

INDIAN INSTITUTE OF ASTROPHYSICS
2nd BLOCK, KORAMANGALA, SARJAPUR ROAD,
BENGALURU – 560034.

TENDER DOCUMENT

Name of Work: **REMODELING OF FIRST FLOOR OF OPTICS
BLOCK FOR I.T.C.C.LAB AT I I A
BANGALORE**

Tender Notice No.: 13 /IIA/CIVIL/ITCC/BANG/ 2016-17 Dated 16.12.2016

Ph.080-2554 1200/1259/1359 , Fax: 25534043

Website: www.iiap.res.in, E-mail: astron@iiap.res.in



INDIAN INSTITUTE OF ASTROPHYSICS

2ND BLOCK, KORAMANGALA, SARJAPUR ROAD,
BENGALURU-560 034

Tender Notice No.: 13 /IIA/CIVIL/ITCC/BANG/ 2016-17 Dated 16.12.2016

The Director, Indian Institute of Astrophysics (IIA) invites sealed item rate tenders in the prescribed form for the following work from appropriate registered contractors in state PWD, CPWD, MES, Scientific institutions and private body contractors who have executed works of similar nature.

Sl. No.	Name of the work	Estimated cost in Rs.	Time for completion	EMD Rs.	Cost of tender document Rs.
1.	REMODELING OF FIRST FLOOR OF OPTICS BLOCK FOR I.T.C.C.LAB AT I I A BANGALORE	25,53,650/-	03 Months	60000.00	1000=00

The Tender Document can be viewed and downloaded from our website www.iiap.res.in/tenders.htm. The interested tenderers may at their option download the same, as **“NO” hard copies of Tender document shall be provided from this office** and submit their offers along with EMD (refundable) & Tender fee (non-refundable) prescribed therein, only in the form of Demand Draft from any Commercial banks drawn in favor of **“ Indian Institute of Astrophysics”** payable at Bangalore. The EMD shall be valid for 180 days from the due date of receipt of tenders.

The Offers containing complete tender document duly filled with price (Bill of Quantities) and complete credentials including experience certificates should be submitted in sealed cover super scribing the envelope with **“REMODELING OF FIRST FLOOR OF OPTICS BLOCK FOR I.T.C.C.LAB AT I I A BANGALORE”**, Notice No. and due date”, shall be submitted addressed to The Director, Indian Institute of Astrophysics, 2nd Block, Koramangala, Bengaluru– 560 034. **The last date of submission of bid is 16.01.2017 on or before 15:00 hrs.** The bids will be **opened at 15:30 hrs. on the same day** in the presence of attending tenderers or their authorized representatives.

ELIGIBILITY CRITERIA

The firms who fulfill the following requirements shall be eligible to submit their Bids. Joint ventures are not acceptable.

- i) Tendering Company shall be professionally managed and resourceful for taking up similar jobs.
- ii) The experience of having successfully completed similar work during last 7 years as on 31.03.2016 should be either of the following:
 - a) Three similar completed works costing not less than the amount equal to 40% of the estimated cost.

OR

- b) Two similar completed works costing not less than the amount equal to 50% of the estimated cost.

OR

- c) One similar completed work costing not less than the amount equal to 80% of the estimated cost.

Documentary Proof for Eligibility

Self attested/certified copy of work orders and completion certificates issued by the authority concerned to establish work experience shall be attached to the tender document. Copies of the Income Tax Returns along with Financial Statements such Balance Sheet, P&L Account etc for the last 3 Financial Years shall be attached to the tender document.

Valid Contract License issued by the competent authority shall be enclosed.

OTHER CONDITIONS

1. Technical & price Bids supported by the above information should be submitted in a Sealed envelope duly superscribed with the name of work, tender notice No., Last date of submission. The completed Bids will be received by this office **upto 15:00 Hrs. on 16.01.2017**

Average annual turnover during last 3 years ending 31.03.2016 should be at least 30% of the estimated cost.

2. If any information furnished by the tenderers is found incorrect at a later stage, the firm shall be liable to be debarred from tendering and taking up of work in I.I.A. The Institute reserves the right to verify the particulars furnished by the tenderers.
3. The firms should submit their offers along with EMD/Tender fee of prescribed amount upto **15:00 Hrs. on 16.01.2017**.
4. Incomplete Technical Bids are liable for rejection.
5. Late & / delayed offer will not be considered.
6. IIA is not responsible for any delay / loss of documents in transit.
7. The Tenders will be opened **on 16.01.2017 at 15:30** hours at **I.I.A, Bangalore** in the presence of bidders or their authorized representatives. The representatives of the tenderers should bring authorization letter / identification while attending for opening of the tenders.
8. IIA reserves the right to reject any or all tenders without assigning any reasons.

**Sr. Administrative Officer
IIA, Bengaluru-34.**

3. INSTRUCTIONS TO THE TENDERERS

1. The tenderers should submit the entire tender document with duly filled with price and technical details of the firm. All the pages of document shall be duly signed.
2. **The rates quoted by the tenderer in the schedule shall be EXCLUSIVE of all taxes and levies payable under respective statutes. Hence, taxes and duties should be shown separately.**
3. The Offers should be submitted in sealed envelope super scribed with “Tender for **“REMODELING OF FIRST FLOOR OF OPTICS BLOCK FOR I.T.C.LAB AT I I A BANGALORE”**., Notice No. and due date”.
4. If any clarification is required should be obtained before filling Tender Document through the authorized person for this purpose.
5. If any discrepancy is there between figures and words for quoted rates, the lower of the two will be considered for the purpose of evaluation.
6. The tenderers who do not fulfill all or any of the tender conditions or if the tender is Incomplete in any respect, will be summarily rejected.
7. The Institute is not bound to accept the lowest tender.
8. Even though the Tenderers meet the above criteria, they are subject to be disqualified if they have (Institute reserves the right to verify the particulars furnished by the tenderers);
 - made misleading or false representations in the forms, statements and attachments submitted in proof of the qualification requirement, Conditional bid / proposal: and / or
 - record of poor performance such as abandoning the works, not properly completing the contract, inordinate delays in completion, litigation history, or financial failures etc.
9. Any effort by the contractor to influence the client in the bid evaluation, bid comparison or contract award decision results in rejection of the contractors bid.
10. Incomplete Technical Bids/Price Bids are liable for rejection.
11. Late & delayed offer will not be considered at all.
12. IIA is not responsible for any delay / loss of documents in transit.
13. No bids will be considered if prescribed Tender Fee and EMD is not found with the bid.
14. All overwriting and corrections shall be duly attested with stamp & signature.

15. Corrigendum's / modifications / corrections, if any from the Institute, will be published on IIA website only.
16. The Director, IIA reserves the right to accept or reject the tenders in full or part without assigning any reason thereof.
17. Performance certificates of the completed works issued by the clients to be enclosed to the bid document.
18. The committee constituted by the Director, IIA may inspect the previously completed or the ongoing works of the bidders to assess their technical suitability for the tendered work.
19. All the pages of the tender document to be signed by the contractor and submit them in the respective sealed covers.
20. The successful contractor will be required to furnish performance guarantee of 5% (Five Percent) of the tendered amount within 15 days from the date of issue of letter of intent/ work order in the form of TDR or Performance Bank Guarantee from any Scheduled Bank issued in favour of "Indian Institute of Astrophysics" in the prescribed form. It should be valid for 60 days after virtual completion of the work.
21. The successful contractor will have to execute an Agreement with the Institute within 21 days of receipt of Letter of Intent / Work Order.
22. All the bidders are requested to visit the site before quoting the rates. The complete document shall be read and understood in all respect. If any clarification is required, the same may got cleared before submitting their offers in writing by contacting the following persons:

Mr. R.Ramachandra Reddy Ph.No. 080 - 2254 1417 E-mail: rrr@iiap.res.in

**INDIAN INSTITUTE OF ASTROPHYSICS
2ND BLOCK, KORAMANGALA, SARJAPUR ROAD,
BENGALURU – 560034.**

***Name of Work:* “REMODELING OF FIRST FLOOR OF OPTICS BLOCK
FOR I.T.C.C.LAB AT I I A BANGALORE”**

Tender Notice No.: 13 /IIA/CIVIL/ITCC/BANG/ 2016-17 Dated 16.12.2016

Name of

The Firm:

Address:

Phone No:

Last date for submission: 16.01.2017 up to 15:00 hrs

FORMAT FOR SUBMISSION OF TECHNICAL & ORGANISATIONAL DETAILS.

NAME OF THE FIRM :.....

1. OFFICE SET UP OF THE FIRM

1.1 Office Address :
.....
.....

1.2 Year of Establishment:

1.3 Contact Person Shri.....
With Designation

Ph No.....

Fax No.....

E-mail.....

1.4 Details of registration if any:
.....

1.5 Organizational setup of the firm
Total staff strength both technical
and Administration with their name, age
qualification and experience :

1.6 PAN (photocopy to be enclosed)
VAT Reg / TIN Reg No.....(photocopy to be enclosed)

1.7 Details of the staff as per the following format.

Sl. No	Profession/discipline	Name	Age	Qualification	Experience (total years)	Field of experience
	Civil					
	Electrical					

2 TENDERER'S EXPERIENCE

Details of Works carried out and on hand during last five years with details such as name of work, year of completion, client name and address, cost of work, time period of construction, nature of work, etc., (It shall enclose a certificate from the owner that the service rendered by the firm has been satisfactory)

Sl. No.	Name & description of work	Value of work and date.	Period of construction and date.	Client persons to whom reference may be made.

3. TOOLS AND EQUIPMENT LIST

The tenderer shall indicate herein below the equipment he has in possession and the equipment he proposes to bring to the site, in case the work is awarded to him.

Sl. No	Type and Description of the equipment.	Numbers the bidder has in possession	Numbers he proposes to bring on to site

Tenderers hereby confirms that the quantity and type of tools he will employ for construction will not be less than those listed above and agree to bring more equipment if so warranted in the opinion of the Engineer-in-charge.

4. FINANCIAL

Bank Name: _____

Branch: _____

Account No.: _____

Average Annual Turnover for last 3 Years: _____

6. INSURANCE

Accident Insurance

Insured with: _____

Policy No.: _____

7. Details of Arbitration cases :

8. Any other detail you would like to intimate in support of your technical bid for appointment :

Signature of the authorized

Person with seal of the firm

(Note: Attach separate sheet for furnishing information in case the space in the format is insufficient)

**INDIAN INSTITUTE OF ASTROPHYSICS
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BENGALURU – 560034.**

PRICE BID

***Name of Work:* “REMODELING OF FIRST FLOOR OF OPTICS
BLOCK FOR I.T.C.C.LAB AT I I A BANGALORE”**

Tender Notice No.: 13 /IIA/CIVIL/ITCC/BANG/ 2016-17 Dated 16.12.2016

Name of

The Firm: _____

Address: _____

Phone No: _____

Last date for submission: 16.01.2017 @ 15:00 hrs

Tender for the “REMODELING OF FIRST FLOOR OF OPTICS BLOCK FOR I.T.C.C.LAB AT I I A BANGALORE”

Conditions of contract.

Sealed item rate tenders are invited by Indian institute of Astrophysics for the above mentioned work

Estimated cost : **Rs 25,53,650 (Twenty five lakhs fifty three thousand six hundred fifty only)**

Time of completion : **Three (03) Months.**

Period of commencement : 7 days from the date of receipt of work order

Retention money/Security Deposit : Security Deposit @5% will be deducted from while making payment. Security Deposit will be refunded as per the extant rules of the Central Government on certification by the engineer-in-charge after the completion of the work.

Defects liability period : 12 Months.

Amount of liquidated damage : Liquidated Damages will be deducted from the bill amount while making final payment for delay in completion of work if any, as per the extant rules of the Central Government.

Escalation : In view of the short duration of the contract, no escalation will be paid to the contractor on account of changes in the market prices of any items of work or changes in the cost of living indices etc.

Tax deduction at source : Statutory deductions such as Income Tax, Works Contract Tax (WCT) and Labour Welfare Cess if any will be deducted while making payment.

The Director, Indian institute of Astrophysics reserves the right to reject any or all the tenders without assigning any reason whatsoever.

The tenderer shall be responsible for arranging and maintaining at his own cost all **materials, tools and plants, water, electricity**, facilities **for workers, safety norms** and all other services required for executing the work.

Timely completion of work and quality of workmanship are of prime importance and the work shall be completed within the stipulated period. Cement consumption must match with standard theoretical calculations. Recovery to be effected in the event of not fulfilling the cement consumption. The waterproofing is the main work for which five year performance guarantee need to be provided by the applicator.

I/ We have read the tender notice, specifications, schedule, drawings, general rules and all other contents of the tender conditions, and Understand that you are not bound to accept the lowest or any tender you may receive.

I/ we hereby tender for the execution for the work specified above within the time specified above, at the rates specified in the attached bill of quantities and in all respects with these specifications, design, drawings and instructions.

I/we agree that should I/we fail to commence the work specified in the above memorandum an amount equal to amount of earnest money mentioned in the form of invitation of tender shall be absolutely forfeited to the Director, IIA.

Dated: _____

Signature of the contractor with stamp

General conditions of contract.

Item rate tender for works.

- The Institute reserves the right to alter the scope /or reduce quantum of work before issue of work order and the contractor shall not have any claim what so ever on this account.
- Rates quoted by the contractor in item rate tender in figures and words shall be accurately filled in so that there is no discrepancy in the rates written in figures and words. However if a discrepancy is found, the rates which correspond with the amount worked out by the contractor shall be taken as correct.
- If the amount of an item is not worked out by the contractor or it does not correspond with the rate written either in figures or words, then the rate quoted by the contractor in the words shall be taken as correct.
- When the **rates quoted by the contractor in figures and in words** tally but the amount is not worked out correctly the rate quoted by the contractor will be taken as correct and not the amount.
- The contractor shall take all precautionary measures to prevent entry of dust, dirt and noise pollution to the adjacent buildings and keep the premises neat and tidy, remove surplus materials and rubbish and shall not cause inconvenience to the staff of IIA. If the contractor or his working people or servants shall break, deface, injure or destroy any part of a building in which they may be working or any buildings, road, kerbs, fence, enclosure, water pipes cables, drains, electric and telephone posts or wire, trees grass or garden. The cost of any such damage and risks arising out of this shall be entirely borne by the contractor.
- A bill shall be submitted by the contractor each month on or before the date fixed by the Engineer- in charge. All the measurements of the work may be recorded jointly by the Engineer-in charge and the contractor or their respective representatives. The measurements will be taken at site, as per latest IS code of practice for measurements. All measurements shall be taken with steel tapes only.
- The Engineer-in-Charge shall have full powers to the removal from the premises of all materials and bad workmanship, which in his opinion are not in accordance with the specifications.

- The Engineer –in- Charge may require the contractor to dismiss or remove from the site of the work any person or persons in the contractors employ upon the work who may be in competent or misconduct himself.

- For working on Sundays, holidays and late hours prior permission will be accorded by the Engineer-in charge on the application made by the contractor.

- All works to be executed under the contract shall be executed under the direction and subject to the approval in all respects of the Engineer-in charge who shall be entitled to direct at what point or points and in what manner they are to be commenced and from time to time carried on.

- The contractor shall treat all materials obtained during dismantling of a structure, excavation of the site for a work etc as Institute’s property and such materials shall be disposed off to the best advantage of the Institute.

- The contractor shall execute the whole and every part of the work in the most substantial and workman like manner and in strict accordance with the specifications of the CPWD / DOS / Bureau of Indian Standards. In case of any class of work for which there is no such specifications the contractor shall carry out the work in all respects in accordance with the instructions in writing of the Engineer- in charge.

- The Engineer-in charge shall have powers to make any alterations in, omissions from, additions to or substitutions for the original specifications, drawings, designs and instructions that may appear to him necessary or advisable during the progress of the work and the contractor shall carry out the work in accordance. The rates for such additional, altered or substituted items of work shall be worked out in accordance with the standard procedure followed in CPWD / DOS.

- If at any time after the commencement of the work, the Institute shall for any reason whatsoever not require the whole thereof as specified in the tender to be carried out, the Engineer- in-Charge shall give notice in writing of the fact to the contractor who shall have no claim to payment of compensation whatsoever on account of any profit or advantage which he might have derived from the execution of the work in full, but which he did not derive in consequence of the full amount of the work not having been carried out, neither shall he have any claim for compensation by reason of any alterations having been made in the original specifications , drawings ,designs and instructions which shall involve any curtailment of the work as originally contemplated.

- The contractor shall obtain a valid license under the Contract Labour (Regulation & Abolition) Act 1970 and the Contract Labour (Regulation & Abolition) Central Rules, 1971 before the

commencement of the work and continue to have a valid license until the completion of the work. No labour below the age of eighteen years shall be employed on the work. The contractor shall pay to labour employed by him either directly or through sub contractors, wages not less than fair wages as defined in the provision of the contract labour (R&A) act 1970 and the contract labour (R&A) central rules 1971 wherever applicable.

- ❑ The contractor shall at his own expenses arrange for the safety provision as per safety code framed from time to time and shall at his own expenses provide for all facilities in connection therewith.
- ❑ The contractor shall comply with all the provisions of the Payment of Wages Act 1936, Minimum Wages Act 1948, Employees liability act 1938, Workmen's Compensation Act 1923, Industrial Disputes Act 1947 and the Contractors Labour (R&A) Act 1970 or the modifications thereof or any other laws relating thereto and the rules made thereunder from time to time. The regulations aforesaid shall be deemed to be a part of this contract and any breach thereof shall be deemed to be a breach of this contract. Security deposit will not be refunded till clearance certificate from Labour Officer is obtained by contractor.
- ❑ The contractor shall make his /their own arrangements for water required for the works and nothing extra will be paid for the same, as the water available from the institute source may not be sufficient to meet the construction.
- ❑ The contractor shall have all the tools and plants necessary to carry out the work such as concrete mixer, vibrator and hoist. The contractor shall employ one graduate engineer during the execution of the work
- ❑ Certified plumbers should be employed by the contractor on the plumbing and sanitary work.
- ❑ The entire work is to be completed within the period stipulated i.e. **Three (03) months** from the 7th day of issue of Letter of Intent/Work Order. The period includes monsoon period also. Time shall be the essence of the contract. After the work awarded, the contractors shall furnish detailed time schedules for the approval of the Engineer-in charge which after approval shall form part of the contract and are to be strictly adhere to.
- ❑ The maintenance period for the work shall be twelve (12) months and any defects noticed during the period shall have to be rectified by contractor at his cost, failing which the action taken for maintenance Engineer-in charge shall be final over which the contractor will not have any claim.
- ❑ The contractor shall extend all co-operation to the contractors executing works such as electrical, air conditioning etc who might be working at the site and shall permit to use scaffolding etc already put up by him.

- ❑ The Engineer-in charge will have the right to get any item of the work included in this tender or not executed through other agencies. Schedule of probable quantities in respect of the work and specifications are enclosed. The schedules of probable quantities are liable to alterations by emission, deduction or additions at the discretion of the Engineer-in charge.
- ❑ The rates quoted by the tenderer in the schedule shall be EXCLUSIVE of all taxes and levies payable under respective statutes. Hence, taxes and duties should be shown separately. The rates shall be firm and shall not be subject to exchange variations, labour conditions or any condition.
- ❑ Works Contract Tax (WCT) and other statutory taxes & Labour welfare cess will be deducted from the amount payable to the contractor as per the relevant sales tax act, if any applicable for the contracted work as amended from time to time, at the rates specified from time to time.
- ❑ Samples of all materials to be incorporated in the works shall be submitted to the Engineer-in charge for his approval without claiming any extra cost. Materials not conforming strictly to the samples are liable to be rejected.
- ❑ The employment of any sub-contractors will be subjected to the approval of the Engineer-in-charge. If at any time during the progress of the work the Engineer-in charge determines that any sub-contractor is incompetent or undesirable the contractor shall take steps immediately to cancel such sub-contractor. The contractor shall be entirely responsible for all the work included in the contract whether executed by him or through his sub-contractors. In particular it may be noted that the contractor shall obtain steel doors and windows from a reputed manufacturer and before placing order for these, the contractor shall obtain the concurrence of the department for the agency from whom he proposes to obtain steel doors and windows.
- ❑ The contractor shall prepare a CPM / PERT /BAR chart/ Detailed estimate programme within a weeks time of issue of Work Order.
- ❑ All materials and articles brought by the contractor to the work site shall have to be declared at the security gate. Similarly no materials shall be taken out from the departmental premises without proper gate pass which will be issued by the Engineer-in charge.
- ❑ Unless otherwise provided in the schedule of quantities the rates tendered by the contractor shall be all inclusive and shall apply to all heights, lifts, leads and depths of the building and nothing extra shall be payable to him on this account.
- ❑ Sample of various materials required for testing shall be provided free of charge by the contractor. Testing charges, if any unless otherwise provided, shall be borne by the department. All other expenditure required to be incurred for taking the samples, conveyance, packing etc. shall be borne by contractor himself. In case of concrete and reinforced concrete work, the

contractor shall be required to make arrangement for carrying out compression strength tests at his own cost including preparation of cubes curing etc. complete.

- ❑ For the purpose of recording measurements and preparing running account bills, the abbreviated nomenclature shall be accepted along with the item number.
- ❑ The contractor shall along the tender submit a schedule of machinery to be used on the work in support of his assurance to adhere to the time schedule specified in the proforma given.
- ❑ I /We declare that the work will be carried out as per the specifications in tender document and as per the specifications said above. The items of work not covered in the specifications said above will be carried out as per the specifications in the relevant CPWD specifications, and if not covered in CPWD specifications the work will be carried out as in the relevant IS specifications, and if not covered in the any of the above, the work will be carried out as directed in writing by the Engineer- in charge.
- ❑ I / We declare that the rates quoted by me/us are on the basis of the above.

Dated: _____

Signature of the contractor with stamp

TENDER FORM

No.....

Date.....

To,

The Director,
Indian institute of Astrophysics,
Koramangala,
Bangalore - 560034

Dear Sir,

Sub: Tender for project : “REMODELING OF FIRST FLOOR OF OPTICS BLOCK FOR I.T.C.C.LAB AT I I A BANGALORE”

With reference to the tender invited by you for the above proposed work, I /we write this after having:

- a). examined the designs, drawings, detailed specifications to tenders, sample agreement, the general conditions of contract and special conditions of contract annexed there to (hereinafter called ‘the contract documents’) relating to construction.
- b). visited and examined the site of the proposed work and acquired the requisite information relating to or affecting the tender. We are agreed to the decisions of the pre-bid meeting by signing and stamping the minutes of the meeting which is enclosed along with this tender(tick if pre-bid meeting held or not YES/NO)

I/We undersigned hereby offer to construct the proposed work in strict accordance with the contract document for the consideration to be calculated in terms of the priced schedule of quantities.

I/We undertake to complete the whole of the works as per the attached schedule from the date of issue of intimation by you that our tender has been accepted and up on being permitted to enter site. I/We further undertake that on failure, subject to the conditions of contract relating to extension of time, I/We shall be agreed ‘Liquidated damages’ for the period during which the work shall remain incomplete.

I/We hereby deposit with you as earnest money **Rs..... (RUPEES**
.....ONLY) [Carrying no
interest] and I/We fail to take up the contract when called up on to do so.

Our Bankers are

1.

2.

Place:

Date:

Signature of the tenderer
Name of the partners of the firm
Or
Name of the person having power of attorney to sign the contract

SPECIAL CONDITIONS

GENERAL:

SPECIAL CONDITIONS OF CONTRACT shall be read in conjunction with GENERAL CONDITIONS OF CONTRACT and both form an integral part of contract. Where the two are at variance, the conditions stipulated in this as SPECIAL CONDITIONS shall supersede relevant GENERAL CONDITIONS.

1. SPECIAL CONDITIONS:

HELMETS :

As a measure of safety, persons employed on the site, Engineers and Supervisors shall wear a helmet of approved make at all times when they are at the site. No visitors shall be allowed on work site without wearing helmet.

Contractors shall make arrangements to provide safety helmets to all the persons employed on the site, Engineers and Supervisors at his cost.

Contractors shall display safety and warning signs at strategic locations at the site.

CHILD LABOUR:

Contractor or his Sub-contractor shall not employ any child labourers on the work site, either permanently or temporarily. It shall be the responsibility of the main Contractor to make sure that no child labour is employed at the site. Contractor shall indemnify the Employer against any consequences statutory or otherwise, that may arise out of employing child labour on the site.

TEMPORARY ELECTRICAL WIRING:

It shall be the responsibility of the main Contractor to make sure that the temporary wiring for construction activity shall adhere to minimum safety precautions as per Electricity Act. All wires / cables shall be drawn on wooden poles properly fixed and shall be drawn overhead.

2. LABOUR SHEDS:

Labour sheds shall be constructed with non-combustible materials like GI sheets or Asbestos sheets. Contractor will not be permitted to use combustible materials such as palm leaves etc., for the construction of the labour sheds.

3. MATERIALS SUPPLY / PROCUREMENT:

No materials will be supplied by the owner. If any increase on the material procurement cost/ labour, P&M will not be entertained for any kind of escalation till completion of the project.

4. BILLING, CERTIFICATION & PAYMENT OF BILLS:

BILLING:

The contractor shall prepare measured bills after completing the quantum of work as per the standard format and submit the same to the Institute for checking and issue of Certificates for Payment.

PAYMENT OF BILLS:

The contractor shall be paid by the Employer from time to time based on the certificate for payment

5. REPAIR OF WORKS DONE BY OTHER AGENCIES:

The civil contractor shall make up any deficiency in the finishing of the areas damaged by other agencies in a workmanlike manner to achieve uniform finishing of the building at no extra cost.

6. MATERIAL TESTS:

The contractor shall provide such assistance, instruments, machines, labour and materials as are normally required for examining, measuring and testing.

The contractor shall install a compression testing machine at site to test concrete cubes and solid blocks.

The contractor shall maintain a record of all the test results in an approved format and periodically submit the same for Architect's/Employer's scrutiny.

7. PLANT & MACHINERY:

The contractor is obliged to furnish to the Employer detailed list of equipment, plant, machinery & personnel proposed to be deployed in this project.

8. CLIENT'S & ARCHITECT'S OFFICES & FACILITIES:

The contractor shall supply, erect and satisfactorily maintain in good repair until final completion of works, a well lighted temporary site office.

The contractor shall provide at all times for the duration of the contract survey instruments for the exclusive use of consultants as directed by consultants for carrying out of his duties in connection with the contract.

Such instruments which must be approved by the Architect, shall include but not limited to the following:

- One theodolite & tripod capable of reading to 20 seconds
- One level with horizontal circle and tripod.
- Two metric leveling staffs not less than 3.5mtr high.
- One 100 metre rustless steel band, one 30 metre rustless steel tape and two 30 metre linen tapes.

- An adequate number of ranging rods drop arrows, wooden setting-out pegs, etc.

The contractor shall be solely responsible for all such instruments and equipment's and shall ensure that they are at all times in good repair and adjustment.

10. SANITATION & DRAINAGE DURING CONSTRUCTION:

The contractor shall provide sanitation and drainage facilities on the site as stated subsequently.

The contractor shall strictly control the labour so that the site is not polluted, made dirty or littered with debris, wastes or the likes. Any person found creating mess or litter or pollution shall be removed from the site immediately at contractor's cost.

The contractor shall provide sanitation facilities at convenient locations on site to preserve the cleanliness of the site. The effluent shall be directed as follows:

- Waste water : Collection and pumping out and disposal off the site in approved manner.
- Sewage : Septic tank provision - sludge to be collected and disposed off at intervals as directed.

The location of the above provisions shall be as marked on the site mobilization scheme drawing.

11. DISCREPANCIES:

The contractor shall bring to the notice of the Architect any discrepancies within or between contract drawings and/or the other contract documents prior to preparation of working drawings and commencement of work and shall not proceed with work until the Architect gives clarifications and instructions to proceed.

12. REPORTS BY CONTRACTOR:

- 12.1 The contractor shall file daily category-wise labour return. The report shall indicate scheduled requirement against actual strength.
- 12.2 The contractor shall prepare weekly reports of planned and actual progress of work and subsequent week's scheduled work. These will also include material procurement status. These reports shall be submitted to Architect and shall be reviewed during weekly co-ordination meeting.
- 12.3 The contractor shall submit monthly report along with monthly bills.
- 12.4 Further progress charts and schedules shall be prepared by the contractor as directed by the Architect.
- 12.5 The contractor shall submit re-conciliation statement of all the materials supplied by the Client, if any, along with every running & final bill.

LIST OF APPROVED MATERIALS

Sl. No.	Material	Make
1	Steel	SAIL – TMT, VIZAG STEEL
2	Cement	ACC/Birla/L&T
3	Acrylic Exterior Emulsion	Asian Paints
4	Plastic Emulsion Paint	Asian Paints
5	Enamel Paint	Asian Paints
6	Aluminum	Jindal, Indal, Hindalco
7	Glass	Saint Gobain, Modi
8	Flush Door	Kutty's Bond Wood, Hunsur Board
9	Vitrified tiles	nitco/RAK
10	Ceramic tiles	NITCO

Water supply and sanitary works

Sl.No.	Material	Make
1	CPVC	Ashirvad/ Astral
2	PVC	a) Supreme / Prince
3	Ball valves	Hawa / R.B.
4	G.M. non-return valves	Kirloskar/Zoloto
5	Sanitary ware	Hindware/approved equivalent
6	C.P. Fittings	Jaquar/approved equivalent
7	Bathroom accessories	Jaquar/approved equivalent
8	SFRC manhole frame and Covers	Southern Concrete Industries/approved equivalent
9	Kitchen sink	Nirali/ Approved Equivalent
10	Anchor bolts/pipe support system	Hilti / approved equivalent
11	CI Grating & MH frame & cover	NECO/ Approved equivalent
12	Laminate	Green lam, meraino, Century
13	Veneer	Jackson, Timex, Green ply
14	Ply	Green ply , Century

Electrical list

1	PVC - FRLS insulated copper wires	Anchor/ Finolex
2	Modular type sockets & switches	Anchors / Roma / Legrand
3	Floor box with switch & socket	Legrand / Anchor
4	Frls PVC conduits	VIP / NELCO
5	Light fixtures	Philips / Bajaj / Havells
6	MCB / ELCB / RCCB / RCBO / MPCB	Legrand / ABB
7	MCB DB	Legrand ABB
8	Cat6e 4 pair UTP Data cable 24 AWG and providing RJ45 outlet with face plate.	Amp / Legrand
9	Cat5e 4 pair UTP Data cable 24 AWG and providing RJ11 outlet with face plate.	Amp / Legrand
10	Net work switch WS-C2960X-24TS-L	

BILL OF QUANTITIES

Bill of Quantities for the work of :REMODELING OF FIRST FLOOR (LEFT WING) SPACE FOR I.T.C.C.LAB AT I I A BANGALORE
(NOTE: Rates shall be quoted after reading the complete Specifications and understanding site conditions)

S L NO	Description	Quantity	Unit	Rate (Rs.)	Amount (Rs.)
	CIVIL WORK				
	Dismantling works:				
1	Dismantling aluminium/ Gypsum partitions, doors, windows, fixed glazing and false ceiling including disposal of unserviceable surplus material and stacking of serviceable material within 50 meters lead as directed by Engineer-in-charge.	350.00	sqm		
2	Dismantling the P V C flooring to make necessary alteration work for provision of entry to the ITCC SEGMENT area and providing & fixing the necessary steps, complete in all respect	50.00	Sqm		
3	Dismantling doors, windows and clerestory windows (steel or wood) shutter including chowkhats, architrave, holdfasts etc. complete and stacking within 50 metres lead : Of area 3 sq. metres and below including the necessary finishing of the damages that may occur during dismantling.	20.00	each		
4	<u>P V C Flooring:</u> Providing and laying unbacked flexible P.V.C / marblex flooring / skirting with PVC sheets /marblex tiles as specified below of approved make and shade including preparing the surface, cleaning as required and applying adhesive -as recommended by the PVC /Marblex tile manufacturers, laying, aligning, cutting in required size and pattern, trimming of tiles, removing the adhesive stains on the surface with soap solution (2table spoons of soap powder for 5 litre of water) using a cloth or mop or and wiping the dried surface with soft dry cloth etc.. complete all as per specifications.				

S L NO	Description	Quantity	Unit	Rate (Rs.)	Amount (Rs.)
	In PVC flooring / skirting / dadoing: with 2mm thick unbacked flexible fully homogeneous PVC poly floor of M/s. poly floor vinyl flooring or TUSKER of M/s. krishna vinyl Limited or Birla vinoleum of M/s. Birla corporation Limited or equilent make conforming to IS: 3462-1986 (including creating necessary pattern in the flooring with two or more shades of the material)	170.00	sqm		
5	UPVC Windows:				
5.1	Providing and fixing UPVC (Unplasticized Poly-Vinyl Chloride) Three Track sliding windows multi chambered and stiffened / reinforced framed windows using 112 mm x 52 mm size sections around as main frames and glass shutters made with the profile sections of size 68 mm x 42 mm , mesh shutters made with the profile sections of size 50 mm x 32 mm including the cost and fixing of 6mm thick clear float glass and SS Mesh 304 Grade for Mosquito Proofing in shutters with necessary beadings, the corners of all the profiles of frames and shutters shall have well defined welded corner joints without any gaps, fixing the window unit to the existing masonry with gaskets / clips / holdfasts / anchor fasteners etc as required. The shutters shall have necessary hadles and other associated fittings(Touch Lock) to facilitate smooth operation. The gaps between the window frames and masonry walls shall be filled with silicon or with any other suitable filler materials. Both the Frame and the Shutters shall be Reinforced with GI Profiles of thickness 1.25mm.	23.00	sqm		

S L NO	Description	Quantity	Unit	Rate (Rs.)	Amount (Rs.)
6	<p>False ceiling Suspension system :False ceiling (Tiles, Panels) shall be suspended with the frame work and Accessories complete from roof slabs, beams etc., by means of 4 mm dia. Galvanized rods, spring steel clips, hanger, Tee Runner, Ultra Look Tee Runner and edge trim etc., The Suspension system consists of Grip bolt of size 50mm in length and dia. of 9.5mm with 16mm long treads for fixing 9.2mm dia. Nut, the thickness of the nut is 5.2mm, this is also fixed with washer of 18.50 mm in dia. and the thickness of the washer is 0.8mm, this grip bolt in fixed on to the RCC slab, by making holes with special hammering machine and with the help of nut and washer, dip Galvanized Iron Rod of 4mm dia. is rounded, then it is been twisted, so that it with-rest above the washer and later on the nut is been tightened and the grip bolt expands inside the RCC slab and holds the G.I Rod 4mm thick straight, this G.I supporting rod of 4mm thick is also twisted on the other side of fixed "j" bolt, this "j" bolt consists of 3mm thick with a length of 133mm, this "j" bolt is later on twisted by 26mm, this "j" bolt has a treated portion of 47mm and this is provided with a nut of 3.63mm thick and the dia. of the nut is 6.9mm, this nut has a washer and this washer has a dia.of 19 mm and the thickness of 0.6mm and all this components are chromodised, later on G.I supporting rod of 4mm thick dia. is twisted and fixed inside the nut and washer, then to maintain a good, straight level of the false ceiling, the nut in "j" bolt is then moved up or down for proper level. The Galvanized Iron 4mm dia. been cut to size of length required as per site requirement</p>				

S L NO	Description	Quantity	Unit	Rate (Rs.)	Amount (Rs.)
6.1	Mineral Fibre False Ceiling				
	Providing and fixing mineral fibre false ceiling of approved size and pattern of reputed make. The panels shall be non combustible, fire proof with excellent aesthetic look.	150.00	sqm		
6.2	Gypsum false ceiling				
	12.5 mm thick tapered edge gypsum moisture resistant board	60.00	sqm		
	FURNITURE				
7	Work station				
7.1	Providing and fabricating work station for the height up to 750 mm height and 600mm wide using 25 mm thick pre-laminated board with necessary edge banding. The provision shall be made for wire manager, CPU, key board tray, storage unit, etc. Complete in all respect as per the direction of the Engineer in Charge.	25.00	mtrs		
7.2	Conference Table: Providing and fabricating the conference table finished with 1.5 mm thick laminate the edges will have 40mm wide 6mm solid beach wood beading with melamine polish. The shape, size details etc. Will be as per the drawing and may vary marginally as per site conditions. The shape of the table is rectangular and size is 3000x1300x750 mm with provision of networking, wire management etc. The specification of the table will be as per drawing.	2.00	each		
	Painting work				
8	Internal Painting - providing and applying painting in two coats with patti and acrylic premium emulsion of ASIAN PAINTS brand with lustre finish on internal wall and Ceiling to give even approved shade after thoroughly brushing the surface, including preparing the surface even and sand paper smooth, cost of materials, labour complete as per specifications	350.00	sqm		
9	Supply & Installation of manually operated roller blinds with 5% openness factor fabric including PVC tape for sides of Screen	25.00	sqm		

S L NO	Description	Quantity	Unit	Rate (Rs.)	Amount (Rs.)
10	PARTITION WORK				
10.1	providing and fixing partition frame work consisting of 50mmx50mm sal wood frame work at spacing not exceeding 600mm c/c fixed to the bottom and ceiling, the partition shall be skinned on both sides using 12mm ply + 3.5mm thick commercial plywood with 4mm groove up to 4 feet height of approved brand termite and water resistance, and top covered with 1.5mm thick laminate of approved quality, complete including cost and conveyance of all materials, labour for all items of work, HOM of equipment as per specification.	40.00	sqm		
10.2	same as above but height of 4 feet with a 12mm thick 4.5 inch pipe capping member of beach wood on top and one side	5.00	sqm		
10.3	partition same as above frame work but finished with 12.5 mm thick tapered edge gypsum moisture resistant board on either side	25.00	sqm		
11	providing and fixing glazed partition with 8mm thick toughned glass fixed with beach wood beading 1.5 inch x 0.5 inch	20.00	sqm		
12	panelling with sal wood 2 inch x 1.25 inch frame work on peripheral walls with 8mm thick ply + 3.5mm MDF finished with 1.5mm laminate with 4mm grooves including providing necessary sliding shutters using 25mm thick ply and 1.5mm laminate	60.00	sqm		
13	providing and fixing in position doors frames made out of 100 x 75 mm in beach wood with architrave on either side of 12 mm thick and 1.5" wide. Shutter made out of 35 mm commercial board with 1.5 mm laminate on either side with vision panel (3' x.9") with 6 mm glass. Hardware Make Dorma Mortice lock, SS Hinges, Door stopper and door closer TS 63 (door size is about 4 feet x 7 feet)	3.00	Nos		

S L NO	Description	Quantity	Unit	Rate (Rs.)	Amount (Rs.)
14	Entrance double door in 10mm thick toughned glass with patch fitting from dorma with 300mm SS handle the jamb line to be claded with 19mm ply finished with 1.5mm laminate (door size is about 5 feet x 7 feet) with necessary floor spring.	1.00	Nos		
15	passage single door in 10mm thick toughned glass with patch fitting from dorma with 300mm SS handle the jamb line to be claded with 19mm ply finished with 1.5mm laminate (door size is about 1100x2100mm) and also have fixed panel of 800mm with necessary floor spring.	1.00	Nos		
16	supply of pedestal unit with drawers : providing and fixing 450mmx450mmx685mm ht mobile pedestal unit-WOODEN with 18mm thick PLPB with edge bonded for body, two equal drawer and one filling drawer with centralized locking system, telescopic channels, castors, handles and lock, including providing necessary cushion for seating on the top etc., complete as per specifications , and as directed by engineer in charge.	15.00	Nos		
17	storage unit-wooden - one side laminate : providing and fixing wood storage unit one side laminate with 18mm PLY/PLPB with edge bound for body, 18mmPLY/PLPBwith open able shutters and individual locking system for shutter, 9mm ply with edge bound for rear portion with hafele fitting hinges , hafele locks, minifix assembly, screw legs, handles and tower bolts depth 450mm.complete as per specifications, and as directed by engineer-in charge.	6.00	sqm		
18	Pantry counter with storage below with openable shutters made out of 19mm commercial ply with 1.5 mm laminate finish on outside and ,1 mm laminate in the inside. Top to have 20mm Granite with bullnosing. The storage will have 600mm depth	2.50	sqm		

S L NO	Description	Quantity	Unit	Rate (Rs.)	Amount (Rs.)
19	projection screen manual 8 feet x 6 feet	1.00	Nos		
20	providing and fixing Pin up board / glass writing board for Work stations with 12mm soft board with fabric (BR Rs 200/mtr)	12.00	sqm		
21	Steel work welded in built up sections/ framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required. In stringers, treads, landings etc. of stair cases, including use of chequered plate wherever required, all complete In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works	3.00	TON		
	Total for Civil Works (A)	Total			

ELECTRICAL WORK

S L NO	Description	Quantity	Unit	Rate (Rs.)	Amount (Rs.)
	<p>Circuit mains using 1.1kV grade PVC insulated copper conductor (MSCC) FRLS wires / PVC insulated PVC sheathed single core cables drawn in 2mm thick PVC FRLS conduit or in existing raceway. Rates quoted shall include supply of conduits, wires & other conduiting accessories. Circuit mains shall be measured from respective DB to the nearest point. All circuit terminations shall be provided with solder less crimping type copper sockets / lugs, ferrules indicating source code on load side & load code on source side. There shall not be any joints in the circuits, only looping is allowed in terminal blocks & at points.</p>				
	<p>1) Conduits running above false ceiling in multiples shall be supported by Slotted GI 'C' channel at distance not more than 0.5mtrs intervals. OR else with spacers & saddles at an intervals of 0.5mtrs</p> <p>2) Accessories shall includes Bends, Collars, junction boxes, Spacers, saddles, screws,</p> <p>3) Conduits shall be ISI marked</p> <p>4) The number of wires drawn in each conduit shall be as per IS 694 code.</p> <p>5) No different phases shall be drawn in same conduit</p> <p>6) Conduit joints shall be done with threading proper accessories only</p>				
1	<p>Wiring for light point with 1.5 Sqmm FR PVC insulated copper conductor single core cable in surface / recessed steel conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 Sqmm FR PVC insulated copper conductor single core cable etc as required.</p>	12nos	Each		

S L NO	Description	Quantity	Unit	Rate (Rs.)	Amount (Rs.)
2	Wiring for 6/16A switch socket with 2x4.0Sqmm FR PVC insulated copper conductor single core cable in surface / recessed steel conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1x4 Sqmm FR PVC insulated copper conductor single core cable etc as required.	90nos	Each		
3	Wiring for twin control light point with 1.5 Sqmm FR PVC insulated copper conductor single core cable in surface / recessed steel conduit, 2 way modular switch, modular plate, suitable GI box and earthing the point with 1.5 Sqmm FR PVC insulated copper conductor single core cable etc as required.	35nos	Each		
4	Supply, laying, connecting at outlet end , testing and commissioning of Cat6e 4 pair UTP Data cable 24 AWG and providing RJ45 outlet with face plate. Amp Make	20nos	Each		
5	Supply, laying, connecting at outlet end, testing and commissioning of Cat5e 4 pair UTP Data cable 24 AWG and providing RJ11 outlet with face plate. AMP make	10nos	Each		
6	Supplying and fixing of PVC 25 mm conduit along with the accessories in surface / recess or cutting the wall/floor and making good the same in case of recessed conduit as required	200m	Meter		
7	Raw Power DB -3 Phase 6 way Incoming: 63 Amps 4P MCB Out goings: 4 Nos.32 Amps DP MCB 2 Nos. 25 Amps DP MCB Legrand : make	1set	Each		
8	UPS Power DB -3 Phase 6 way Incoming: 63 Amps 4P MCB Out goings: 6 Nos. 16 Amps DP MCB Legrand : make	1set	Each		
9	Supply and installation of 2x2 feet recessed mount led light fitting	12nos	Each		

S L NO	Description	Quantity	Unit	Rate (Rs.)	Amount (Rs.)
10	Supply and installation of 6 inch dia recessed mount led light fitting.	35nos	Each		
11	Net work switch WS-C2960X-24TS-L	1nos	Each		
12	Intercom junction box	1nos	Each		
13	Telephone Instruments	5nos	Each		
14	Cat 6 UTP, 24 Port Unloaded Patch panel	1set	Each		
15	<u>Lighting circuit</u> To wiring using 2X2.5 + 1X1.5 sqmm PVC insulated FRLS wire drawn in 20mm dia 2mm thick PVC FRLS conduit as lighting circuit. The circuit main shall be measured in running metres from respective distribution board upto first switch point and looping between the switches (further onwards, it shall be deemed to be included in point wiring).	100m	Meter		
16	<u>Emergency Lighting Circuit :</u> To wiring using 3 X1.5 sqmm PVC insulated FRLS wire drawn in 20mm dia 2mm thick PVC FRLS conduit as lighting circuit. The circuit main shall be measured in running metres from respective distribution board upto first switch point and looping between the switches (further onwards, it shall be deemed to be included in point wiring).	15m	Meter		
17	<u>VAV Circuit :</u> To wiring using (3 x 2.5) sqmm PVC insulated FRLS wire drawn in 20mm dia 2mm thick PVC FRLS conduit being recond from the distribution board to first VAV socket and consequent looping	10m	Meter		
18	<u>Raw power & UPS power Circuit :-</u> Raw power & UPS power Circuit Supply & Installation of 3 C x 2.5 Sqmm FRLS 1100V unarmoured double insulated flexible multicore cable in white and black colour for UPS circuit.	30m	Meter		

S L NO	Description	Quantity	Unit	Rate (Rs.)	Amount (Rs.)
19	Supply & Installation of 3 C x 4 Sqmm FRLS 1100V unarmoured double insulated flexible multicore cable in white and black colour for UPS circuit.	200m	Meter		
	Total For Electrical Works (B)	Total			

SUMMARY

1	Total for Civil Works (A)	
2	Total For Electrical Works (B)	
	GRAND TOTAL	

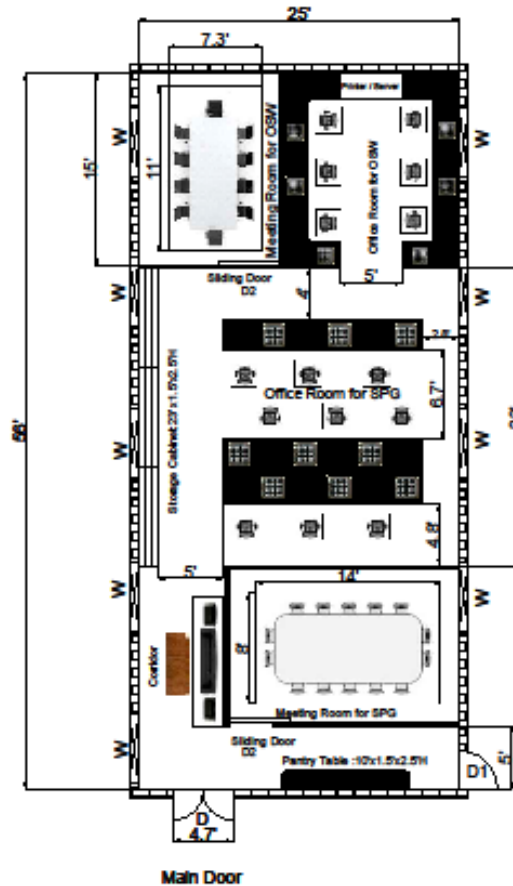
(Grand Total amount in words Rs.....
.....)

Date:

Place:

Signature of the contractor with seal

TMT Office Space



SI:No	Description	Qty
01	3 - Drawer With Cushion Top (2x2)	15-Nos
02	Table (< 5X2)	15-Nos
03	Rolling Chair (2X2)	15-Nos
04	3.5x7' (D2) Sliding Door	02-Nos
05	3x7' (D1) Door	01-No
06	4.7x7' (D) Door	01-No
07	Meeting Room for SPG :18' L X 12' W	01-No
08	Meeting Room for OSW :15' LX12'W	01-No
09	Sofa Set-3+1+1	01-Set
10	Brick Wall	
11	Window :5'5"x4'.10"	09-Nos
12	Pantry Table :10'x1.5'x2.5'H	01-No
13	10/12 mm Clear Glass for partition with suitable Supporting Structure Preferably SS with full Height. Venetian Blinds for Meeting Rooms	

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SI No	Title	TMT Office Space
01	Designed	S.Kathiravan
02	Checked	S.Kathiravan
03	Drawn	T.Vishnu

Date :24-08-2016