attorney should also be furnished.

**ANNEXURE 'F'**  
**PROFORMA OF CERTIFICATE FOR ISSUE**  
**BY THE PURCHASER AFTER SUCCESSFUL COMMISSIONING OF EQUIPMENT**

No. \_\_\_\_\_

Date \_\_\_\_\_

To

Messrs., \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Subject: Certificate of installation/commissioning of equipment/plant and its satisfactory and faultless functioning for 30 days after installation/ commissioning.

1) This is to certify that the equipment as detailed below has been received in good condition along with all the standard and special accessories and a set of spares (subject to remarks in para no. 2 below) in accordance with the contract/technical specifications. The same has been installed and commissioned.

a. Contract No. /Supply Order No. \_\_\_\_\_ dated \_\_\_\_\_

b. Description of the equipment(s)/plant(s)

c. Name of equipment.

d. Bill of lading/air way bill/railway receipt/woods consignment note no. \_\_\_\_\_  
\_\_\_\_\_ dated \_\_\_\_\_

e. Date of installation/commissioning

f. Date of completion of 30 days satisfactory and faultless functioning of equipment.

2) Details of accessories/spares not yet supplied and recoveries to be made on that

account. : SI. No. Description of item Quantity Amount to be recovered

\_\_\_\_\_

3) The proving test has been done to our entire satisfaction and operators have been trained to operate the equipment(s)/plant(s).

4) This will be without prejudice to the recoveries/penalties/LD which becomes payable due to omission or commission on the part of the Second and Third Party as per the Agreement, Supply Order and LOC.

Signature

Name

Designation with stamp

### Explanatory notes for filling up the certificate:

a. He has supervised the commissioning of the equipment in time, i.e. within the time specified in the contract.

b. It should always be kept in mind that satisfactory installation and commissioning means satisfactory and faultless functioning of the equipment for 30 days and of works conducted there under covered under the contract in working order.

