| NIT No. | : | |
|--|---|---|
| | | E-TENDER RLAC/2023/1397 |
| TITLE | : | E-TENDER FOR FIREFIGHTING, FIREALARM AND MISCELLANEOUS ELECTRICAL WORKS AT RAM LAL ANAND COLLEGE, (UNIVERSITY OF DELHI), NEW DELHI |
| OWNER | : | PRINCIPAL, RAM LAL ANAND COLLEGE. |
| ADDRESS | : | BENITO JUAREZ ROAD, NEW DELHI- 110 021 |
| WEBSITE | : | WWW.RLACOLLEGE.EDU.IN |
| TYPE OF TENDER | : | OPEN- E TENDER (TWO COVER SYSTEM) |
| ESTIMATED COST OF WORK | : | Rs. 33,24,235/- |
| TENDER FEE | : | RUPEES ONE THOUSAND ONLY |
| DATE OF START | : | 02-03-2023 |
| LAST DATE OF SUBMISSION OF TECHNICAL BID DOCUMENT | : | 11-03-2023 (5 PM) |
| EARNEST MONEY DEPOSIT | : | Rs. 66,485.00 (Rupees Sixty- Six Thousand four hundred Eighty-five only |
| TENDER PREPARED BY | - | E M Project Services A-615, Shastri Nagar New Delhi-110052 |

| | ILINI | DER SCHEDULE |
|--|-------|--|
| Validity Of Offer | : | 90 Days |
| Cost Of Tender Document | : | Rs. 1,000/- D.D. Payable in Favour of PRINCIPAL, RAM LAL ANAND COLLEGE. separate D.D. |
| Estimated Cost of The Work | : | Rs. 33,24,235/- |
| Earnest Money Deposit. | : | Rs 66,485/_ D.D. Payable in Favour of PRINCIPAL, RAM LAL ANAND COLLEGE. EMD of unsuccessful bidders will be returned. separate D.D. |
| Start Of Tender Download. | : | 02-03-2023 |
| Last Date of Tender Download. | : | 10-03-2023 (5 PM) |
| Last Date of Submission of Tender. | : | 11-03-2023 (5 PM) |
| Date Of Opening of Technical Bid. | : | 13-03-2023 (12 PM) |
| Defects Liability Period. | : | 12 Months |
| Contract Time Period. | : | 2 Months from the date of commencement |
| Penalty For Delay. | : | Rs. 5,000/- Per Day Up to Maximum Of 10% Of the Cost of The Works. |
| Minimum Running Account Bill Value. | : | 8 LAKHS |
| Retention Percentage. | : | 5% |
| Performance Guarantee. | : | Before Issue of Letter to Start the Work, Contractor Shall Furnish a Performance Guarantee in the Form of A Bank Guarantee to the Tune of Five Percent (5%) of The Cost Of The Accepted Tender Amount. Bank Guarantee Will Be Kept Valid Up To 12 Months After Completion of The Works. No mobilization Advance will be issued |
| Value of Work for Interim Certificate | | Rs 2, 50,000 |
| Date of Commencement of work | | The 10 th day after the date on which the Architect/Engineer- in-charge issues written orders to commence the work or the date of handing over the site whichever is later. |
| Contact Details for Clarification Related to Tender. | : | E-Mail: <u>emprojectservices@gmail.com</u> Office- 011-23642702 Mob 9810021003-8860565499 |

TENDER SCHEDULE

NOTICE INVITING TENDER

То

Dear Sir/ Madam,

Online bids are invited from the registered contractor in appropriate category with C.P.W.D in composite category/ M.E.S./ Railways / Delhi PWDs /working contractor for Delhi University to submit your most competitive **ONLINE** tender through the Central Public Procurement (CPP) Public Procurement (CPP) portal web site <u>eProcurement System Government of India</u>

in TWO COVER SYSTEM (TECHNICAL & FINANCIAL) on or before the prescribed due date and time for E-TENDER FOR FIREFIGHTING, FIREALARM AND MISCELLANEOUS ELECTRICAL WORKS AT RAM LAL ANAND COLLEGE, NEW DELHI..

Manual Bids shall not be accepted, except for the supportive documents / instruments if any asked in this tender.

The complete details of the tender items are available in the tender document, which can be downloaded from www.rlacollege.edu.in and the Central Public Procurement (CPP) Public Procurement (CPP) portal web site <u>eProcurement System Government of India</u>.

The bids are to be submitted ON-LINE through <u>eProcurement System Government of India</u> up to the due date and time of submission of tender. Any queries related to the tender document should be addressed to the tender inviting authority PRINCIPAL, RAM LAL ANAND COLLEGE.

Any queries relating to the process of online bid submission or queries relating to CPP Portal by bidders should be addressed to 24x7 CPP Portal Helpdesk by using the Toll-Free numbers given in the CPP website.

| Dated: | |
|--------|--|
| | |

Principal Ram Lal Anand College

ELIGIBILITY CRITERIA

The contractor shall submit the completion certificate for the following works and upload the same on website.

The similar work shall mean:

- a. Fire-Fighting system
- b. Fire-Alarm system

C. Electrical system

 Contractor must have completed one work of 80 % of value of the estimated cost in a single composite contact with proportional 80 % in all three sub-heads. i.e a. Fire Fighting b. Fire Alarm system c. electrical works or individually different works containing similar works of 80 % of estimated cost in separate work orders.

Or

Contractor must have completed two works of 60 % of value of the estimated cost in a single composite contact with proportional 60 % in all three sub-heads. i.e a. Fire Fighting b. Fire Alarm system c. electrical works or individually different works containing similar works of 60 % of estimated cost in separate work orders. (Two works for each sub-head)

Or

Contractor must have completed three works of 40 % of value of the estimated cost in a single composite contact with proportional 40 % in all three sub-heads. i.e a. Fire Fighting b. Fire Alarm system c. electrical works or individually different works containing similar works of 40 % of estimated cost in separate work orders. (three works for each sub-head)

SPECIAL CONDITIONS OF CONTRACT

- 1. All CPWD specifications as amended up to date shall be applicable.
- 2. The works are required to be completed within a period of two months from the date of commencement.
- 3. The contractor will prepare and submit a Phasing Plan with Bar Chart of all construction activities with targeted dates of completion and get it approved from the college authorities.
- 4. Completed Tender should accompany PAN number, GSTN number, email address, phone number and registered address of the Contractor.
- 5. CONTRACTORS are advised to inspect and examine the site and the surroundings and satisfy themselves before submitting their Tender as to the nature of the ground and sub- soil (so far as practicable), the form and the nature of the site, the means of access to the site, the accommodation they may require and in general shall themselves obtain necessary information as to the risks, contingencies and other circumstances which may influence or affect their Tender. CONTRACTOR shall be deemed to have full knowledge of the site, whether he inspects it or not and no extra charge consequent to any misunderstanding or otherwise shall be allowed.
- 6. Submissions of the Tender by the CONTRACTOR implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and local conditions and other factors bearing on the execution of the works.
- 7. A CONTRACTOR should quote in figures as well as in words rate(s) quoted. The amount for each item should be worked out and the requisite totals given. Special care shall be taken to write rates in figures as well as in words and the amount in figures only in such a way that interpolation is not possible. The total amount shall be written both in figures and in words. In case of figures the words "Rs." should be written before the figure of rupees and the words "paise" should be written at the end. Unless the rate is in whole rupees and followed by the word "only" it should invariably be upto two places of decimals.
- 8. All rates shall be quoted on the Tender form only.
- 9. The Tender shall be accompanied by earnest money deposit of Rs. 66,485/- (Rupees S i x t y s i x T h o u s a n d Four Hundred E i g h t y F i v e Only), in the form of a demand draft in favor of the **Principal, Ram Lal Anand College**.
- 10. On acceptance of the Tender, earnest money will be treated as a part of the security. In addition, contractor shall furnish performance guarantee in the form of an F.D.R or bank guarantee of 5% of the accepted Tender cost in favor of **Principal, Ram Lal Anand College,** before issue of letter to start the work.
- 11. The CONTRACTOR, whose Tender is accepted, shall permit of the Principal, Ram Lal Anand College, New Delhi at the time of making any payments to him for works done under the contract to deduct towards security deposit such sum as will along with the amount of earnest money already deposited amount to the following.

% of the cost of the work: -

 \Box 5% of the bill amount.

- \Box 50% of the security money will be released along with the final bill and the balance after expiry of the successful performance of the Defects Liability Period of one year without any interest.
- 12. Ram Lal Anand College, New Delhi will return the earnest money where applicable to every unsuccessful CONTRACTOR on return of all the Tender documents without any interest.
- 13. A CONTRACTOR shall submit the Tender which satisfies each condition laid down in this notice, failing which the Tender will be liable to be rejected.
- 14. Ram Lal Anand College, New Delhi does not bind itself to accept the lowest or any tender or to give any reasons for their decision.
- 15. Ram Lal Anand College, New Delhi reserves the right of accepting the whole or any part of the Tender and CONTRACTOR shall be bound to perform the same at his quoted rates.
- 16. GST or any other tax applicable in respect of this contract shall be payable by the Contractor and Ram Lal Anand College will not entertain any claim whatsoever in respect of the same.
- 17. The cost of facilitating the issue of Fire clearance certificate and the required liaison will be under the scope of contractor and the final payment up to 20 % of contract value shall be released after receipt of FIRE NOC from Delhi Fire Department.
- 18. T.D.S. for GST/WCT etc. as applicable to union territory of Delhi shall be deducted from the payments to be made to the Contractor and tax deduction certificate shall be issued by Ram Lal Anand College, New Delhi as per govt. guidelines.
- 19. The Contractor shall carryout the work in stages as to cause minimum disturbance to the Owner. Contractor shall be responsible for any damage to the equipment or structures, injury to the personnel during the progress of the work and he shall be liable to pay compensation as may be decided by the PRINCIPAL, RAM LAL ANAND COLLEGE. or his authorized representative in respect of such damages/injuries
- 20. All labour Employed by the Contractor shall be covered by the workman's compensation act. Any death, injury or mishap to the workmen of the Contractor will entirely be the Contractor's responsibility and the College, shall not be liable to pay any damages for the same.
- 21. Contractor shall take adequate safety precautions to avoid any accident etc. at site. Shall erect proper barricades, sign boards, lights, etc. shall provide safety belts, safety shoes, head gears (helmet I.S.I standard) and shall be fully responsible for any criminal & civil liabilities. All safety arrangements are to be made by contractor at his own cost.

- 22. No labor or material rate escalation claims will be entertained from the contractor as this work has to be completed within 2 months from the date of commencement of work at site.
- 23. Rates quoted shall be applicable equally to all floors and shall include all lifts and leads. No extras on this account shall be payable.
- 24. The contractor shall provide training for operation and maintenance of Equipment's to the Owners representatives free of cost, where required.
- 25. Rates quoted by the contractor shall be inclusive of all items of work mentioned in the BOQ and Any work, supplies or services which might have not been specifically mentioned in the BOQ but are necessary for entire completion of the work shall be executed / provided/ rendered by the CONTRACTOR without any Extra cost and within the time schedule specified. Rates quoted shall be deemed to include such elements of labour and materials necessary to complete the items of work in all respects.
- 26. Contractor shall submit only computerized Bills supported with computerized measurement sheets in A4 size hard copy prints and soft copy in Microsoft Excel Format. Manual Handwritten bills or measurement sheets will not be accepted.
- 27. PRINCIPAL, RAM LAL ANAND COLLEGE, reserves the right to decrease the items of work, change the specifications of works or remove the entire section of work as may be deemed necessary to finish the works within the available budget.

GENERAL CONDITIONS OF CONTRACT

<u>Definitions</u>: the contract document consists of the agreement, the special and general conditions of the contract, specifications and bills of quantities including all modifications and the contract drawings prepared by the Architect from time to time

- 1. <u>The site:</u> shall mean the site of contract work.
- 2. <u>Bidder / Contractor:</u> Shall mean the person or business that agrees to conduct the contract work under the terms of the contract.
- 3. <u>Sub-Contractor</u>: includes those who have a direct contract with the Contractor.
- 4. <u>Notice:</u> written notice shall be deemed to have been served if delivered in person to a member of the Contractors firm.
- 5. <u>Owner:</u> PRINCIPAL, RAM LAL ANAND COLLEGE.
- 6. <u>Work:</u> the term "work" includes both labour and material of the Contractor/Sub-Contractor.
- 7. <u>Time limits:</u> time limits stated in the contract are essence of the contract.
- 8. <u>Law:</u> law of the place of work shall govern the construction under this contract.
- 9. <u>Virtual completion</u>: date of virtual completion is the date when the construction is sufficiently completed in accordance with the contract documents, including modifications, if any.
- 10. <u>Contract documents:</u> shall consist of the following:
 - a) The agreement.
 - b) The General and Special conditions of contract.
 - c) The Bill of Quantities.
 - d) The drawings & specifications.
 - e) The approved makes.

TYPE OF CONTRACT

It is Percentage rate c on tract. The Contractor shall be paid for the actual quantity and quality of work done, as measured at site on the rates quoted by him, based on a payment certificate issued by the Architect/ Engineer- In charge.

SCHEDULE OF QUANTITIES

Schedules of quantities given in the contract bill are provisional and are meant to indicate the intent of the work and to provide a uniform basis for the contract. The Owner reserves the right to increase or decrease any of the quantities or to totally omit any of them. Contractor shall bound to carry out the same without claiming any extras.

inspections to check the quality and quantity of the work and shall not be responsible for the Contractors failure to carry out the construction work in accordance with the contract documents. During his site inspections, the Architect shall inform the Owner about progress of work, defects, and deficiencies if any.

The Architect may in his absolute discretion from time to time, issue further drawings, details, written instructions, written decisions and written explanations regarding: -

- 1. Variation or modification of the design
- 2. Quality or quantity of work, addition/alteration/omissions, and substitutions of any work
- 3. Any discrepancy and divergence between drawings and specifications.
- 4. Removal and re-erection of any works executed by the Contractor.
- 5. Dismissal of any persons employed on the site, who in the opinion of the Architect is not fit for the job.
- 6. Opening for inspection any work-covered up
- 7. Amending and making good any defects under defects liability period
- 8. Removal from site, any materials brought by the Contractor, which in the opinion of the Architect is not up to the desired standard.
- 9. Delay and extension of time
- 10. Postponement of any work

ENGINEER INCHARGE

Engineer In-Charge shall mean the person approved by the College.

TAXES

GST or any other tax applicable in respect of this contract shall be payable by the Contractor and Ram Lal Anand College will not entertain any claim whatsoever in respect of the same.

STATUTORY OBLIGATIONS

The Contractor shall comply with and give all notices required by any Govt. authority and instrument, rule or order made under an act of parliament or state assembly or any regulation or byelaw of the local body, relating to the work and indemnify the Owner against any such liability arising out of noncompliance of the law.

By way of illustration of various Acts/statutory compliances as stated above, the following Acts as amended from time to time shall be complied with by the CONTRACTOR:

- a) Employee's Provident Fund Act 1952
- b) Contract Labour Act (Regulations and Abolition 1970)
- c) Minimum Wages Act 1948
- d) Payment of Wages Act 1936

- e) Workmen Compensation Act 1923
- f) Factories Act 1948
- g) Apprenticeship Act 1961

MEASUREMENT OF WORK

Unless otherwise specified, measurement of work shall be carried from the works executed. The measurements for preparing Bills will be taken jointly by the CONTRACTOR's representative and the Engineer In charge. In measurement of work as stated above, the CONTRACTOR shall certify that the work has been carried out strictly as per the drawings, specifications, and item of work in terms of the agreement. Such certificate shall require Engineer In-Charge's end orsement for payment.

In the event of any dispute regarding the measurement of the work executed, the decision of the OWNER shall be final and binding on the CONTRACTOR.

In the case of site measurements, should the CONTRACTOR not attend or neglect or fail to send his representative for taking joint measurements, the measurements taken by the Engineer In-Charge shall be deemed to be the correct measurement of work and shall be binding on the CONTRACTOR.

REJECTION

If the Contract work or any portion thereof, at any time, is found to be defective or fails to fulfill the requirements of the agreement, the Engineer In-Charge shall give the CONTRACTOR notice in writing setting-forth particulars of such defects or failure and the CONTRACTOR shall forthwith make good the defects or replace or alter the same to make it comply with the requirements of the agreement.

Any materials, equipment, etc. brought to the site and found to be not in accordance with the agreement, shall be rejected by the Engineer In-Charge and the CONTRACTOR shall remove the materials from the site within the period specified by the Engineer In-Charge.

The CONTRACTOR shall not be entitled to any extension of time or extra cost for rejection as per above.

CERTIFICATES OF PAYMENTS

Engineer Incharge shall issue an interim certificate of payment stating the amount due to the Contractor from the Owner and the Contractor shall be entitled to payment thereof within a period of two week after issue of the certificate. From the total amount, certified deduction shall be made towards payments already made, security deposit, TDS etc.as applicable to Delhi or any other tax applicable at the time of making payment.

All running payments shall be regarded as payment by way of advance against final payment only and not as payment for the work completed till the date of final payment. The running payment made shall not preclude the liability of the CONTRACTOR to finally complete the work strictly in accordance with the specifications and drawings, if required by re- constructing faulty work

CLAIM FOR EXTRA

In the case of extra item(s) (items that are completely new, and are in addition to the items contained in the contract), the contractor will submit rates, supported by rate analysis, for the work and the engineer-in-charge shall within one month of the receipt of the rates supported by rate analysis, after giving consideration to the analysis of the rates submitted by the contractor, determine the rates on the basis of the market rates and the contractor shall be paid in accordance with the rates so determined.

DEDUCTION FOR UNCORRECTED WORK

If the Engineer In-charge deems it in-expedient to correct work damaged or not done in accordance with the contract, an equitable deduction from the contract price shall be made thereof.

FLUCTUATIONS

The Contractor shall not claim any extras for fluctuation of price and the contract price shall not be subjected to any rise or fall in prices.

POSSESSION BEFORE VIRTUAL COMPLETION

If the Owner, with the consent of the Contractor takes possession of part of the building for handing over to the finishing Contractor, such part of the building shall not be deemed to be virtually completed. Virtual completion of such part would occur only on completion of the last part of the structure.

TIME EXTENSION

Upon it becoming reasonably apparent that the progress of the work is delayed, the Contractor shall forthwith give written notice of the cause of delay to the Principal, Ram Lal Anand college to enable the Principal to take a proper decision in the matter.

INSPECTION AND TEST

- i. The CONTRACTOR shall ensure inspection and test of all materials and work at his cost through his ENGINEER IN CHARGE and other technical staff either at site or through any approved laboratory.
- ii. The CONTRACTOR shall ensure proper supervision and inspection during the progress of work at site.
- iii. All materials and work, whether at the site or in the CONTRACTOR's /Sub-Contractor's premises shall be subject to inspection and test by the ENGINEER IN CHARGE. The CONTRACTOR/ his Sub-Contractor shall provide all facilities free of cost to the ENGINEER IN CHARGE including all labor, materials, tools, tackles, instruments, appliances, etc. to enable the ENGINEER IN CHARGE to carry out inspection and/or test.

iv. All test certificates shall be subject to certification by the ENGINEER IN CHARGE. SD/- Page **11** of **31** (BIDDER STAMP AND SIGNED) Principal Ram Lal Ananad College

- v. The CONTRACTOR shall submit to the ENGINEER IN CHARGE three copies of all inspection/ test certificates.
- vi. The CONTRACTOR shall not be entitled to any claim for extra time or cost due to any delay in carrying out inspection and testing or re-inspection and re-testing if so decided by the ENGINEER IN CHARGE The CONTRACTOR shall take adequate steps to rectify the defects or to replace such materials and work which have failed during inspection /testing

RESPONISBILITY OF COMPLETION

Any work, supplies or services which might have not been specifically mentioned in the specifications, schedule of items or drawings but are necessary for entire completion of the contract work shall be executed / provided/ rendered by the CONTRACTOR without any Extra cost and within the time schedule specified. Rates quoted shall be deemed to include such elements of labor and materials necessary to complete the items of work in all respects.

DAMAGES FOR NON-COMPLETION

If the Contractor fails to complete the works by the date specified or within any extended time granted to him, the Contractor shall allow the Owner to deduct a sum calculated at the agreed liquidated damages, from the money due to him for the period the work remained incomplete, subject to a maximum amount of 10% of the contract value.

LIQUIDATED DAMAGES FOR DELAY

If the CONTRACTOR fails to complete the work/item (s) of work in all respects and hand over the same to the OWNER within the time stipulated the CONTRACTOR, without prejudice to any other right or remedy of the OWNER on account of such breach, be liable to pay the OWNER liquidated damages at the rate of 1% (one percent) of the total contract price for delay of every week or part thereof.

The total amount of liquidated damages shall be limited to 10% (Ten percent) of the total contract price.

The above provisions shall not apply in cases of delay for which the CONTRACTOR is entitled to extension of completion time

VIRTUAL COMPLETION CERTIFICATE AND DEFECTS LIABILITY PERIOD

When in opinion of the Architect the works are practically completed, he shall forthwith issue a certificate to that effect, that date will be taken as the date of virtual completion.

The Architect shall prepare a schedule of defects, not later than 14 days after the expiry of the defects liability period. The Contractor shall within a reasonable period after receipt of schedule of defects shall rectify the same, failing which the Architect will make suitable deductions from the contract sum.

MAINTENANCE GUARANTEE / DEFECTS LIABILITY PERIOD

Maintenance Guarantee period will be 12 months from the actual date of completion and handling over to the OWNER.

- a) The CONTRACTOR guarantees that within the maintenance guarantee period, the contract work shall not show any signs of defects, cracks, settlements, disfigurations, shrinkage, leakage, dampness or any other defects.
- i) The CONTRACTOR shall maintain and satisfactorily execute, at his own cost, all such works of repair, amendment, re-construction, rectification, replacement and any other work to make good the faulty work as stated in Article (a) during the maintenance guarantee period.
 - b) The CONTRACTOR shall, if required by the ENGINEER IN CHARGE, search for the causes of any defects, imperfection or fault under the direction of the ENGINEER IN CHARGE. The cost of such search shall be borne by the CONTRACTOR.
 - c) At intervals specified by the ENGINEER IN CHARGE the CONTRACTOR, along with the ENGINEER IN CHARGE, shall inspect the contract work to satisfy himself that no defects have cropped up in the contract work. Should there be any signs of defects, the CONTRACTOR shall take immediate steps to rectify the same, failing which; the ENGINEER IN CHARGE may get the defects rectified at the risk and cost of the CONTRACTOR.
 - d) At the end of the maintenance guarantee period, the CONTRACTOR, along with the ENGINEER IN CHARGE, shall carry out final inspection of the contract work to prove that no defects had appeared in the contract work or that all defects which appeared in the contract work have been rectified to the entire satisfaction of the ENGINEER IN CHARGE. If during the final inspection it is found that the defects still remain in the contract work, the period of maintenance guarantee shall be extended at the discretion of the ENGINEER IN CHARGE and the CONTRACTOR shall be liable to make good the defects and be responsible for the maintenance of the work till the defects have been fully rectified.
 - e) Upon successful completion of the maintenance guarantee period the OWNER shall issue final acceptance certificate to the CONTRACTOR

PAYMENT WITH HELD

The Architect/Engineer In-charge may withhold or on account of subsequently discovered evidence nullify the whole or part of any certificate to such an extent as may be necessary in his reasonable opinion to protect the Owner from loss, for defective work, non-payment to Subcontractors, or other claims connected to this work.

INJURY TO PERSONS

The Contractor shall indemnify the Owner against any liability, loss, claim or proceedings whatsoever arising under any statutory or common law in respect of personal injury to or the death

of any person, whomsoever arising out of or during or caused by carrying out the work.

INSURANCE

Without prejudice to his ability to indemnify the Owner, the Contractor and his Subcontractors shall maintain such insurance as are necessary to cover the liability of the Contractor and the sub-Contractors.

INSURANCE AGAINST FIRE

The Contractor shall in the joint name of the Owner and the Contractor, insure against loss or damage due to fire, earthquakes and riots.

COORDINATION OF WORK

Contractor shall extend complete coordination to other agencies i.e. air-conditioning, firefighting and interiors working on the same site.

LABOUR

Contractor shall not employ child labour under 14 years of age and if female workers are employed, he should make provision for safeguarding the small children to keep them clear of the site. All labour shall wear safety helmets and shoes to protect them from injury.

SAFTEY

In respect of all labour directly or indirectly employed in the work for the performance of the contractor's part of this contract, the contractor shall at his own expense arrange for the safety provisions as per C.P.W.D. Safety Code framed from time to time and shall at his own expense provide for all facilities in connection therewith. In case the contractor fails to make arrangement and provide necessary facilities as aforesaid, he shall be liable to pay a penalty of Rs.200/- for each default and in addition, the Engineer-in- Charge shall be at liberty to make arrangement and provide facilities as aforesaid and recover the costs incurred in that behalf from the contractor.

<u>ANTIQUITIES</u> All fossils and other objects of interest or value, which may be found on the site or in excavating the same during progress of the work, shall become a property of the Owner. The Contractor shall carefully take out and preserve all such objects and hand them over to the Owner, through the Architect.

GUARANTEE

Besides guarantees required elsewhere, the Contractor shall guarantee the works in general for one year after completion of defects liability period.

TREES AND SHRUBS

The Contractor shall protect trees and shrubs designated by the Owner/Architect/ Engineer In Charge from damage during the course of work

SD/-Principal Ram Lal Ananad College

PERFORMANCE GUARANTEE

In addition to the Security Deposit the Contractor shall furnish a performance guarantee in the form of a Bank Guarantee to the tune of Five percent (5%) of the cost of the tender amount, which will be kept valid up to 12 months after completion of the work.

TERMINATION OF CONTRACT

If the CONTRACTOR violates the Agreement or shall neglect to execute the work with due diligence or expedition or shall refuse or neglect to comply with any reasonable directions, instructions or orders given to him in writing by the Architect/Engineer In- Charge in connection with the work or shall contrivance or breach any provisions of the Agreement, the OWNER may give notice in writing to the CONTRACTOR to make good the failure, neglect or contravention complained of or cure that breach within a period of 30 (thirty) days of receiving such notice and in default of the compliance with the said notice, the OWNER without prejudice to his rights as below may rescind or terminate the Agreement stating therein the effective date of termination, holding the CONTRACTOR liable for the damages that the OWNER may sustain in this behalf.

Without prejudice to any of the rights or remedies under this contract, if the contractor dies, the Owner shall have the option of terminating the contract without compensation to the CONTRACTOR.

TENDER ACCEPTANCE (OFFER) LETTER

TO,

PRINCIPAL, RAM LAL ANAND COLLEGE. Benito Juarez Road, New Delhi- 110 021

Subject: Acceptance in respect of terms and conditions of tender document for E-TENDER FOR FIREFIGHTING, FIREALARM AND MISCELLANEOUS ELECTRICAL WORKS AT RAM LAL ANAND COLLEGE, NEW DELHI.

Dear Sir,

- 1. I / We have downloaded the tender document(s) for the above-mentioned tender from the website www.rlacollege.edu.in / <u>eProcurement System Government of India</u>.
- 2. I / We hereby certify that I / We have read every page of the tender document including all terms/conditions/drawings/annexures/forms/appendixes/paras etc. which are part of the contract agreement, and I / We agree to accept all the terms and conditions contained therein.
- 3. The corrigendum(s) issued from time to time by your organisation has also been taken into consideration, while submitting this acceptance letter.
- 4. I / We hereby unconditionally accept all the terms and conditions of above-mentioned tender document and corrigendum(s) as applicable.
- 5. In case any provisions of this letter are found violated, then PRINCIPAL, RAM LAL ANAND COLLEGE. shall without prejudice to any other right or remedy be at liberty to reject my/our bid including the forfeiture of EMD.
- 6. 1 / We hereby certify that all statements made, and information supplied in the enclosed appendix, annexure, forms/paras etc. furnished herewith are true and correct.
- 7. I / We have furnished all information and details necessary for demonstrating our qualification and have no further critical information to supply.
- 8. I / We understand and accept that PRINCIPAL, RAM LAL ANAND COLLEGE. is not bound to accept the lowest bid or any of the bids submitted by the bidders or to give any reasons for their decision.
- 9. I/We understand and accept that all taxes including GST shall be payable by the bidder/contractor and PRINCIPAL, RAM LAL ANAND COLLEGE. will not entertain any claim whatsoever in respect of taxes.
- 10. I/We understand and accept that PRINCIPAL, RAM LAL ANAND COLLEGE. reserves the right of accepting the whole or any part of the tender and the bidder/contractor shall be bound to perform the same at quoted rates.

- 11. I/ We understand and accept that in case any information provided by me/us is found to be false/ incorrect, then PRINCIPAL, RAM LAL ANAND COLLEGE. shall be at liberty to reject our bid and without prejudice to any other right or remedy, be at liberty to forfeit the EMD absolutely and I / We shall not have any claim against PRINCIPAL, RAM LAL ANAND COLLEGE. .
- 12. A sum of Rs. Rs. 66,485.00 (Rupees Sixty- Six Thousand four hundred Eighty-five only)- (Bank Draft No..... Dated.....) is hereby forwarded in Bank Draft in the favor of Principal, Ram Lal Anand College, New Delhi as earnest money.
- 13. I/We understand that If I/we fail to keep the Tender open as aforesaid or make any modifications in the terms and conditions of the Tender which are not acceptable to Principal, Ram Lal Anand College, New Delhi. I/We agree that Principal, Ram LAl Anand College, New Delhi, shall without prejudice to any other right or remedy, be at liberty to forfeit the said earnest money absolutely. Should this Tender be accepted, I/we hereby agree to abide by and fulfill all the terms, conditions and provisions of the aforesaid documents

Yours Faithfully,

Signature of Bidder: Name: Designation:

Stamp of the Bidder:

BIDDER'S DETAILS

| S.NO. | DESCRIPTION | DETAIL | |
|---------------------|---|--------|--|
| 1 | Name of Company | | |
| 2 | Address of Company | | |
| 3 | PAN no. | | |
| 4 | GSTN no. | | |
| 5 | Telephone Number | | |
| 6 | Email Address | | |
| 7 | Name of Company Owner / Director / Partner | | |
| 8 | Address of Company Owner / Director / Partner | | |
| 9 | Telephone Number of Company Owner / Director/ Partner | | |
| informa | I/We hereby declare that the information furnished above is true and correct. In case the above information is found incorrect at any stage, the PRINCIPAL, RAM LAL ANAND COLLEGI may take appropriate action as warranted. | | |
| Name: | | | |
| Designa | ation: | | |
| Stamp & Signatures: | | | |
| Place: | | | |
| Date: | | | |

| S.NO. | | DESCRIPTION | СНЕСК |
|-------|---|--|-------|
| 1) | : | COMPANY REGISTRATION DETAILS | |
| 2) | : | COMPANY PROFILE | |
| 3) | : | GST REGISTRATION CERTIFICATE COPY | |
| 4) | : | PAN CARD COPY | |
| 5) | : | PF REGISTRATION CERTIFICATE | |
| 8) | : | VALID COMPLETION CERTIFICATES ALONG WITH PAYMENT TRAIL | |
| 9) | : | TURN OVER CERTIFICATE (ANNEXURE 1) | |
| 10) | : | SOLVENCY CERTIFICATE (30 LAKHS) | |
| 11) | : | TENDER FEE OF RS. 1000 IN THE FORM OF A DEMAND DRAFT IN | |
| | | THE NAME OF PRINCIPAL, RAM LAL ANAND COLLEGE. ORIGINAL | |
| | | DEMAND DRAFT TO BE SUBMITTED WITH THE TECHNICAL BID | |
| | | TO THE OFFICE OF THE PRINCIPAL AND SCANNED COPY TO BE | |
| | | UPLOADED ALONG WITH THE TENDER. | |
| 12) | : | EMD FEE OF RS. 66,485/- IN THE FORM OF A DEMAND DRAFT IN | |
| | | THE NAME OF PRINCIPAL, RAM LAL ANAND COLLEGE. ORIGINAL | |
| | | DEMAND DRAFT TO BE SUBMITTED WITH THE TECHNICAL BID | |
| | | TO THE OFFICE OF THE PRINCIPAL AND SCANNED COPY TO BE | |
| | | UPLOADED ALONG WITH THE TENDER. | |
| 13) | : | NIT STAMP & SIGNED BY THE BIDDER (MUST FILL THE BIDDER | |
| | | DETAIL IN NIT) | |

CHECKLIST OF DOCUMENTS TO BE PLACED IN THE TECHNICAL BID

TURNOVER CERTIFICATE (ANNEXURE 1)

ON THE LETTER PAD OF CHARTERED ACCOUNTANT

This is to certify that the total turnover of

M/s

Having PAN

is as under:

| FINANCIAL YEAR | AMOUNT (FIGURES) | AMOUNT (WORDS) |
|-------------------|---------------------|-------------------|
| 2019-2020 | | |
| 2020-2021 | | |
| 2021-2022 | | |

Average = Total/3 =

It is further certified that the above-mentioned amounts have been derived from the books of accounts presented before us for the abovementioned periods.

Stamp and Signature of Chartered Accountant.

| S.No. | Details of Materials / Equipment | Manufacturer's Name |
|-------|---|------------------------|
| | | ISI Marked |
| 1. | Terrace Pumps | Kirloskar |
| | | KSB |
| | | Willo - Mather & Platt |
| 2. | Motor | ABB |
| | | Bharat Bijlee |
| | | Kirloskar |
| | | Siemens |
| | | Crompton Greaves |
| 3. | G.I. / M.S. Pipes (IS : 1239 / IS : 3589) | ТАТА |
| | | Jindal Hissar |
| | | Surya |
| | | Prakash |
| 4. | Paints | Asian Paints |
| | | Berger |
| | | ICI |
| | | Shalimar Paints |
| | | Johnson & Nicolas |
| 5. | Single Headed Landing Valve | Eversafe |
| | | Firex |
| | | Minimax |
| | | Newage |
| | | Priyanka |
| | | Safex |
| 6. | Fire Hose | Ever safe |
| | | Padmini |
| | | Safeguard |
| | | Safex |
| 7. | Hose Box (ISI marked) | Geetech |
| | | Safeline |
| | | Padmini |
| 8. | First Aid Hose Reel (| Eversafe |
| | | Newage |
| | | Padmini |
| | | Safeguard |
| | | Safefire |
| | | Safex |
| 9. | Hose Reel Drum (ISI marked) | Eversafe |
| | | Geetech |
| | | Newage |
| | | Safeline |

MAKE OF MATERIAL FOR FIRE FIGHTING SYSTEM

| S.No. | Details of Materials / Equipment | Manufacturer's Name |
|-------|------------------------------------|---------------------|
| 10. | Gun Metal Branch Pipe | Eversafe |
| | | Newage |
| | | Safeguard |
| | | Safex |
| | | Minimax |
| 11. | Fireman Axe | Minimax |
| | | New Age |
| | | Safeguard |
| 12. | Installation Control Valve | HD |
| | | CD |
| | | Newage |
| 13. | Sprinkler Heads | HD |
| | | Newage |
| | | Reliable |
| | | Sharp |
| | | Тусо |
| | | Viking |
| 14. | Fire Extinguishers | Eversafe |
| | C C | Dupont |
| | | Kanex |
| | | Navbharat |
| | | Safex |
| 15. | Water Flow Switch | Gem |
| | | Honeywell |
| | | Macdonald |
| | | Rapid Control |
| | | System Sensor |
| | | Spray Safe |
| | | Switzer |
| | | Viking-Potter |
| 16. | Pipe Protection Wrapping & Coating | IWL - Pypkote |
| | | Neotape |
| | | Rustech - Coatek |
| | | STP Ltd. |
| 17. | Pipe clamp & supports | Chilly |
| | | Euroclamp |
| | | Easyflex |
| | | Gripple |
| 18. | GM / Forged Brass Valves | Jayhiwa |
| | | Kitz |
| | | RB |
| | | Sant |
| | | Zoloto |
| | | |

| S.No. | Details of Materials / Equipment | Manufacturer's Name |
|-------|----------------------------------|---------------------------------|
| 19. | Cast Iron Sluice Valves | Indian Valve Company |
| | | Kirloskar |
| | | Marck-Cair |
| | | Sant |
| 20. | Butterfly Valve | Jayhiwa |
| | | Marck-Cair |
| | | Sant |
| | | Zoloto |
| 21. | Check Valve – Wafer Type | Kirloskar |
| | | Jayhiwa |
| | | Marck-Cair |
| | | Normex |
| 22. | Check Valve – Dual Plate | Marck-Cair |
| | | Normex |
| 23. | Pressure Switch | Danfoss |
| | | Infoss |
| | | Viking |
| 24. | Foot valve | Kirloskar |
| | | Normex |
| 25. | Solenoid valve | Avcon |
| | | Aira |
| | | Danfoss |
| | | Viking |
| 26. | Air Release Valve | OR |
| | | Zoloto |
| | | ITAP |
| | | Marck |
| 27. | Ball Float Valve | Prayag |
| | | Zoloto |
| | | Sant |
| 28. | Y Strainer | Emerald |
| | | Sant |
| | | SKS |
| | | Zoloto |
| 29. | Pressure Gauge | Aquamet |
| | | Emerald |
| | | Fiebig |
| | | H Guru |
| | | Wika |
| 30. | DWC Pipes | Rex/Tirupati/Jyoti |
| 31. | HDPE Pipe | Ashirvad/Polyplast/Utkarsh/Duke |

LIST OF APPROVED MAKES FOR FIRE ALARM SYSTEM

| S. No. | Details of Materials / Equipment | Manufacturer's Name |
|--------|---------------------------------------|---|
| 1 | Fire Alarm control panel/Sector panel | Agni/System sensor/Apollo/Notifier/Ansu |
| 2 | Detectors and other accessories | Agni/Apollo/Siemens/system sensor/Notifier |
| 3 | Wires and Cables | RR kables / Polycab/ Havell.s |
| 4 | DWC Pipe | Rex/Tirupati/Jyoti |
| 5 | HDPE Pipe | Ashirvad/Polyplast/Utkarsh/Duke |

List of approved makes of material-Electrical Works

| S. No. | Details of Materials / Equipment | Manufacturer's Name |
|--------|----------------------------------|--------------------------------------|
| 1 | G.I.Pipe | B-Class Tata/Jindal Hissar/Prakash |
| | | Tubes |
| 2 | G.I Strips | GI coating thickness as per relevant |
| | | IS standard. |
| 3 | Wires and Cables | RR kables / Polycab/ Havell.s |
| 4 | DWC Pipe | Rex/Tirupati/Jyoti |
| 5 | HDPE Pipe | Ashirvad/Polyplast/Utkarsh/Duke |

SCHEDULE OF WORK

| SI. No. | Item Description | Quantity | Units | RATE |
|------------|--|----------|-------|------|
| 1 | PUMPS Supplying, installation, testing and commissioning of electric driven terrace pump suitable for automatic operation and consisting of following, complete in all respects, as required: (Terrace Pump) Supplying, installation, testing and commissioning of electric driven terrace pump suitable for automatic operation and consisting of following, complete in all respects, as required: (Terrace Pump) (a) Horizontal type, multistage, centrifugal, split casing pump of cast iron body & bronze impeller with stainless steel shaft, mechanical confirming to IS : 1520 b) Suitable HP squirrel cage induction motor TEFC type suitable for operation on 415 volts, 3 phase, 50 Hz, AC supply with IP55 class of protection for enclosure, horizontal foot mounted type with Class-'F' insulation, conforming to IS-325. (c) M.S.fabricated common base plate, coupling, coupling guard, foundation bolts etc.as required. (d) Suitable cement concrete foundation duly plastered and with anti vibration pads. | | | |
| 1.01 | 450 lpm at 35 m Head (Two for Auditorium and Academic blocks+ 2 for Principal Block with allied buildings) | 4.00 | Set | |
| 2 | CONTROL PANELS for terrace Pumps Fabrication, supply, Installation testing & commissioning of Electrical control panel of cubical construction, floor/wall mounted type, fabricated out of 2mm thick CRCA sheet, compartmentalised with hinged lockable doors, dust and vermin proof, powder coated of approved shade after 7 tank treatment process, cable alley, interconnection with suitable size copper conductor cable/solid copper strip, having switchgears and accessories, mountings and internal wiring, earth terminals, numbering etc. complete in all respect, suitable for terrace pump set complete as per CPWD specification with following in coming and Outgoings, suitable for operation on 415V, 3 phase, 50Hz Ac Supply with enclosure protection class IP 42 as required : INCOMING 100 A, 25 kA 4 Pole MCCB, Ics=100% Icu rating Digital Voltmeter 0-500V with selector switch Digital Ammeter (0-250 A) with selector switch & CTs etc. LED type RYB phase indicating lamps, ON, OFF, trip indicating lamps | | | |

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Principal Ram Lal Ananad College

SD/-

| | Set of Copper Bus Bar 200A | | | |
|------|--|-------|-------|--|
| | OUTGOING (Note : All outgoing feeders for pumps should have digital Ammeter with selector switches, and LED type ON, OFF, trip indicating lamps) | | | |
| | Terrace Pump | | | |
| 2.01 | 63 A, 25 kA TPN MCCB, Ics=100% Icu, with fully automatic Star/Delta starter suitable for 12.5 HP pump with overload protection, current sensing type single phase preventor complete with all accessories and internal wiring required for automatic operation, selector switch for local/remote, auto/manual/OFF operation 2 Nos. | 2.00 | Set | |
| | PIPES & ACCESSORIES | | | |
| 3 | Providing, laying, testing & commissioning of 'C' class heavy duty MS pipe conforming to IS 3589/IS 1239 including Welding, fittings like elbows, tees, flanges, tapers, nuts bolts, gaskets etc. and fixing the pipe on the wall/ceiling with suitable clamp/support frame and painting with two or more coats of synthetic enamel paint of required shade complete as required : | | | |
| 3.01 | 25 mm dia | 90 | Meter | |
| 3.02 | 32 mm dia | 40 | Meter | |
| 3.03 | 40 mm dia | 40 | Meter | |
| 3.04 | 50 mm dia | 30 | Meter | |
| 3.05 | 65 mm dia | 20 | Meter | |
| 3.06 | 80 mm dia | 16 | Meter | |
| 3.07 | 100 mm dia | 280 | Meter | |
| 4 | Providing, laying, testing & commissioning of 'B' class heavy duty G.I. pipe conforming to IS 1239 including welding, fittings like elbows, tees, flanges, tapers, nuts, bolts, gaskets etc. and fixing the pipe on the wall/ceiling with suitable clamp/support frame and painting with two or more coats of synthetic enamel paint of required shade complete as required : | 80.00 | Meter | |
| | a) 50 mm dia | | | |
| 5 | Supplying and fixing single headed internal hydrant valve with instantaneous Gunmetal/Stainless Steel conforming to IS 5290 (Type -A) with blank Gunmetal/Stainless Steel cap and chain as required : | 2.00 | Set | |
| | a) Single headed Stainless steel-(Auditorium) | | | |
| | | | | |

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Principal Ram Lal Ananad College

| 6 | Supplying, fixing, testing and commissioning of butterfly valve of PN 1.6 rating with bronze/gunmetal seat duly ISI marked complete with nuts, bolts, washers, gaskets conforming to IS 13095 of following sizes as required : | | | |
|------|--|-------|------|--|
| 6.01 | 50 mm dia | 4 | Set | |
| 6.02 | 100 mm dia | 14 | Set | |
| 7 | Supplying and fixing orifice plate made out of 6 mm thick stainless steel (Grade 304) with orifice of required size to be fitted between flange & landing valve of external and internal hydrants to reduce pressure at the outlet to the level of 3.5 kg/cm2 complete as required. | 2.00 | Each | |
| 8 | Supplying and fixing 63 mm dia, 15 m long RRL hose pipe with 63 mm dia male and female couplings duly bound with GI wire, rivets etc. conforming to IS 636 (type-A) as required : | 4.00 | Set | |
| 9 | a) Stainless Steel (Grade 304) Supplying and fixing first-aid Hose Reel with MS construction spray painted in post office red, conforming to IS 884 complete with the following as conforming to IS 884 complete with the following as conforming to IS 884 complete with the following as required. 20 mm nominal internal dia water hose thermoplastic (Textile reinforced) type -2 as per IS: 12585 20 mm nominal internal dia gun metal globe valve & nozzle. Drum and brackets for fixing the equipment's on wall. | | | |
| 9.01 | Connections from riser with 25 mm dia stop gun metal valve & M.S. Pipe and socket. a) 40 M | 18.00 | Set | |
| 10 | Supplying & fixing 63 mm dia gun metal short branch pipe with 20 mm nominal internal diameter size nozzle conforming to IS 903 suitable for instantaneous connection to interconnect hose pipe coupling as required : a) Stainless Steel (Grade 304) | 4.00 | Nos. | |
| 11 | Supplying and fixing of fire brigade connection of cast iron body with gun metal male instantaneous inlet couplings complete with cap and chain as reqd. for suitable dia MS pipe connection conforming to IS 904 as required : a) 2 way-100 mm dia M.S. Pipe | 1.00 | Set | |
| 12 | Supplying and fixing air vessel made of 250 mm dia, 8 mm thick MS sheet, 1200 mm in height with air release valve on top and flanged connection to riser, drain arrangement with 25 mm dia gun metal wheel valve with required accessories, pressure gauge and painting with synthetic enamel paint of approved shade as required. | 1.00 | Set | |
| 13 | Providing, fixing, testing & commissioning of 15mm dia quartzoid bulb type sprinklers of rating 68 degree centigrade with required accessories : | 35.00 | Each | |

SD/-

| | a) Pendent Sprinkler | | | |
|-------|--|----------|--------|--|
| 14 | Providing & fixing of pressure switch in M.S. pipe line including connection etc. as required. | 4.00 | Each | |
| 15 | Supplying, installation, testing & commissioning of sprinkler flexible pipe (UL Listed) of stainless steel complete with 15 NPT on reducer thread with maximum working pressure of 175 PSI test pressure of 875 PSI (Burst) with branch line (Inlet) 25mm NPT male thread to sprinkler head (Outlet) 15mm NPT female thread with reducer, nipple, 2 side brackets, centre bracket, stock bar of following sizes completes as required. | | | |
| 15.01 | 700mm | 5.00 | Set | |
| 15.02 | 1000 mm | 5.00 | Set | |
| 16 | Providing, installation, testing & commissioning of adjustable rosette plate for 15mm dia in white finish UL Listed or FM approved complete as required. | 35.00 | Each | |
| 17 | Supply and laying of 4x35 sq.mm Aluminium Conductor cable from Panel to terrace pump panel with GI earth wires, connections terminations etc. complete as required -2 Cable lengths | 125.00 | Meter | |
| 18 | Providing and placing on terrace (at all floor levels) polyethylene water storage tank, IS : 12701 marked, with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank. | 40000.00 | Litres | |
| 19 | Structural steel work in single section, fixed with or without connecting plate, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete. | 950.00 | Kg | |
| 20 | Supplying and laying of following size DWC HDPE pipe ISI marked along with all accessories like socket, bends, coupler etc. conforming to IS14930, Part II complete with fitting and cutting, jointing etc. direct in ground (75cm below ground level) including excavation and refilling the trench but excluding sand cushioning and protective covering etc. complete as required. 90 mm dia (OD-90 mm and ID-76 mm nominal) | 40.00 | Meter | |
| 21 | FIRE DETECTION AND ALARM SYSTEM (CONVENTIONAL) (Devices) | | | |
| 21.01 | Supplying, installation, testing & commissioning of heat detector operating at 54°C/57°C with rate of rise cum fixed temperature (dual thermistor) type with mounting base complete with all connection etc. as required. | 7 | Each | |
| 21.02 | Supplying, installation, testing & commissioning of smoke detector with built-in LED and mounting base complete with all connections etc. as required. | 75 | Each | |
| 21.03 | Supplying, installation, testing & commissioning of manual call boxes of MS construction in surface/recess with stainless steel chain & hammer assembly complete with glass and push button etc. as required. | 12 | Each | |

| 21.04 | Supplying, installation, testing & commissioning response indicator on surface/recess MS box having two LEDs metallic cover complete with all connections etc. as required. | 32 | Each | |
|-------|--|--------|-------|--|
| 21.05 | Supplying, installation, testing & commissioning fire alarm sounder with facility to make announcement, mounted in M.S. box (16 SWG) with hinged cover plate & suitable for operation with amplifier i/c line matching transformer etc. complete as required. | 12 | Each | |
| 21.06 | Supplying, installation, testing & commissioning of smoke detector with built-in LED and mounting base complete with all connections etc. as required. Supplying, installation, testing & suitable for following zones, complete with visual indications for commissioning sector panel short circuit fault, open circuit fault, fire condition and all other standard facilities as per IS:2189 with mimic diagram for all area/zone covered, complete with all connections, interconnections as required. | 8 | Each | |
| 21.07 | Supplying, installation, testing & commissioning of main control and indicating panel made out of 16 SWG MS sheet to accommodate the following items duly powder coated in approved colour with louvers for ventilation, locking arrangement, audio and visual indication for fire alarm and public address system, monitoring system including connections, interconnections etc complete as required. 10 Zone panel for fire alarm system 250 Watt amplifier racks suitable for operation on 230V AC/24V DC supply conforming to IEC-268-3 complete with all accessories as required - 2 Nos.(one to act as standby) Battery charger trickle cum boost to take complete load of fire alarm & PA system complete with all accessories | 1.00 | Each | |
| | including providing & fixing of 2 nos.12 volt, 60 AH each sealed maintenance free batteries -1 set. | | | |
| 22 | CABLING & WIRING | | | |
| 22.01 | Supplying & laying of 2x1.5 sqmm fire alarm armoured cable, 600/1000V rated with annealed copper conductor having XLPE insulation, steel wire armouring & FRLS outer sheath complete as required. | 395.00 | Meter | |
| 22.02 | Supplying & laying of 3 2x1.5 sqmm fire alarm armoured cable, 600/1000V rated with annealed copper conductor having XLPE insulation, steel wire armouring & FRLS outer sheath complete as required. | 125.00 | Meter | |
| 22.03 | Supplying and fixing 25 mm dia MS flexible pipe with PVC coating along with all ancillaries and accessories like coupler etc. as required. | 75.00 | Meter | |
| 22.04 | Supplying and laying of following size DWC HDPE pipe ISI marked along with all accessories like socket, bends, coupler etc. conforming to IS14930, Part II complete with fitting and cutting, jointing etc. direct in ground (75cm below ground level) including excavation and refilling the trench but excluding sand cushioning and protective covering etc. complete as required. | 30.00 | Meter | |

| | | | 1 | |
|---------------------|--|--------|-------|--|
| | | | | |
| | A) 63 mm Dia (OD 63mm and ID-51 mm nominal) | | | |
| 23 | SH-1-EARTHING & LIGHTNING PROTECTION | | | |
| 20 | G.I. Pipe electrode | | | |
| 23.01 | Earthing with G.I. earth pipe 4.5 mtr long, 40 mm dia including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc with charcoal or coke and salt as required. (12 LA+6 Earth) | 18.00 | Set | |
| 23.02 | Providing and fixing of lightning conductor final, made of 25mm dia 300mm long, G.I tube, having, Single prong at top, with 85mm dia 6mm thick G.I base plate including holes etc. complete as required. | 12.00 | Each | |
| 23.03 | Providing & fixing 25 mm X 5 mm G.I. strip on surface or in recess for connections etc. as required. | 24.00 | Meter | |
| 23.04 | Providing & fixing 6SWG GI wire on surface or in recess for loop earthing as required. | 450.00 | Meter | |
| 23.05 | Providing and fixing G.I tape 20mm X 3mm thick on parapet or surface of wall for lightning conductor complete as required.(for horizontal run) | 600.00 | Meter | |
| 23.06 | Providing and fixing G.I tape 20mm X 3mm thick on parapet or surface of wall for lightning conductor complete as required.(for Vertical run) | 250.00 | Meter | |
| 23.07 | Providing and fixing testing joint made of 20mm X 3mm thick G.I strip,125mm long, with 4nos of G.I bolts,nuts,check nuts and spring washers etc complete as required. | 12.00 | Each | |
| 23.08 | Providing and laying G.I tape 32mm X 6mm form earth electrode directly in ground as required | 36.00 | Meter | |
| 24 | EARTHING & LIGHTNING PROTECTION SH-II-MiscElectrical works | | | |
| 24.01 | Checking and correction of polarity of all Lighting plugs and Power plugs for complete area of Ram lal Anand College | 1.00 | Lot | |
| 25 | Supplying and laying of following size DWC/ HDPE pipe ISI marked along with all accessories like socket, bends, coupler etc. conforming to IS14930, Part II complete with fitting and cutting, jointing etc. direct in ground (75cm below ground level) including excavation and refilling the trench but excluding sand cushioning and protective covering etc. complete as required. | | | |
| 25.01 | 63 mm Dia (OD 63mm and ID-51 mm nominal) | 150.00 | Meter | |
| 25.02 | 90 mm dia (OD-90 mm and ID-76 mm nominal) | 60.00 | Meter | |
| 25.03 | 120 mm dia (OD-120 mm and ID -103 mm nominal) | 20.00 | Meter | |
| 26 | Dismantling of Cables/Re-laying in existing DWC HDPE pipes, End termination with compression glands and providing and fixing thimbles/lugs etc for all UG armoured cables | 1.00 | Lot | |
| Total in Figures | | | | |