NIT No.	:	E-TENDER/RLAC/2023/1198 DATED 09.01.2023.
TITLE	:	E-TENDER FOR CIVIL, INTERIORS, FIRE FIGHTING, ELECTRICAL, HVAC, AUDIO, VIDEO & STAGE LIGHTING WORKS AT AUDITORIUM BUILDING OF RAM LAL ANAND COLLEGE, 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	:	74.27 LAKHS
TENDER FEE	:	RUPEES ONE THOUSAND ONLY
DATE OF START	:	10-01-2023
LAST DATE OF SUBMISSION OF TECHNICAL BID DOCUMENT	:	27-01-2023
EARNEST MONEY DEPOSIT	:	1,50,000/-
TENDER PREPARED BY	:	RANJIT SINGH & ASSOCIATES, 1206 SURYA KIRAN BUILDING, 19 K.G. MARG, NEW DELHI 110001. PH. 011-43560879. RSA1206@MSN.COM

Contents TENDER SCHEDULE ______2 CHECKLIST OF DOCUMENTS TO BE PLACED IN THE TECHNICAL BID4 TENDER ACCEPTANCE (OFFER) LETTER......7 BIDDER'S DETAILS9 SPECIAL CONDITIONS OF CONTRACT10 GENERAL CONDITIONS OF CONTRACT.......13 FORM OF PERFORMANCE SECURITY BANK GUARANTEE BOND25 TURNOVER CERTIFICATE (ANNEXURE 1)......28 LIST OF APPROVED MAKES FOR CIVIL WORKS29 LIST OF APPROVED MAKES FOR ELECTRICAL WORKS30 ANNEXURE 2: LETTER FROM HVAC OEM ON OEM LETTERHEAD......41 ANNEXURE 3: LETTER FROM AUDIO, VIDEO & STAGE LIGHTING OEM (ON OEM LETTER HEAD)42

CONTRACT DRAWINGS43

TENDER SCHEDULE			
Validity Of Offer	:	90 Days	
Cost Of Tender Document	:	Rs. 1,000/- D.D. Payable in Favour Of PRINCIPAL, RAM LAL ANAND COLLEGE. EMD of unsuccessful bidders will be returned. separate D.D.	
Estimated Cost of The Work	:	74.27 LAKHS	
Earnest Money Deposit.	:	1,50,000/- 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.	:	10 January 2023	
Last Date of Tender Download.	:	24-01-2023 At 3:00 Pm	
Last Date of Submission of Tender.	:	25-01-2023 At 3:00 Pm	
Date Of Opening of Technical Bid.	:	27-01-2023 At 3:30 Pm	
Defects Liability Period.	:	24 Months	
Contract Time Period.	:	5 Months	
Penalty For Delay.	:	Rs. 5,000/- Per Day Up to Maximum Of 10% Of the Cost of The Works.	
Minimum Running Account Bill Value.	:	15 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 24 Months After Completion of The Works.	
Contact Details for Clarification Related to Tender.	:	Email: Rsa1206@Msn.Com Phone. 011-43560879	

ELIGIBILITY CRITERIA

S. NO.		DESCRIPTION
1)	:	BIDDER SHOULD HAVE COMPLETED THREE SIMILAR WORKS EACH COSTING NOT LESS THAN RUPEES 30.0 LACS
		OR
		BIDDER SHOULD HAVE COMPLETED TWO SIMILAR WORKS EACH COSTING NOT LESS THAN RUPEES 45.0 LACS
		OR
		BIDDER SHOULD HAVE COMPLETED ONE SIMILAR WORKS EACH COSTING NOT LESS THAN RUPEES 60.0 LACS
2)	:	BIDDER SHOULD HAVE AVERAGE ANNUAL TURNOVER (GROSS) OF 37.0 LACS
3)	:	BIDDER SHOULD HAVE A SOLVENCY OF RUPEES 30 LACS
4)	:	BIDDER SHOULD SUBMIT AN EMD OF RUPEES 1,50,000/
5)	:	LETTER OF AUTHORIZATION FROM ORIGINAL EQUIPMENT MANUFACTURER (OEM) SPECIFIC TO THE TENDER SHOULD BE ENCLOSED.
		BIDDER SHALL SUBMIT LETTER FROM HVAC OEM CONFIRMING THE WORKABILITY OF RATES QUOTED FOR HVAC SYSTEM. (ANNEXURE-2)
		BIDDER SHALL SUBMIT LETTER FROM AUDIO, VIDEO & LIGHTING OEM CONFIRMING THE WORKABILITY OF RATES & FLAWLESS OUTPUT / PERFORMANCE OF THE SYSTEM QUOTED FOR AUDIO, VIDEO AND LIGHTING SYSTEM. (ANNEXURE-3)

CHECKLIST OF DOCUMENTS TO BE PLACED IN THE TECHNICAL BID

S.NO.		DESCRIPTION	CHECK
1)	:	COMPANY REGISTRATION DETAILS	
2)	:	COMPANY PROFILE	
3)	:	GST REGISTRATION CERTIFICATE COPY	
4)	:	PAN CARD COPY	
5)	:	PF REGISTRATION CERTIFICATE	
6)	:	TURNOVER CERTIFICATE (ANNEXURE -1)	
7)	:	SOLVENCY CERTIFICATE	
8)	:	VALID COMPLETION CERTIFICATES	
9)	:	LETTERS OF AUTHORISATION FROM OEM	
10)	:	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.	
11)	:	EMD FEE OF RS. 1,50,000/- 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)	:	ANNEXURE – 2 (LETTER FROM HVAC OEM)	
13)		ANNEXURE - 3 (LETTER FROM AUDIO, VIDEO & STAGE	
		LIGHTING OEM)	

SUBMISSION OF TECHNICAL BID

1) THE TECHNICAL BID DOCUMENTS HAVE TO BE SCANNED AND UPLOADED ON THE CPP PORTAL.

NOTICE INVITING TENDER

To

All The Eligible Bidders,

Dear Sir/ Madam,

You are invited 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 CIVIL, INTERIORS, FIRE FIGHTING, ELECTRICAL, HVAC, AUDIO, VIDEO & STAGE LIGHTING WORKS AT AUDITORIUM BUILDING OF RAM LAL ANAND COLLEGE, NEW DELHI..

Manual Bids shall not be accepted, except for the supportive documents / instruments if any asked in this tender. However, bidders are requested to submit hardcopy technical bid on or before the tender due date mentioned in the tender document.

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 eProcurement System Government of India.

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.

Sd/-

PRINCIPAL, RAM LAL ANAND COLLEGE.

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 CIVIL, INTERIORS, FIRE FIGHTING, ELECTRICAL, HVAC, AUDIO, VIDEO & STAGE LIGHTING WORKS AT AUDITORIUM BUILDING OF 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 / eProcurement System Government of India .
- 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. I/We understand and accept that, if after the tender is accepted, I / We fail to commence the execution of the works within the stipulated time, then PRINCIPAL, RAM LAL ANAND COLLEGE. shall 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.

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	
above i	•	nation furnished above is true and correct. In case the ct at any stage, the PRINCIPAL, RAM LAL ANAND tion as warranted.
Name:		
Designation:		
Stamp & Signatures:		
Place:		
Date:		

SPECIAL CONDITIONS OF CONTRACT

- 1. 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. CONTRACTORS shall be deemed to have full knowledge of the site, whether they inspect it or not and no extra charge consequent to any misunderstanding or otherwise shall be allowed.
- 2. Submissions of the Tender by the CONTRACTOR implies that he has read all 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.
- 3. 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 favour of PRINCIPAL, RAM LAL ANAND COLLEGE. before issue of letter to start the work.
- 4. The CONTRACTOR, whose Tender is accepted, shall permit PRINCIPAL, RAM LAL ANAND COLLEGE. 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:
 - a) 5% of the bill amount.
 - b) 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 two year without any interest.
 - c) TDS on Income Tax/GST/Labour Cess etc. as applicable.
- 5. PRINCIPAL, RAM LAL ANAND COLLEGE. will return the earnest money where applicable to every unsuccessful contractor on return of all the Tender documents without any interest.
- 6. TDS on Income tax/GST/Labour cess etc. as applicable shall be deducted from the payments made to the bidder/contractor and TDS certificates shall be issued by the owner.
- 7. Water and electricity shall be arranged by the tenderer himself. In case it is available, the same can be provided by the College authorities at one point. A recovery @ 1 %

for electricity and 1% for water charges shall be recovered on gross value of work done.

- 8. The work shall be carried out in accordance with the phasing plan approved by the PRINCIPAL, RAM LAL ANAND COLLEGE. to avoid any disturbance. The site is expected to be handed over immediately. The contractor will prepare and submit a Phasing Plan with Bar Chart with targeted dates of completion for all the activities and get it approved from the PRINCIPAL, RAM LAL ANAND COLLEGE. within 7 days of award of contract.
- 9. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ELECTRICAL, FIRE FIGHTING, AUDIO, VIDEO, STAGE LIGHTING & HVAC WORKS FOR APPROVAL FROM THE COLLEGE AUTHORITIES WITHIN 1 MONTH OF AWARD OF THE WORK.
- 10. CONTRACTOR SHALL SUBMIT BLOCK SCHEMATICS, AUDIO 3D SIMULATION & EQUIPMENT LAYOUT DRAWINGS FOR THE AUDIO, VIDEO & LIGHTING WORKS WITHIN 1 MONTH OF AWARD OF THE WORK.
- 11. The rates shall be inclusive of 2 years ON SITE comprehensive defect liability maintenance including all tools, plants, parts, labour, supervision and technical support.
- 12. The work shall be carried out as per specifications in the Tender schedule/latest C.P.W.D. Specifications, along with the correction slips; issued up to date of acceptance of Tender in case of doubt the decision of the Architect shall be final and binding on the Contractor.
- 13. 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.
- 14. The serviceable materials out of the dismantled materials if any will be the property of the PRINCIPAL, RAM LAL ANAND COLLEGE. and all such materials shall be properly stacked by the Contractor as directed by the Engineer-in-charge. Decision of PRINCIPAL, RAM LAL ANAND COLLEGE. or his authorized representative on the serviceability of the dismantled materials shall be final and binding on the Contractor.
- 15. 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.
- 16. 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.
- 17. No labor or material rate escalation claims will be entertained from the contractor as this work has to be completed within 5 months from the date of commencement of work at site.
- 18. Rates quoted shall be applicable equally to all floors and shall include all lifts and leads. No extras on this account shall be payable.
- 19. The contractor shall provide training for operation and maintenance of Equipment's to the Owners representatives free of cost, where required.
- 20. 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.
- 21. 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.
- 22. Labour Camp will be arranged by the contractor outside the Site of work at his own cost.
- 23. PRINCIPAL, RAM LAL ANAND COLLEGE. 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. The site: 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. Sub-Contractor: 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. Owner: PRINCIPAL, RAM LAL ANAND COLLEGE.
- 6. Work: the term "work" includes both labour and material of the Contractor/Sub-Contractor.
- 7. Time limits: time limits stated in the contract are essence of the contract.
- 8. Law: 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. Contract documents: 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 an item rate contract. The Contractor shall be paid for the actual quantity and quality of work done, as measured at site on the rates quoted by him, on the basis of 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 be bound to carry out the same without claiming any extras.

CONTRACT DRAWINGS

- 1. In general, drawings shall indicate dimension, position & type of construction.
- 2. Specifications shall indicate the qualities, methods, and bill of quantities shall indicate the quantum and rates. Any work indicated in drawings and not mentioned in the specifications or vice versa shall be furnished as fully set forth in both.
- 3. Contractor shall not deviate from the drawings and Architect's interpretation of the drawings shall be final and without appeal.
- 4. Errors/inconsistencies discovered in the drawings shall be instantly brought to the notice of the Architect for interpretation and correction, if any.
- 5. All drawings are the property of the Architect and shall not be used on any other project.

ARCHITECTS INSTRUCTIONS

If within seven days of receipt of written instructions from the Architect, requiring compliance with an instruction the Contractor does not comply hence-with, then the Owner may get the work executed through another agency at the risk and cost of the Contractor.

SCOPE OF WORK OF CONTRACTOR

The scope of work to be carried out by the CONTRACTOR shall also include the following:

- 1. Setting out of the works in respect of position, level dimensions, alignments, etc. including establishment of benchmarks, survey reference points, etc.
- 2. Clearance of the site.
- 3. Site levelling /terracing within the limits as shown in the drawings or as directed by the Engineer In charge.
- 4. Disposal of debris, excavated materials, etc. as per the instructions of the Engineer In-Charge
- 5. All scaffolding, shorting, cantering, shuttering works, etc.
- 6. Running and maintenance of all plants and equipment, tools and tackles, etc.
- 7. Any other work required in connection with the execution of the contract work.

The cost of all the above-mentioned works shall be deemed to be included in the rates for various items of work although such inclusion may not be specifically spelt out.

SAMPLES AND SHOP DRAWINGS

The Contractor shall submit samples of materials and shops drawings required by the Architect with promptness within a week.

PROGRESS CHART

In order to achieve the completion time as stated above, the CONTRACTOR shall submit to the OWNER within 2 (two) days from the effective date of Agreement a detailed Bar chart/PERT Network. The list of activities for which the Bar chart/PERT network has been

worked out and their commencement, duration and completion shall be subject to the approval of the OWNER

ACCESS FOR ARCHITECT/ ENGINEER IN CHARGE TO THE WORKS

The Architect and his representative shall have access, at all reasonable times, to the work and workshops of the Contractor.

ARCHITECTS STATUS AND DECISIONS

The Architect shall be Owner's representative during the construction period. He shall periodically visit the site to familiarize himself generally with the progress and the quality of work and to determine, in general if the work is proceeding in accordance with the contract documents. The Architect shall not be required to make exhaustive or continuous on-site 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 in regard to: -

- 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 up 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 IN CHARGE

Engineer In-Charge shall mean a competent engineer appointed and paid by the Owner and acting in congruence with the Architect.

CONTRACTORS FIELD ORGANIZATION AND EQUIPMENT

- 1. The Contractor shall employ qualified and competent licensed Electricians on the site.
- 2. Contractor shall provide and install all necessary hoists, ladders, scaffoldings, tools, tackles, plants and machinery necessary for execution of the works
- 3. Contractor shall provide and maintain simple watertight office accommodation at site

- 4. Contractor shall make his own security arrangements at site and keep a 24-hour Watchman
- 5. Contractor shall provide sanitary convenience for site staff and labour to keep the site clean
- 6. A telephone line at site to be maintained and paid by the Contractor
- 7. Guardrails shall be provided by the Contractor for safety of labour and general public at the site of works.

TAXES

All taxes including GST, Labour Cess etc. applicable in respect of this contract shall be payable by the Contractor and PRINCIPAL, 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 bye-law 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:

- 1. Employee's Provident Fund Act 1952
- 2. Contract Labour Act (Regulations and Abolition 1970)
- 3. Minimum Wages Act 1948
- 4. Payment of Wages Act 1936
- 5. Workmen Compensation Act 1923
- 6. Factories Act 1948
- 7. Apprenticeship Act 1961

SUB CONTRACTOR

Before awarding any subcontract, the Contractor shall notify Architect/Engineer In-Charge in writing the names of the Sub-Contractors proposed. Contractor shall not employ the Sub-Contractor to whom Architect or Engineer In Charge may have a reasonable objection.

MEASUREMENT OF WORK

Unless otherwise specified, measurement of work shall be carried from the works actually executed. The measurements for the purpose of 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 endorsement for the purpose of payment.

In the event of any dispute with regard to 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 fulfil 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

Architect/Engineer In-Charge 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 reconstructing 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 Architect/ 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 works 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 every part of the contract work.

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 Architect/ Engineer In charge, to enable the Architect and Owner to take a proper decision in the matter.

INSPECTION AND TEST

- 1. 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.
- 2. The CONTRACTOR shall ensure proper supervision and inspection during the progress of work at site.
- 3. 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 labour, materials, tools, tackles, instruments, appliances, etc. to enable the ENGINEER IN CHARGE to carry out inspection and/or test.
- 4. All test certificates shall be subject to certification by the ENGINEER IN CHARGE.
- 5. The CONTRACTOR shall submit to the ENGINEER IN CHARGE three copies of all inspection/ test certificates.
- 6. 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.
- 7. The CONTRACTOR shall take adequate steps to rectify the defects or to replace such materials and work which have failed during inspection /testing.

RESPONSIBILITY 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 labour 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 Rs. 5,000/- (Five Thousand) per day of delay. 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/Engineer In charge 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/Engineer In charge shall prepare a schedule of defects, not later than 14 days after the expiry of the defect's liability period. The Contractor shall within a reasonable period of time after receipt of schedule of defects shall rectify the same, failing which the Architect/Engineer In charge will make suitable deductions from the contract sum.

MAINTENANCE GUARANTEE / DEFECTS LIABILITY PERIOD

Maintenance Guarantee period will be 24 months from the actual date of completion and handling over to the OWNER.

- 1. 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.
- 2. 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.
- 3. 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.
- 4. 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.
- 5. 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.
- 6. Upon successful completion of the maintenance guarantee period the OWNER shall issue final acceptance certificate to the CONTRACTOR

PAYMENT WITH HELD

The Architect 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 in the course of 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 the works against loss or damage due to fire, earthquakes, and riots.

COORDINATION OF WORK

Contractor shall extend complete coordination to other agencies i.e. electrical, 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.

SAFETY

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.

GUARANTEE

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

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 24 months after completion of the work.

WARRANTY

The Contractor shall give warranty that works to be done supplied shall be new and free from all defects and faults in material, workmanship, and manufacture and shall be of the highest grade and consistent with the established and generally accepted standards for materials of the type ordered and shall perform in full conformity with the specifications and drawings. The Contractor shall be responsible for any defects that may develop under the conditions provided by the contractor and under proper use, arising from faulty materials, design or workmanship such as corrosion of the equipment, inadequate contact protection, deficiencies in design and or otherwise and shall remedy such defects at his own cost when called upon to do so by the Institute who shall state in writing in what respect goods are faulty. This shall survive inspection or payment for, and acceptance of goods, after the goods have been taken over.

If it becomes necessary for the contractor to replace or renew any defective Portion / portions of the equipment under this clause, the provisions of the clause shall apply to the portion / portions of equipment's replaced or renewed or until the end of the warranty period of 24 months, whichever may be later. If any defect is not remedied within a reasonable time, the College may proceed to get the work done at the Contractor's risk and expenses, but without prejudice to any other rights which the College may have against the Contractor in respect of such defects. Replacement under warranty clause shall be made by the Contractor free of all charges at site including freight, insurance and other incidental charges

REPLACEMENT OF DEFECTIVE EQUIPMENT

If any equipment or any part thereof, is found defective or fails to meet the requirements of the contract before it is accepted College shall give the Contractor a notice setting forth details of such defects or failures and the Contractor shall forthwith arrange to set right the defective equipment or replace the same by the good one to make it comply with the requirements of the contract. This in any case shall be completed within a period not exceeding one month from the date of the initial report pointing out the defects. The replacement or rectification shall be made at site by the Contractor free of cost. Should the Contractor fail to do the needful within this stipulated time frame, the College reserves the right to reject the equipment in full or in part and get it replaced at the cost of the Contractor. The cost of any such replacement made by the College shall be deducted from the amount payable to the Contractor against this purchase order.

If any equipment or part thereof is lost or rendered defective during transit, pending settlement of the insurance claim, fresh order shall be placed on the Contractor for such loss or defective equipment and the Contractor shall arrange to supply the same within three months of such order at the same prices and on the same general terms and conditions as mentioned in this purchase order.

ADD ON ORDER

PRINCIPAL, RAM LAL ANAND COLLEGE. reserves the right to place Add on order for additional quantity up to 100% of the original quantity at the same rate and terms & conditions of the purchase order within six months from the date of issue of purchase order.

ARBITRATION

In case of dispute, the difference of opinion on any matter pertaining to the works, the decision of the PRINCIPAL, RAM LAL ANAND COLLEGE. be final and binding on the contractors. If either party is not satisfied with the decision of the PRINCIPAL, RAM LAL ANAND COLLEGE., within 28 days a notice to this effect will be sent to the PRINCIPAL, RAM LAL ANAND COLLEGE. in writing. The matter can then be referred to a sole arbitrator or a panel of two arbitrators appointed under the arbitration act 1996.

LIQUIDATION

If the CONTRACTOR commences to be wound up, not being a member's voluntary winding up for the purpose of amalgamation or reconstruction, or carries on his business under a receiver for the benefits of his creditor the OWNER shalt be at liberty to:

- i) Give such receiver the liquidator or other person the option of carrying out the performance under the Agreement, subject to the receiver, liquidator or other person providing a guarantee up to an amount to be agreed upon by the OWNER and such receiver liquidator or other person for the due and faithful performance of the Contractor's obligations under this Agreement, or
- ii) If the receiver, liquidator or other person fails within 30 (thirty) days to exercise the option to carry out performance of the Agreement then the OWNER may terminate the Agreement and give notice in writing to the CONTRACTOR or to the receiver, liquidator or to any person in whom the Agreement may have become vested.

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.

OFFICIALS NOT TO BENEFIT

The Contractor warrants that it has not and shall not offer any direct or indirect benefit arising from or related to the performance of the Contract or the award thereof to any representative, official, employee, or other person in the office of PRINCIPAL, RAM LAL ANAND COLLEGE. Benito Juarez Road, New Delhi- 110 021. The Contractor acknowledges and agrees that any breach of this provision is a breach of an essential term of the Contract.

PENALTY FOR USE OF UNDUE INFLUENCE

The contractor undertakes that he has not given, offered or promised to give, directly or indirectly, any gift, consideration, reward, commission, fees, brokerage or inducement to any person in service of the Buyer or otherwise in procuring the Contracts or for bearing to do or for having done or forborne to do any act in relation to the obtaining or execution of the present Contract.

Any breach of the aforesaid undertaking by the Contractor (Seller) or any one employed by him or acting on his behalf (whether with or without the knowledge of the Seller) or the commission of any offers by the, Seller or anyone employed by him or acting on his behalf, as defined in Chapter IX of the Indian Penal Code, 1860 or the Prevention of Corruption Act, 1986 or any other Act enacted for the prevention of corruption shall entitle the Buyer to cancel the Contract and all or any other Contracts with the Seller.

FORM OF PERFORMANCE SECURITY BANK GUARANTEE BOND

In consideration of the PRINCIPAL, RAM LAL ANAND COLLEGE. (hereinafter called "The Owner") having agreed under the terms and conditions of agreement no.		
Dated:		
Made between the Owner and		
(hereinafter called "the Said Contractor(s)) for the work of E-TENDER FOR CIVIL INTERIORS, FIRE FIGHTING, ELECTRICAL, HVAC, AUDIO, VIDEO & STAGE LIGHTING WORKS AT AUDITORIUM BUILDING OF RAM LAL ANAND COLLEGE, NEW DELHI. herein after called "the said agreement".		
We (please mention name of the bank below)		
Undertake to pay to The Owner an amount not exceeding Rupees		
(In words)		
On demand by The Owner.		
2. We (please mention name of the bank below)		
Do hereby undertake to pay the amounts due and payable under this Guarantee without any demure, merely on a demand from The Owner stating that the amount claimed is required to meet the recoveries due or likely to be due from the said contractor(s). Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the bank under this Guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rupees		
(In words)		

3. We, the Said Bank further undertake to pay to The Owner any money so demanded notwithstanding any dispute or disputes raised by the Said Contractor(s) in any suit or proceeding pending before any court or tribunal relating thereto, our liability under this present being absolute and unequivocal.

The payment so made by us under this bond shall be a valid discharge of our liability for payment thereunder and the Said Contractors(s) shall have no claim against us for making such payment.

4. We (please mention name of the bank below)

Further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said agreement and it shall continue to be enforceable till all the dues of The Owner under or by virtue of the said agreement have been fully paid and its claims satisfied or discharged or till Engineer-in-Charge on behalf of The Owner certified that the terms and conditions of the said agreement have been fully and properly carried out by the Said Contractor(s) and accordingly discharges this guarantee.

5. We (please mention name of the bank below)

Further agree with The Owner that The Owner shall have the fullest liberty without our consent and without effecting in any manner our obligations hereunder to vary any of the terms and conditions of the said agreement or to extend time of performance by the said contractor(s) from time to time or to postpone for anytime of from time to time any of the powers exercisable by The Owner against the said contractor(s) and to for-bear or enforce any of the terms and conditions relating to the sad agreement and we shall not be relived from our liability by reason of any such variation, or extension being granted to the Said Contractor(s) or for any forbearance, act of commission on part of The Owner or any indulgence by The Owner to the Said Contractor(s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.

- 6. This guarantee will not be discharged due to the change in the constitution of The Bank or the Said Contractor(s)
- 7. We (please mention name of the bank below)

Lastly undertake not to revoke this guarantee except with the previous consent of The Owner in writing.

8. This Guarantee shall be valid upto________. Unless extend on demand by The Owner. Notwithstanding anything mentioned above, our liability against this guarantee is restricted to Rupees

(In words)

And unless a claim in writing is lodged with us within six months of the sate of expiry of the extended date of expiry of this guarantee all our liablities under this guarantee shall stand discharged.

E-TENDER F	OR CIVIL, INTERIO	RS, FIRE FIGHTING, ELECTR	ICAL, HVAC, AUDIO, VIDEO &
STAGE LIGHT	ING WORKS AT AU	DITORIUM BUILDING OF RA	M LAL ANAND COLLEGE, NEW
		DELHI.	
Dated: the	day of	for	(Bank).

TURNOVER CERTIFICATE (ANNEXURE 1)

ON THE LETTER PAD OF CHARTERED ACCOUNTANT

	This is to certify tha	at the total turnover of
M/s		
Having PAN		
	is as	under:
FINANCIAL YEAR	AMOUNT (FIGURES)	AMOUNT (WORDS)
2019-2020		
2020-2021		
2021-2022		
Average = Tota	al/3 =	
		mentioned amounts have been derived ed before us for the above-mentioned
Stamp and Sig	nature of Chartered A	ccountant

LIST OF APPROVED MAKES FOR CIVIL WORKS

	Approved Make of Materials			
	(Applicable wherever the make is not listed in the item)			
S.No. Materials		Manufacturer		
1)	Commercial Ply and	Duro, Greenply, Virgo, Merino		
	Commercial Board			
2)	Teak Ply	Duro, Greenply, Virgo, Merino		
3)	Laminate	Greenlam, Virgo, Merino, Sundek		
4)	Mirror	Modigaurd, Saint Gobain		
5)	Glass	Modigaurd, Saint Gobain		
6)	Flush Door Shutters	Duro, Green, Virgo, Merino		
7)	Paints	Nerolac, Dulux, Asian, Berger		
8)	Mortice Latches And Locks	Godrej, Dorset, Hardwyn, Ebco, Hettich, Hafele.		
9)	Coarse Sand	As Per Is:383 (Latest Edition)		
		Approved Quarry Or Equivalent		
10)	Fine Sand	Do.		
11)	Stone Aggregate	Do.		
12)	Aluminium Section	Jindal/ Hindalco.		
13)	Wall and Floor Tiles	Orient, Kajaria, Nitco, Johnson, Somany, Asian.		
14)	Mdf Board	Century Prowud, Greenpanel, VIR.		
15)	Hinges-Ms Oxidised / SS	Godrej, Dorset, Hardwyn, Ebco, Hettich, Hafele.		
16)	Tower Bolt	Godrej, Dorset, Hardwyn, Ebco, Hettich, Hafele.		
17)	Door Stopper	Godrej, Dorset, Hardwyn, Ebco, Hettich, Hafele.		
18)	L-Drop	Godrej, Dorset, Hardwyn, Ebco, Hettich, Hafele.		
19)	Handles and locks	Godrej, Dorset, Hardwyn, Ebco, Hettich, Hafele.		
20)	Pvc Strips/ Hand Rail /Railing	Fixo Pan, Sun, Kelco, S-Rail,		
21)	Cement: OPC 43 / 53	Ultratech, L&T, Ambuja, JK Laxmi, ACC.		
22)	Steel	Tata, Sail, RNIL, Rathi Thermax 500.		

LIST OF APPROVED MAKES FOR ELECTRICAL WORKS

LIST	LIST OF APPROVED MAKES FOR ELECTRICAL WORKS				
S.No.	Details of Materials / Equipment	Manufacturer's Name			
1	LT Panel, Main Distribution Panel, Sub-	Tricolite industries Ltd.			
	Main Distribution Panel and Motor	Adlec Control System			
	Control Centre	SPC Electro Tech Pvt. Ltd.			
		Ambit Switchgear			
		Milestone			
2	Sandwiched Construction Bus ducts	Control & Switchgear			
		Henikwon (L&T)			
		GE			
		Schneider Electric			
3	Final Distribution Board	Legrand			
		Hager			
		ABB			
		Siemens			
		Schneider Electric (MG)			
4	Air Circuit Breaker (3/4 Pole)	Schneider Electric (MVS)			
	,	Larsen & Toubro (C-Power)			
		ABB (E-Max)			
		Siemens			
5	Moulded Case Circuit Breaker (MCCB)	Larsen & Toubro			
	()	ABB			
		Schneider Electric (CVS)			
		Siemens			
6	Motor Protection Circuit Breaker(MPCB)	Hager			
		ABB			
		Schneider Electric			
		Siemens			
7	Miniature Circuit Breakers (MCB)	Hager			
		ABB			
		Schneider Electric			
		Siemens			
8	Residual Current Circuit Breaker (RCCB)	Hager			
		ABB			
		Schneider Electric			
		Siemens			
9	Power/Aux. Contactor / Capacitor	Schneider Electric (MG)			
	The state of the s	Hager (L&T)			
	Duty Contactor	ABB			
		Siemens			
10	Change Over Switch	Larsen & Toubro			
		C & S			

LIST OF APPROVED MAKES FOR ELECTRICAL WORKS				
S.No.	Details of Materials / Equipment	Manufacturer's Name		
		HPL – Socomec		
11	Control Transformer/Potential	Automatic Electric		
	Transformers	Matrix		
		Pragati		
		Precise		
12	Current Transformer (Epoxy Cast Resin)	Automatic Electric		
	, , , , , , , , , , , , , , , , , , , ,	Matrix		
		Pragati		
		Precise		
13	Protection Relay			
	a. Numeric Type	ABB		
		Areva		
		Larsen&Toubro		
		Siemens		
	b. Electromagnetic Type	ABB		
		Areva		
		Larsen&Toubro		
14	Indicating Lamps LED type and Push	Vaishno Electricals		
	Button	Larsen & Toubro (ESBEE)		
		Schneider Electric Siemens		
15	Overload relays with built-in Single-	ABB		
	Phase preventer	Larsen & Toubro		
	1	Schneider Electric		
		Siemens		
16	a. Electronic Digital Meters	Conzerv		
	(A/V/PF/Hz/KW/KWH) with LED	Schneider Electric		
	Display	Secure		
	b. ISI Marked Dual Energy Meter	Secure		
	with centralized metering & billing	Radius		
	system			
17	Static Power Meter & Logger (SPML)	Conzerv		
1,	Summer of the first of Edgger (ST 1122)			
	With RS 485 port	Schneider Electric		
	_	Secure		
18	Power Capacitor	Matrix		
		Ducati		
		EPCOS		
		Meher		
19	Automatic Power Factor Correction Relay	Areva		
	(Numeric Type)	BELUK (Germany)		
		Siemens		

LIST	LIST OF APPROVED MAKES FOR ELECTRICAL WORKS				
S.No.	Details of Materials / Equipment	Manufacturer's Name			
20	PVC insulated XLPE aluminium/copper conductor	Cable corporation of India			
	armoured MV Cables upto 1100 V grade	Skytone			
		Ravin Cable			
		Polycab			
		KEI			
		Dimond			
21	LT Jointing Kit / Termination	Birla-3M			
		Raychem			
		REPL			
		Safe Kit			
22	Cable Glands Double Compression with	Baliga Lighting			
	earthing links	Comet			
		Cosmos			
23	Bimettalic Cable Lug	Comet			
		Dowell's (Biller India)			
		Hax Brass (Copper Alloy India)			
24	PVC insulated copper conductor stranded	Finolex			
	flexible wires	R RKabel			
		Skytone			
		KEI			
		Polycab			
		BatraHenlay			
25	Mettalic / GI Conduit (ISI approved)	AKG			
		BEC			
		NIC			
26	Lead Coated Flexible GI Conduit	PLICA India Pvt. Ltd.			
		Flexicon			
27	PVC Conduit &Accessories (ISI	AKG			
	approved)	BEC			
		Precision			
		Polypack			
		Ravindra			
28	Industrial Socket				
	a. Splash Proof	Clipsal			
		Gewiss			
		Legrand			
		Neptune Balls			
		Schneider Electric			
	b. Metal Clad	ВСН			
		MDS			
29	Switch & Socket	Clipsal (Opal Series)			
		Crabtree			

LIST OF APPROVED MAKES FOR ELECTRICAL WORKS				
S.No.	Details of Materials / Equipment	Manufacturer's Name		
		M K India (Wraparound)		
		Idoasian-simon		
		Legrand (Mosaic)		
		Wipro (NorthWest)		
		Havells –crownos		
		ABB – Lumina		
		Anchor Roma		
		Siemens		
		L&T		
30	Ceiling Fan	Crompton Greaves		
		Havells		
		Orient		
		Usha		
31	Lighting Fixture			
	a. Incandescent / Halogen / PL / Metal	Philips		
	Halide) / Fluorescent	Wipro		
	,	GE		
	b. External Lighting Fixture	Bajaj Electricals Ltd.		
		Keslec		
		LIGMAN		
		Philips		
	b. Aviation Obstruction Light(LED	Wipro		
		Actos		
	Type)	Bajaj		
	- 3 F - 7	Binay		
32	Electronic Ballast for Fluorescent	Osram		
-	(To be selected as per fixtures'	Opal		
	manufacturer)	J.F.		
	,	Philips		
		Thorn		
		Wipro (APF)		
33	Selector Switch, Toggle switch	Kaycee		
	, 20	Salzer (Larsen & Toubro)		
34	Cable Trays (Factory Fabricated) /	Profab Engineer		
	Raceways	Ricco Steel		
		Needo		
		MaheshwariElectrtricals		
35	Sealed Maintenance Free Batteries	Amar Raja		
		Exide		
		Global (Rocket)		
		Hitachi		
		Shinkobe		
36	Battery Charger	Caldyne		
50	Buttery Charger	ChhabiElectricals		
		CiliaoiLiccuicais		

S.No.	Details of Materials / Equipment	Manufacturer's Name
	·	Joshi Electricals
		Max Power
		Volstat
37	Invertor	Autopro (Professional Lighting)
		Luminous
		Megatech
		Microtek
38	Lightning Protection System	Erico
	(Early Streamer Emission Type)	LPI
39	Timer	ABB
		Larsen & Toubro
		Legrand
		Schneider Electric
		Siemens
40	50 W Halogen Light Transformer	Gemini Global
	(Encapsulated Transformer)	Opal
		Philips
		Reiz
41	Tap off / splitters complete with gasketed G.I. boxes	Catvision
		CE
		DX
		Powerage
		Vision Hire
B.	TELELEPHONE / DATA	
1	Tag Block	Krone
		TVSE
2	Telephone armoured / unarmoured cable /	Delton
	wire	Finolex
		Skytone
		Fusion Polymer
		Polycab
3	Coaxial Cable	Beldon
		Comm-Scope (US Imported)
		Fusion Polymer

LIST OF APPROVED MAKES FOR PLUMBING WORKS

LIST	LIST OF APPROVED MAKES FOR SANITARY WORKS				
S.No.	Details of Materials / Equipment	Manufacturer's Name			
1	Vitreous China Sanitaryware	Cera			
		Neycer			
		Parryware			
2	W.C Seat Covers	Admiral			
		Tara			
3	Low level Flushing cisterns	Commander			
	- -	Duralite			
	WC Connectors	Multiwik			
		Viega			
2	Bath Tub and Shower Tray	Aquaplus			
		Parryware			
3	Stainless Steel Sink	Cobra			
		Jayna			
		Nirali			
6	Cistern	Commandor			
		Champion			
		Parryware			
7	CP Brass Fittings	Crabtree			
		Ess-Ess			
		Gem			
		Jaguar			
		Kingston			
		Parko			
		Parryware			
		Marc			
		Plumber			
8	Flow Control Devices	Jaquar			
		RST			
9	Storage Type Geyser / Heat Pump	Racold			
		AO Smith			
		Venus			
10	Floor Drain Fixture, Rain Water Outlets	ACO			
		GMGR			
		Neer			
11	Urinal Trap	Chilly			
- *		Neer			
12	ULTRA LOW FLOW FIXTURES-	M.N. Padia			
12	(Flush valves, Faucets, Bib taps)	Schell			
	Low Flow C.P Fittings				
13	Macerating systems	Grundfos			
		Sanitop			

LIST	LIST OF APPROVED MAKES FOR SANITARY WORKS						
S.No.	Details of Materials / Equipment	Manufacturer's Name					
14	Shower Channel / PP – car parking channel	ACO					
		Kessel					
		Viega					
15	C.P. Grating for Floor Trap	Chilly					
		GMGR					
		Neer					
		Viega					
16	GI / M.S Pipes (IS: 1239 and IS: 3589)	AST Pipes					
		Hitech					
		Swastik					
		Zenith					
17	GI pipes fittings	Crescent Engg Corp. Jalandhar					
		KS Engg					
		RM Engg works, ahmedabad					
		Zoloto					
18	GI/MS Pipe Protection Wrapping &	IWL - Pypkote					
	Coating	Neotape					
		Rustech – Coatek					
		STP Ltd.					
19	Pipe clamp & supports	Diamond					
		Easyflex					
		Intellotech					
20	Pipe Hangers	Hitech					
		OM fasteners					
21	D. I. Pipes	Jindal					
		NECO					
22	UPVC Pipe	Finolex					
		Jain					
		Kisan					
		Prince					
		Crescent Engg Corp. Jalandhar					
		KS Engg					
		RM Engg works, ahmedabad					
		Zoloto					
23	CPVC pipes & fittings	Ajay					
		Ashirwad					
		Astral					
		Prince					
24	Teflon Tape						
25	Toilet Accessories	Akoi					
		Parko					
26	P.P.R Pipes	Prince					
		Reliance					
		Supreme					

LIST	LIST OF APPROVED MAKES FOR SANITARY WORKS						
S.No.	Details of Materials / Equipment	Manufacturer's Name					
27	P.E.X pipes	Itap					
		Giacomini					
		Henco					
		Viega					
28	FRP/GRP Manhole covers	Everlast					
		Thermoset					
29	HDPE Pipe & fitting	Duraline					
		Kimplas					
		Reliance					
30	RCC Pipe	Dhere					
	1	KK					
		INDIAN HUME PIPE					
		Pranali					
31	Stoneware Pipes	Anand					
31	Stolle water i spes	Burn & Co.					
		Perfect potteries					
		Rajura					
32	GM / Forged Brass Ball Valves	Jayhiwa					
32	GW/ Forged Brass Ball Valves	Leader					
		RB					
		Sant					
33	Sluice Valves	Advance					
33	Stuice valves	Kirloskar					
		Marck-Cair					
		SANT					
		Zoloto					
2.4	D. W. G. W. I.						
34	Butterfly Valve	Audco					
		Jayhiwa					
		Keystone					
2.5		Marck-Cair					
35	Check Valve – WaferType	Kirloskar					
		Jayhiwa					
		Marck-Cair					
		Normex					
36	Check Valve – Dual Plate	Marck-Cair					
		Normex					
		Sant					
37	Cast Iron Non Return valve	Leader					
		Zoloto					
38	Check Valve Forged Screwed	Leader					
		RB					
		Zoloto					
39	Pressure Reducing Valve	Marck-Suzhik					
		RB					

LIST	LIST OF APPROVED MAKES FOR SANITARY WORKS						
S.No.	Details of Materials / Equipment	Manufacturer's Name					
		OR					
		Zoloto					
40	Solenoid Valve	Avcon					
		Aira					
		Danfoss					
41	Thermostatic mixing valve	Danfoss					
		Overtrop					
42	Air Release Valve	Marck					
		OR					
		RB					
		Studor					
		Zoloto					
43	Ball Float Valve	Prayag					
		Zoloto					
44	NRV – Ball type – Sewage application	Danfoss					
		Silverspark					
		Normex					
45	Backflow preventor	Normex					
46	Foot valve	Kirloskar					
		Normex					
47	HDPE Tanks	Sintex					
		Ashish					
48	Air Vent Inlet Valve	Studor					
49	Food Crusher for Sink	Enviro					
		Venus					
		Zach- Rajguru					
50	FRP/GRP- SMC water tank	Devi Polymers pvt. Ltd.					
		Smartage					
		Binani					
51	FRP/GRP storage tanks	Sintex					
52	Y Strainer CI	Leader					
		Marck-Cair					
		Zoloto					
53	Hydropneumatic System	Aquasub Engineering					
		CRI Pumps					
		Dharani pumps					
		Grundfos					
		Kirloskar					
		Nocchi					
		Nanfang					
		Willo – Mather & Platt					
54	Storm Water Drainage & Sewage Sump	Aquasub Engineering					
	Pumps (Submersible)	CRI Pumps					
		Darling					

LIST	OF APPROVED MAKES FOR SANITARY	WORKS		
S.No.	Details of Materials / Equipment	Manufacturer's Name		
		Dharani		
		Grundfos		
		Kirloskar		
		KSB		
		Kishor		
		Nocchi		
		Mody		
		Willo – Mather & Plantt		
55	Transfer Pumps	Aquasub Engineering		
		CRI Pumps		
		Dharani		
		Grundfos		
		Kirloskar		
		KSB		
		Nanfang		
		Nocchi		
		Willo - Mather & Platt		
56	Self-Priming Pumps	Aquasub Engineering		
		CRI Pumps		
		Johnson		
		Kirloskar		
57	Borewell Pump	Aquasub Engineering		
		CRI Pumps		
		Grundfos		
		Kirloskar		
58	Anti Vibration Mounting & Flexible	Cori		
	Connections	Dunlop		
		Flexionics		
		Easyflex		
		Resistoflex		
		VIMPA		
59	Pressure Gauge	Fiebig		
		H Guru		
60	Water Meter (Mechanical Type)	Dasmesh		
		Kranti		
		Kent		
61	Level Controller & Indicator (Water)	Pumptrol		
		RM Engg. Works, Ahmedabad		
62	Paints	Asian Paints		
		Berger		
		ICI		
		Shalimar Paints		
63	MH / Water Tank Plastic Steps	KGM		
	-	Patel		

	OF APPROVED MAKES FOR SANITARY		
S.No.	Details of Materials / Equipment	Manufacturer's Name	
		Pranali Industries	
64	Insulation for Hot Water Pipes	Armacell – Armaflex	
		K-Flex	
		Thermaflex	
65	Electric Hot Water Generator / Heat Pump	A.O. Smith	
		Spherehot	
		Venus	
		Riello	
66	Solar Heating	A.O Smith	
		Ecotherm	
		Megason (Greece)	
		Overtrap	
		Solinteks	
		Tata BP Solar	
		Vijay Solar	
67	Grease Trap/Separator	ACO	
		Wade	
68	Welding Rods	Ador	
		Cosmos	
		Prima (S)	
		Super Bond (S)	
69	Fastener	Fisher	
		Hilti	
		Mungo	
		Powers	
70	Fire Sealant	Birla 3 M	
		Hilti	
		Powers	
		Promat	
		STI (USA)/ Fire master	
71	Manhole (prefabricated)	OK Play	
	,	Supreme	
72	Temperature Sensor / Gauge	Forbes Marshall	
		Danfoss	
		Wika	
73	Vacuum Sewer System	Roediger Vacuum	
74	Syphonic Roof Drainage System	Geberit	
		George Fisher	
		Neuva Terrain	
		Saint Gobian	

ANNEXURE 2: LETTER FROM HVAC OEM ON OEM LETTERHEAD

TO
THE PRINCIPAL
RAM LAL ANAND COLLEGE
BENITO JUAREZ ROAD, NEW DELHI- 110 021

SUB: E-TENDER FOR REPAIR RENOVATION WORKS AT AUDITORIUM BUILDING OF RAM LAL ANAND COLLEGE, NEW DELHI.

DEAR SIR,

WE HEREBY CONFIRM THAT THE RATES FOR HVAC SYSTEM FOR RLA COLLEGE AUDITORIUM BUILDING AS QUOTED BY THE BIDDER:

M/S

ARE WORKABLE.

(AUTHORISED SIGNATORY)

NAME:

ADDRESS:

CONTACT NUMBER:

ANNEXURE 3: LETTER FROM AUDIO, VIDEO & STAGE LIGHTING OEM (ON OEM LETTER HEAD)

PLEASE PROVIDE SEPARATE LETTERS IN CASE OF SEPARATE OEM'S FOR AUDIO/ VIDEO & STAGE LIGHTING.

TO

THE PRINCIPAL
RAM LAL ANAND COLLEGE
BENITO JUAREZ ROAD, NEW DELHI- 110 021

SUB: E-TENDER FOR REPAIR RENOVATION WORKS AT AUDITORIUM BUILDING OF RAM LAL ANAND COLLEGE, NEW DELHI.

DEAR SIR.

WE HEREBY CONFIRM THAT THE RATES FOR AUDIO, VIDEO & STAGE LIGHTING SYSTEM FOR RLA COLLEGE AUDITORIUM BUILDING AS QUOTED BY THE BIDDER:

M/S

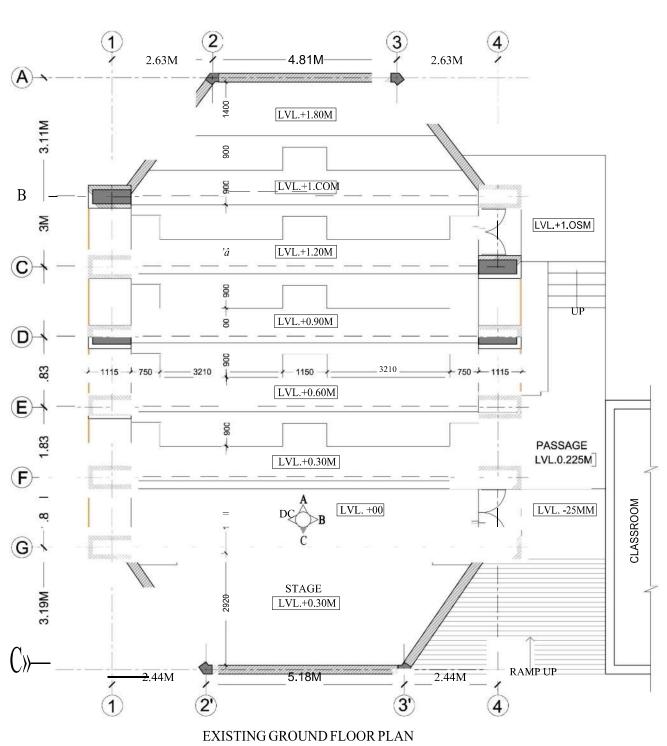
ARE WORKABLE AND THAT THE AUDIO/ VIDEO & LIGHTING SYSTEM DESIGN WILL BE SYNCHRONISED TO GIVE VERY GOOD PERFORMANCE / OUTPUT.

(AUTHORISED SIGNATORY) NAME:

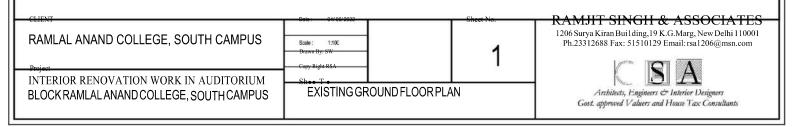
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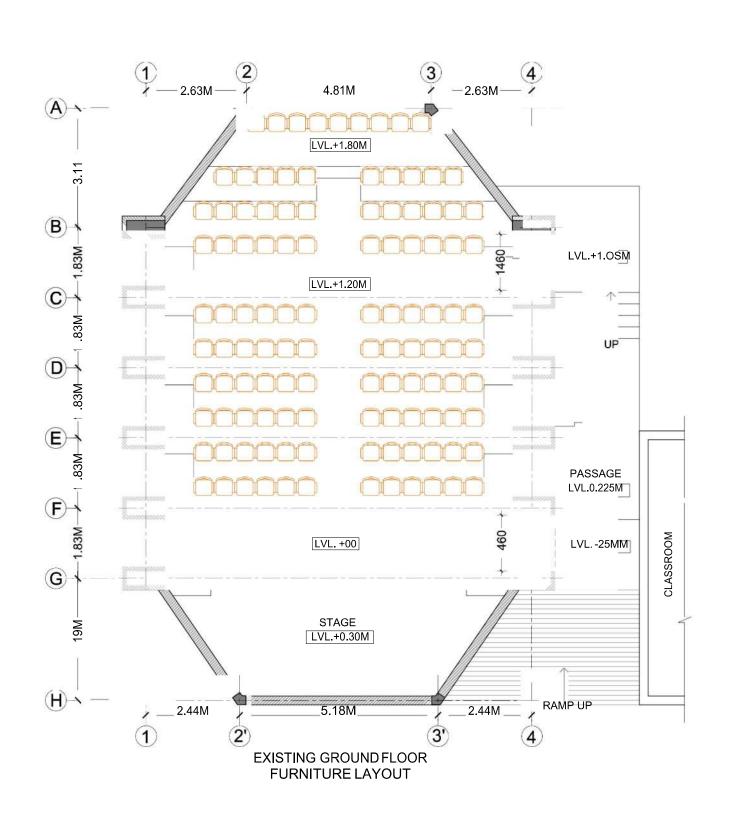
CONTACT NUMBER:

CONTRACT DRAWINGS

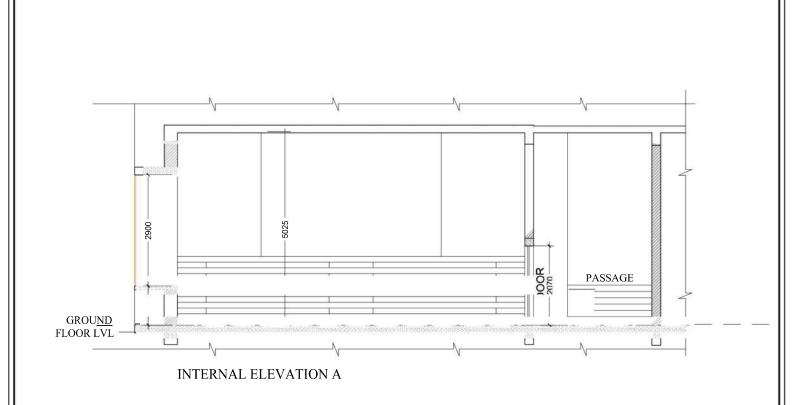


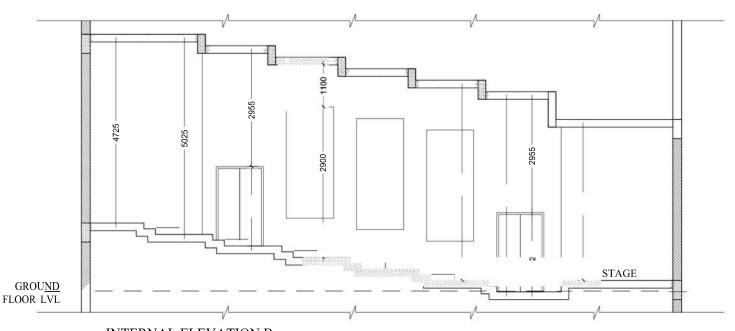
AUDITORIUM BLOCK











INTERNAL ELEVATION B

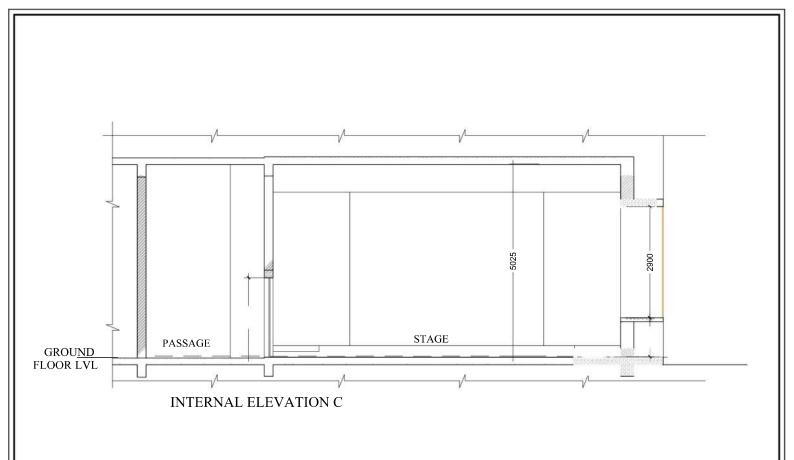
ı	CLIENT	Date: 04/06/2022		Sheet No.	
	RAMLAL ANAND COLLEGE, SOUTH CAMPUS	Scale: 1:100	ľ	<u> </u>	
		Drawn By: SW		3	
	Project	Copy Right RSA			
	INTERIOR RENOVATION WORK IN AUDITORIUM BLOCK RAMLAL ANAND COLLEGE, SOUTH CAMPUS	Sh t T' INTERNAL EL	LEVATIONS		

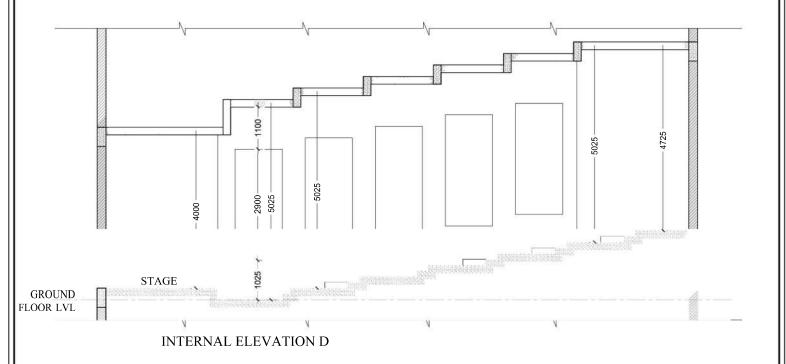
RANJIT SINGH & ASSOCIATES

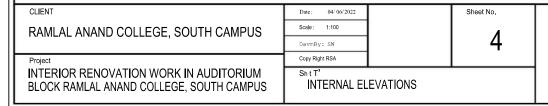
1206 Surya Kiran Building,19 K.G.Marg, New Delhi 110001 Ph.23312688 Fax: 51510129 Email: rsa1206@msn.com



Architects, Engineers H Interior Designers both approved Palmers and house Ta:x: Consultants





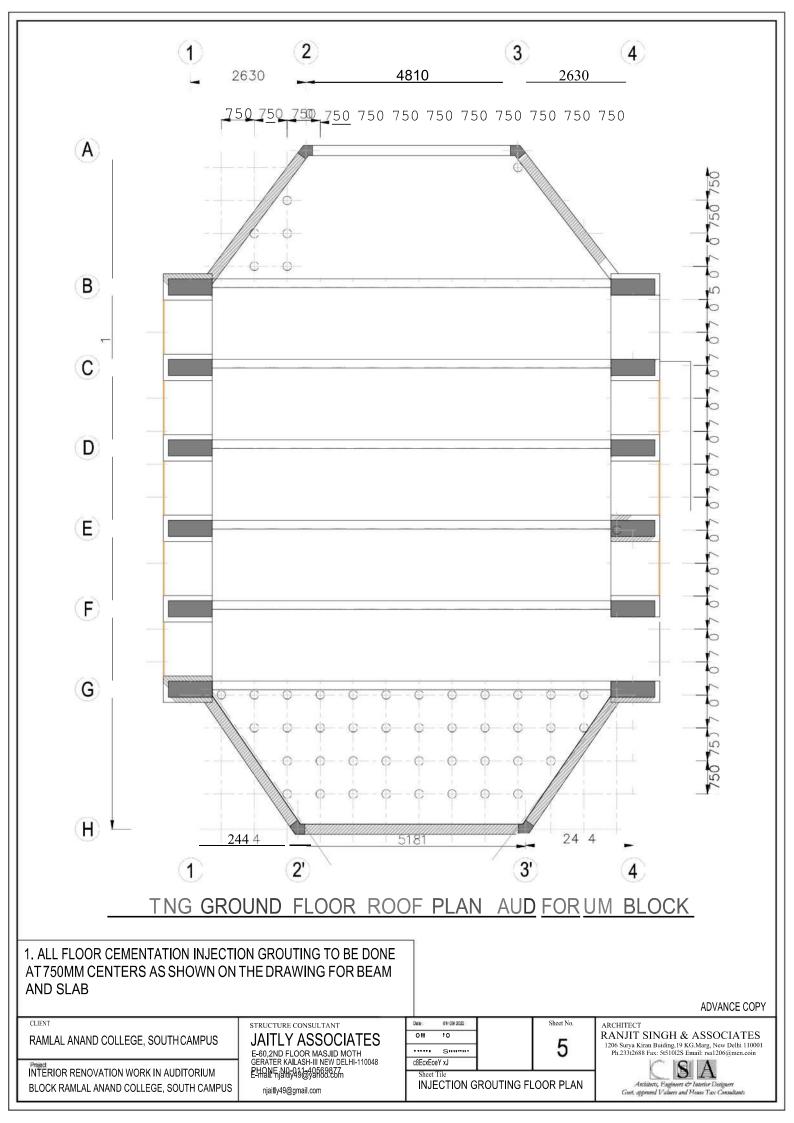


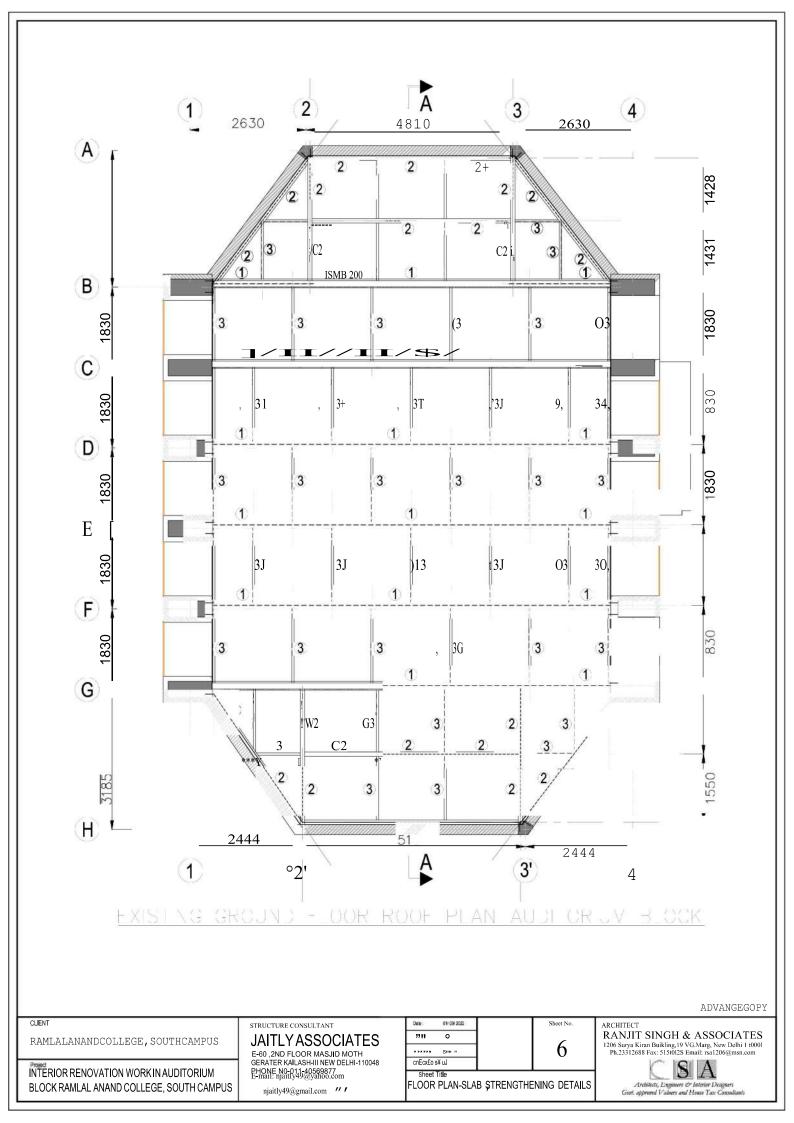
RANJIT SINGH & ASSOCIATES

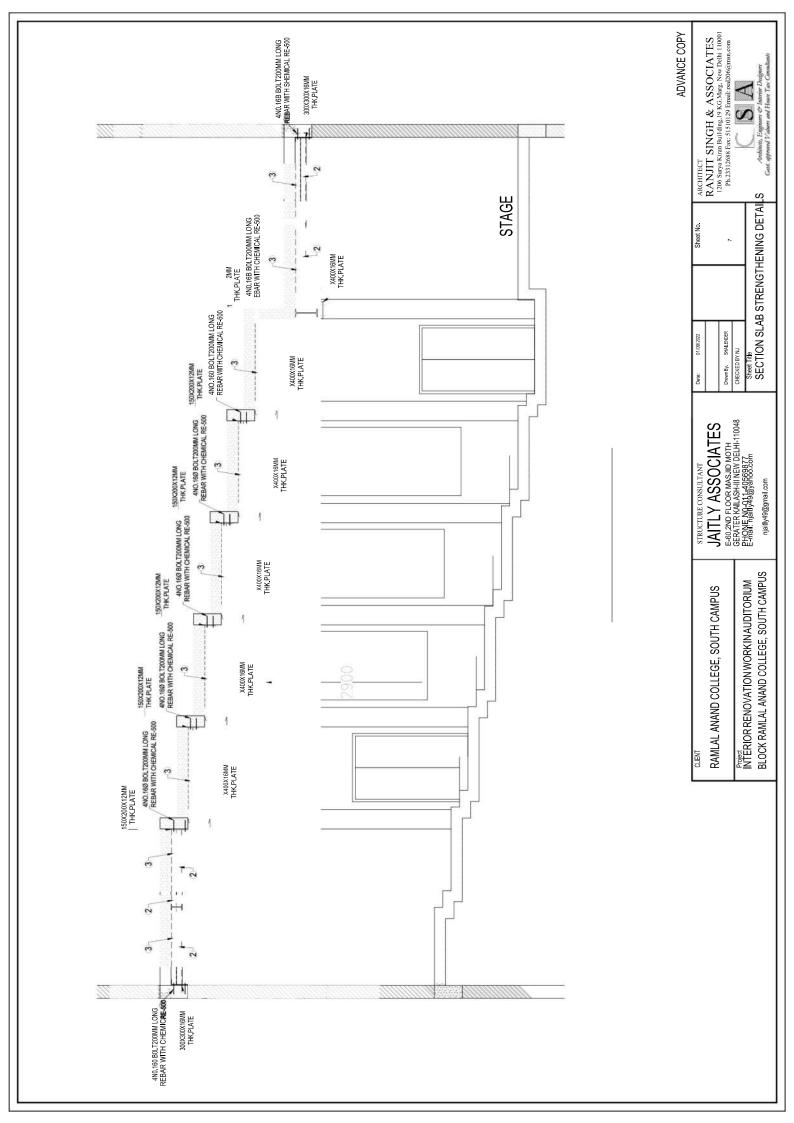
1206 Surya Kiran Building,19 K.G.Marg, New Delhi 110001 Ph.23312688 Fax: 51510129 Email: rsa1206@msn.com



Architects, Engineers H Intenor Designers bout approved Palmers and house To Consultants







BEAM SCHEDULE

WEIGHT /KG	61.1	2	» 2
SECTION SIZE	ISMB-400	ISMB-200 €	svc— 00 E
BEAM VARIED	-	2	Z

200X200X12MM BHK.PLATE VIEW V-V SMB 400 ISMB 20 'ISMB 400 | 200X200X12 MM THK. PLATE **─ ISMB** 200

ISMB 300 TO ISMB 200 (TYP.) SMB TO ISMB CONNECTION

6MM THK / C.F.W.

 APPLY RUST REMOVER & ANTI RUST ON EXPOSED STEEL 2. BIND NEW REINFORCEMENT

SEQUENCE OF WORK FOR STRENGTHENING COLUMN

- 3. PROVIDE M25(1:1:2) CONCRETE "CHHAPAI" WITH PMC MORTAR
 - 4. PROVIDE 1SMB & ISMC MEMBER SHOWN ON THE DRAWINGS.
- 5. APPLY ZINC CHROMATE PRIMER ON ISMB.

NOTES:

- 1ALL DIMENSIONS ARE IN MM
- 2 ALL STEEL SHALL BE WELDABLE QUALITY STEEL CONFORMING
 - TO IS:2062 GRADE-A.
- 3 GRADE OF BOLTS M 4.8
- 4 ALL WELDS SHALL BE 6mm. THK. U.N.0
- 6 ALL OPEN ENDS OF TUBULAR SECTIONS TO BE CLOSED 5 ALL HOLES ARE B+2 DIA FOR 0 DIA BOLTS, U.N.O.

6MM THK C.F.W. **ISMB** 200

- WITH 6MM PLATE.
- 7 ALL STIFFENERS ARE FULL WELDED WITH MAIN PLATE. 8 STEEL GRADE OF YST 250 IN BEAM & 310 IN COLUMN
- FILLET WELD, U.N.O., AFTER ERECTION & FINAL ALIGNMENT. 9 ALL CONNECTIONS WILL BE WELDED WITH 6mm.

. ALL FLOOR CEMENTATION IN JECTION GROUTING TO BEDONE AT750MMCENTERSASSHOWNONTHEDRAWINGFORBEAM AND SLAB

E-60,2ND FLOOR MASJID MOTH GERATER KAILASH-III NEW DELHI-110048 PHONE N0-011-40569877 E-mail: njattly49@yahoo.com JAITLY ASSOCIATES STRUCTURE CONSULTANT njaitly49@gmail.com

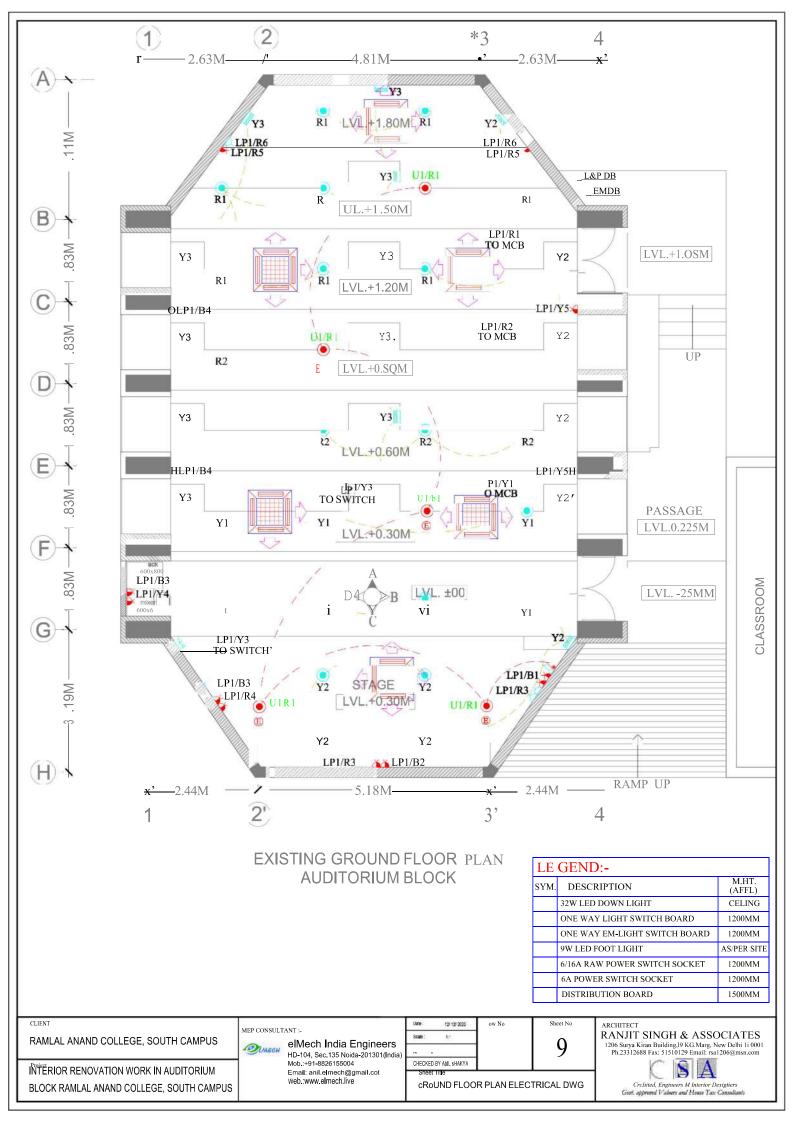
INTERIOR RENOVATION WORK IN AUDITORIUM BLOCK RAMLAL ANAND COLLEGE, SOUTH CAMPUS

RAMLALANANDGOLLEGE, SOUTHGAMPUS

 ∞ SLAB STRENGTHENING DETAILS Drawn By: SHALLENDER CHECKED BY NJ



ADVANGEGOPY



PROJECT NAME AUDITORIUM			8 WAY TPN LIGHT & POWER DB DETAIL (AUDITORIUM)						
RAITING OF INCOMER	RCCB RAITING	CKT.NO.	SP MCB RAITING	WIRE SIZE IN SQMM	LOCATION	NO.OF POINTS	LOA R	AD IN WA	TTS B
B 2X6 SQMM	CCB 32A 300MA DP RCCB	LP1/R1 LP1/R2 LP1/RS LP1/R4 LP1/RS LP1/R6 LP1/Y LP1/Y	16A 16A 16A		AUDITORIUM AUDITORIUM AUDITORIUM AUDITORIUM AUDITORIUM AUDITORIUM AUDITORIUM AUDITORIUM AUDITORIUM	9 7 4 2 2 2 2	288 224 400 J000 J000 200	224 182	
)A FP MCB ZE4X10+2	32A 300MA DP RCCB	LPJ /\3 LPJ /\Y4 LPJ /\Y5 LPJ /\Y6	10A 6A 16A 6A	2X1.5+1X1.5 2X2.3+1X2.5 2X2.3+1X2.5	AUDITORIUM AUDITORIUM AUDITORIUM SPARE	12 2 2		108 J 000 J 000	
40A FP MCB SUBMAIN SIZE 4X10+2X6 SQMM	LPJ/8 6A 2X2.	2X2.5+1X2.5 2X2.5+1X2.5 2X2,5+1X2.5 2X2,5+1X2.5	AUDITORIUM AUDITORIUM AUDITORIUM AUDITORIUM SPARE SPARE	2 2 4 2			J 000) 000 400) 000		
					TOTAL LOAD IN		3112	2514 9.10K\\	5400

CLIEN"

RAMLAL ANAND COLLEGE, SOUTH CAMPUS

Project

INTERIOR RENOVATION WORK IN AUDITORIUM BLOCK RAMLAL ANAND COLLEGE, SOUTH CAMPUS

MEP CONSULTANT :-



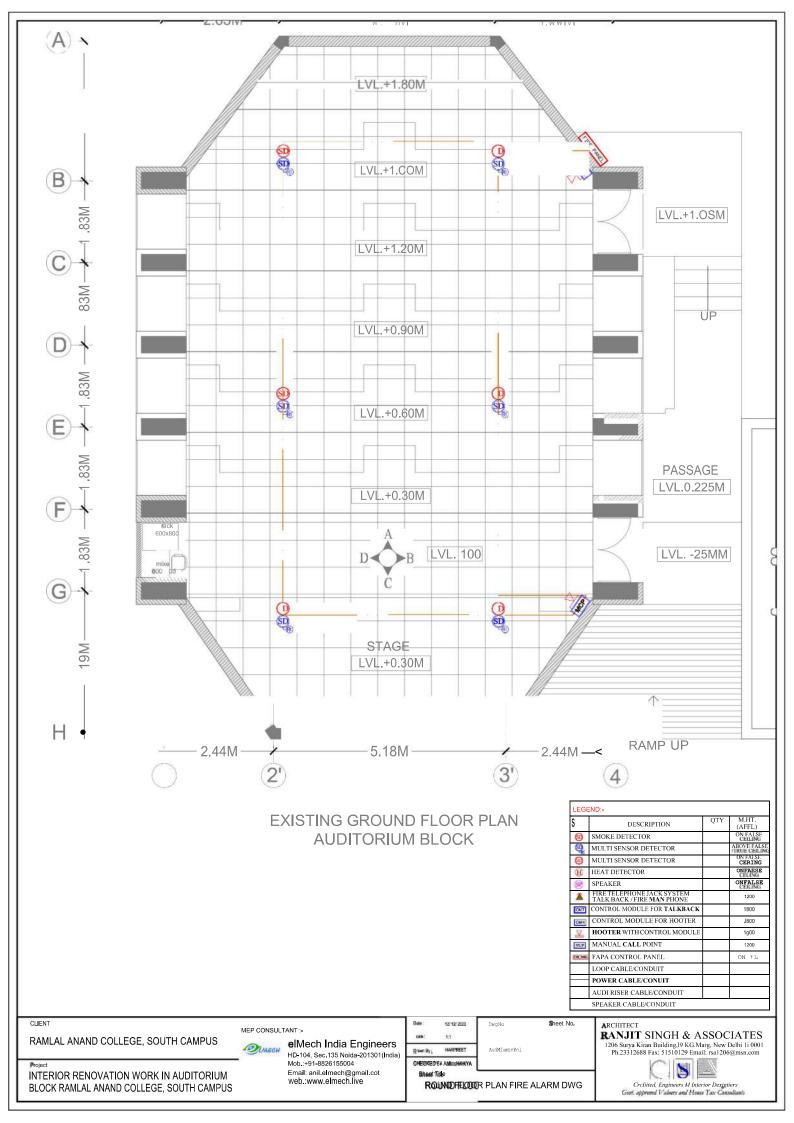
elMech India Engineers HD-104, Sec.135 Noida-201301(India) Mob.:+91-8826155004 Email: anil.elmech@gmail.cot

Email: anil.elmech@gmail.cot Web.:www.elmech.live

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ARCHITECT
RANJIT SINGH & ASSOCIATES
1206 Surya Kiran Building, 19 KG.Marg, New Delhi 1i 0001
Ph.23312688 Fax: 51510129 Email: rsa1206@msn.com





Tender Inviting Authority: PRINCIPAL, RAM LAL ANAND COLLEGE, NEW DELHI 110021

Name of Work: E-TENDER FOR CIVIL, INTERIORS, FIRE FIGHTING, ELECTRICAL, HVAC, AUDIO, VIDEO & STAGE LIGHTING WORKS AT AUDITORIUM BUILDING OF RLA COLLEGE

Contract No: E-TENDER/RLAC/2023/1198 DATED 09.01.2023.

Name of the			_				
Bidder/ Bidding Firm /							
Company :							
			CHEDULE		· · · · · · · · · · · · · · · · · · ·	I	
NUMBER #	TEXT #	NUMBER #	TEXT #	NUMBER	NUMBER #	NUMBER #	TEXT #
SI. No.	Item Description	Quantity	Units	Estimated Rate in Rs. P	RATE WITH TAXES In Figures To be entered by the Bidder in RS. P	TOTAL AMOUNT With All Taxes	TOTAL AMOUNT WITH ALL TAXES In Words
1	2	4	5	6	13	54	55
1.00	NOTE: ITEMS MENTIONED AS 0 (ZERO) QUANTITY ARE RATE ONLY ITEMS. PLEASE QUOTE THE RATES FOR THOSE ITEMS. CIVIL WORKS						
1.01	Providing, erecting, maintaining and removing temporary protective screens made out of specified fabric with all necessary fixing arrangement to ensure that it remains in position for the work duration as required by the Engineer-in-charge.	120.00	SQM	45.70		0.00	INR Zero Only
1.02	Dismantling Work of the below listed items including disposal of unserviceable material, Cleaning the hall and its surroundings and stacking of serviceable material with in 50 meters lead as directed by Engineer-in-charge. Rate shall be inclusive of all labour, materials, tools & plant, ladders, scaffolding etc. as required to complete the work to the satisfaction of the engineer incharge. 1) Removal of auditorium chairs and complete auditorium flooring to make bare the under surface. 2) Removal of all electrical wires & cables, switches, switch boxes, exposed conduits, light fittings and fixtures, Distribution boards etc. complete. 3) Removal of AC indoor and outdoor units including there frames, suspenders, piping and accessories complete. 4) Removal of all False Celing frames, suspenders, sections, supports etc. 5) Removal of all wall cladding including Frames etc.	1.00	LUMP SUM	50000.00		0.00	INR Zero Only
1.03	A) Removal of all existing doors and windows including the door window frames Dismantling Work of the below listed items including disposal of unserviceable material, Cleaning the hall and its surroundings and stacking of serviceable material with in 50 meters lead as directed by Engineer-in-charge. Rate shall be inclusive of all labour, materials, tools & plant, ladders, scaffolding etc. as required to complete the work to the satisfaction of the engineer incharge. Demolition of WALL & CEILING plaster to expose the RCC beams & RCC slab.	300.00	SQM	45.05		0.00	INR Zero Only

1.04	Chipping of unsound/weak concrete material from slabs, beams, columns etc. with manual Chisel and/ or by standard power driven percussion type or of approved make including tapering of all edges, making square shoulders of cavities including cleaning the exposed concrete surface and reinforcement with wire brushes etc. and disposal of debris for all lead and lifts all complete as per direction of Engineer-In-Charge 25 mm average thickness.	50.00	SQM	104.60	0.00	INR Zero Only
1.05	Disposal of building rubbish / malba / similar unserviceable, dismantled or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in-charge, beyond 50 m initial lead, for all leads including all lifts involved.	100.00	CUM	219.35	0.00	INR Zero Only
1.06	Providing and inserting 12mm dia galvanised steel injection nipple in honey comb area and along crack line including drilling of holes of required diametre (20mm to 30mm) up to depth from 30mm to 80mm at required spacing and making the hole & crack dust free by blowing compressed air, sealing the distance between injection nipple with adhesive chemical of approved make and allow it to cure complete as per direction of Engineer-In-Charge.	232.00	EACH	202.70	0.00	INR Zero Only
1.07	Providing and injecting approved grout in proportion recommended by the manufacturer into cracks/honey-comb area of concrete/masonry by suitable gun/pump at required pressure including cutting of nipples after curing etc. complete as per directions of Engineer-in- Charge. (The payment shall be made on the basis of actual weight of approved grout injected.) Stirrer mixed SBR Polymer (of approved make) modified Cement slurry made with Shrinkage Compensating Cement in concrete/RCC work.	232.00	KG	106.70	0.00	INR Zero Only
1.08	Providing and fixing double scaffolding system (cup lock type) on the exterior side of building/structure, upto 25 metre height, above ground level, including additional rows of scaffolding in stepped manner as per requirement of site, made with 40mm dia M.S. tube, placed 1.5 metre centre to centre, horizontal & vertical tubes joint with cup & lock system with M.S. Tubes, M.S. tube challis, M.S. clamps and staircase system in the scaffolding for working platform etc. and maintaining it in a serviceable condition for execution of work of cleaning and/ or pointing and/ or applying chemical and removing it thereafter. The scaffolding system shall be stiffened with bracings, runners, connecting with the building etc, wherever required, if feasible, for inspection of work at required locations with essential safety features for the workmen etc., complete as per directions and approval of Engineer-in-charge. Note:-(1) The elevational area of the scaffolding shall be measured for payment purpose.	900.00	SQM	285.00	0.00	INR Zero Only
1.09	Providing, mixing and applying bonding coat of approved adhesive on chipped portion of RCC as per specifications and direction of Engineer-In-charge complete in all respect. SBR Polymer (@10% of cement weight) modified cementitious bond coat @ 2.2 kg cement per sqm of surface area mixed with specified proportion of approved polymer.	150.00	SQM	117.75	0.00	INR Zero Only

1.10	Plaster of walls and ceiling with SBR polymer (of SikaLatex® SBR / Nitobond SBR / Cico Latex Sbr/ DR. FIXIT 302 SBR Latex make) modified Cement mortar in proportion of 1:4 (1 cement: 4 graded coarse sand with polymer minimum 2% by wt. of cement used) as per specifications and directions of Engineer-in-charge Note: Measurement and payment: The pre-measurement of thickness shall be done just after the surface preparation is completed and Payment under this item shall be made only after proper wet curing has been done and surface has been satisfactorily evaluated by sounding / tapping with a blunt metal instrument and/or the 75mm size cube crushing strength at the end of 28 days to be not less than 30 N/Sqmm2).	260.00	SQM	333.00	0.00 INR Zero Only
1.11	Add for plaster drip course/ groove in plastered surface or moulding to R.C.C. projections	150.00	Meter	64.07	0.00 INR Zero Only
1.12	Applying priming coats with primer of approved brand and manufacture, having low VOC (Volatile Organic Compound) content. With water thinnable cement primer on wall surface having VOC content less than 50 grams/litre	300.00	SQM	64.450	0.00 INR Zero Only
1.13	Drilling suitable holes in reinforced or plain cement concrete with power driven drill machine to a minimum depth of 100mm upto 200mm in RCC beams, lintels, columns and slabs to introduce steel bars including fixing 16mm dia 200mm bolt of steel grade 5.8 (hilti/fisher make) in position using epoxy resin anchor grout of Hilty HIT-RE 500 V3 make all complete as per direction of Engineer-In-Charge.	200.00	EACH	750.000	0.00 INR Zero Only
1.14	Structural steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of Zinc Chromate Primer all complete.	5822.00	kg	78.200	0.00 INR Zero Only
1.15	Brick work with common burnt clay selected F.P.S. (non modular) bricks of class designation 7.5 in exposed brick work including making horizontal and vertical grooves 10 mm wide 12 mm deep complete in cement mortar 1:6 (1 cement : 6 coarse sand) Above plinth level upto floor V level	12.00	CUM	8565.950	0.00 INR Zero Only
1.16	Steel work in built up tubular (round, square or rectangular hollow tubes etc.) trusses etc., including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc. complete MS Hollow tube rough frame for door window openings	98.00	KG	154.900	0.00 INR Zero Only
1.17	Providing Fixing Anodized Aluminium window using Jindal Domal Z sections, as per design complete with 6mm toughened fixed glass panel, 6mm toughened openable glass window, PEGO Single point window handle HD 10, a pair of 400 mm stainless steel 304 GRADE friction stays of EBCO HILOAD make, fixing with hilti/fisher SS dash fasteneres, sealing of gap (upto 5mm) between window and wall with silicon sealent etc. all complete. Minimum 2mm thick aluminium section Rates including all labour, materials, dash fastners, silicon sealent etc. complete.	176.00	SQFT	850.000	0.00 INR Zero Only
1.18	Providing and fixing carbon steel galvanised (minimum coating 5 micron) dash fastener (Hilti/Fischer make) of 10 mm dia double threaded 6.8 grade (yield strength 480 N/mm2), counter sunk head, comprising of 10 mm dia polyamide PA6 grade sleeve, including drilling of hole in frame, concrete/ masonry, etc. as per direction of Engineer-in-charge. 10 x 120 mm	20.00	EACH	140.000	0.00 INR Zero Only

1.19	ACOUSTIC DOOR WITH CHOWKHAT FOR DOOR OPENING SIZE 1.46M X 2.1M: Providing, Supplying, Installation, Testing and fixing in position a 65 mm thick acoustic door with chowkhat. Door should have a 150 mm x 300 mm vision panel of 6.0 mm thick toughened glass. Both Shutters shall be made with 100mm x 50mm thick hardwood outer frame with 50 mm x 50 mm hardwood ribs at 500 mm c/c bothways. All woodwork shall be treated with anti-termite treatment. The door shutter shall have 6 mm thick BWP grade plywood fixed on its both sides. All the cavities inside the door shall be filled with high NRC acoustic insulation materials (rockwook of 60 kg/m3 density) Insides of the door will be lined with 3mm thick MLV Sheet of minimum 1700 kg/m3 density. Periphery of the the shutter shall be covered with 12mm thick teakwood lipping matching with the door frame. The external faces of the door shutter will be finished with 1mm thick laminate on both sides. Teakwood lipping will be melamine polished. Weather seal of Rehau make shall be fixed on the door frame to fill the gap of shutter and wooden frame. Drop down seal to be fixed in shutter to block the gap with floor when the door is closed. The cost shall include all hardware fittings like heavy duty SS Hinges (4inch long - 5 per door), 1ft long D type SS 304 Handles of Godrej/Hettich/Dorma make (both inside and outside).	2.00	Nos	40000.000	0.00	INR Zero Only
1.20	Providing and fixing Godrej Kaditala 275 mm Chrome	2.00	Nos	1800.000	0.00	INR Zero Only
1.21	Providing and fixing hydraulic door closer (having brand logo with ISI, IS: 3564, embossed on the body, for door weight upto 80 kg to 100 kg and door width from 750 mm to 900 mm), with double speed adjustment with necessary accessories and screws etc. complete. (Only of Godrej/Hettich/Dorset/Dorma)	2.00	Nos	3000.000	0.00	INR Zero Only
1.22	Kota stone slabs 20 mm thick in risers of steps, skirting, dado and pillars laid on 12 mm (average) thick cement mortar 1:3 (1 cement: 3 coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the slabs, including rubbing and polishing complete	65.00	SQM	2038.550	0.00	INR Zero Only
1.23	25mm Kota stone slab flooring over 20 mm (average) thick base laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab, including rubbing and polishing complete with base of cement mortar 1 : 4 (1 cement : 4 coarse sand)	106.00	SQM	1706.600	0.00	INR Zero Only
1.24	Extra for pre finished nosing in treads of steps of Kota stone/ sand stone slab.	150.00	Meter	157.350	0.00	INR Zero Only
1.25	Providing & fixing in position Phenol bonded Bamboo wood flooring for stage area with planks of sizes 14mm thick, 1800mm length (minimum) and 130 mm wide(minimum), in approved colour, texture and finish, having Performance Appraisal Certificate (PAC) issued by Building Materials & Technology Promotion Council (BMTPC). The flooring shall be fixed with tongue and groove interlocking system, with underlayment of 4mm thick expanded poly ethylene foam sheets having density 40kg/cum, over prepared surface with necessary quarter round planks of size 1900mm x 18mm and door reducer of size 1900mm x 44mm, wherever required. The bamboo wood planks shall have minimum density of 1000 Kg/cum & minimum Hardness 1000 Kgf. with Eco friendly UV coating, all complete as per direction of Engineer in-charge.	22.00	SQM	5289.050	0.00	INR Zero Only

1.26	2" thick Slotted Wood Finish Wall Panel system on Masonry: Providing and fixing wall panelling on existing masonry with 50mm x 50mm Aluminium section framework of size 600mmx600mm grids and filled with acoustical insulation of 50 mm thickness 1000 gsm density from Star Insulation or Prime Insulation. The framework and acoustical infill is to be concealed behind the 15mm Slotted finish fire rated wood finish MDF panels from Topakustik, Wood Fit, Armstrong, Sound Slats, RPG or equivalent approved vendors. The perforated wood finish panels must have a minimum perforation area of 12% or higher and is to be supplied with black RP Tissue or equivalent of approved quality. This should be completed as per details and diagrams provided. Rate shall be inclusive of installation on the frame work arrangements. Works will be inclusive of scaffolding and staging at all levels. Rate shall include the preparation of detailed shop drawings as per site conditions, which shall be approved before commencement of works.	101.00	SQM	5500.000	0.00	INR Zero Only
1.27	Acoustical Wall Panels with Gripper system: Providing and installing Acoustical treatment to the walls, including 2"x2" Aluminium section framework of size 600mmx600mm and 50 mm thick Acoustical Insulation of 1000 gsm density from Star Insulation or Prime Insulation. 9 mm thick Plywood strips-100 mm width strips with 20 mm air gaps in between, fixed over acoustical insulation. The plywood strips are to be faced with 6 mm thk fire retardant polyester wadding and gripper system from Walltracts, Chisel Interiors Inter Dimension or equivalent system) pressure stapled over Plywood strips and selected FINAL Fabric. Fabric is to be approved by Client and tested by vendor for dimensional stability etc installed in the gripper system, all done in accordance to the recommendation and the specs Rate quoted includes all the materials, labour, scaffolding, lead, lift, finishing, cleaning, hardware, etc complete.Contractor shall submit the samples and the Shop drawings to the architect prior to the commencement of the work for approval.	30.00	SQM	4000.000	0.00	INR Zero Only
1.28	DSR 2021 12.45.4 . Gypsum board false celing with Fully Perforated Gypsum Plaster Board of size 1200 x 2400x12.5 mm having approx. 15 % perforated area with perforation size and pattern as approved by the Engineerin-charge and as per manufacturer's specification, withall 4 side tapered and backed by acoustical tissue with NRC value not less than 0.60. (GYPROC or approved equivalanet)	100.00	SQM	1300.500	0.00	INR Zero Only
1.29	SCRAPPING AND SANDING OF WALLS / CEILING SURFACE : to remove existing paint and undulations and preparing the surface smooth including necessary repairs to scratches etc. complete. SANDING TO BE DONE WITH DUST FREE MECHANICAL SANDING MACHINES.	900.00	SQM	20.850	0.00	INR Zero Only
1.30	EXTERIOR PAINTING: Finishing walls with 2 COATS of 100% Premium acrylic emulsion paint having VOC less than 50 gm/litre and UV resistance as per IS 15489:2004, Alkali & fungal resistance, dirt resistance exterior paint of required shade (Company Depot Tinted) with silicon additives. Two coats applied @ 1.43 litre/ 10 sqm. Over and including priming coat of exterior primer applied @ 0.90 litre/10 sqm. APPROVED MAKES FOR PAINT: (BERGER WEATHERCOAT LONG LIFE 7, ASIAN PAINT ULTIMA EMULSION, NEROLAC EXCEL ALL IN ONE, DULUX WEATHERSHEILD POWERFLEXX)	600.00	SQM	218.900	0.00	INR Zero Only

1.31	INTERIOR PUTTY: Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete. APPROVED MAKES FOR PUTTY: (BIRLA WHITE, JK WALL PUTTY, BERGER WALL PUTTY, ASIAN PAINTS WALL PUTTY, DULUX WALL PUTTY, NEROLAC WALL PUTTY)	300.00 SQM	123.850	0.00 INR Zero Only
1.32	INTERIOR PAINTING: Wall painting with 2 COATS of premium acrylic emulsion paint of interior grade, having VOC (Volatile Organic Compound) content less than 50 grams/ litre of approved brand and manufacture, including applying additional coats wherever required to achieve even shade and colour Including priming coat of approved brand wall primer. APPROVED MAKES FOR PAINT: (BERGER RANGOLI TOTAL CARE, ASIAN PAINTS APCOLITE PREMIUM EMULSION, NEROLAC PEARLS INTERIOR EMULSION, DULUX SUPER CLEAN 3 IN 1)	300.00 SQM	186.000	0.00 INR Zero Only
1.33	PAINTING WOOD WORK / METAL WORK: Enamel Painting of Woodwork/ Metal Work at all heights and levels including a) surface preparation (scrapping, sanding, cleaning) b) applying primer & repair putty on the surface. c) painting 2 coats on the surface. All work complete as per the directions of the engineer incharge. APPROVED MAKES FOR PAINT: (BERGER LUXOL SATIN ENAMEL, ASIAN PAINTS APCOLITE PREMIUM SATIN ENAMEL, NEROLAC SATIN ENAMEL, DULUX SUPER SATIN)	200.00 SQM	179.800	0.00 INR Zero Only
1.34	REPLACING GLASS IN EXISTING WINDOWS: Providing & Fixing 6mm toughened glass in existing aluminium windows including all required aluminium profile, EPDM rubber / gasket, fittings, fixtures etc. complete including removal of existing broken glass.	18.00 SQM	1500.000	0.00 INR Zero Only
1.35	Aluminium Handle in existing aluminium windows: Providing Fixing PEGO Single point window handle HD 10 in existing aluminium windows Including removal of old handles.	5.00 Nos	500.000	0.00 INR Zero Only
1.36	SS 304 Friction Stay in existing aluminium windows: Providing Fixing a pair of 400 mm stainless steel 304 GRADE friction stays of EBCO HILOAD make in existing aluminium windows Including removal of old friction stays.	5.00 Nos	1000.000	0.00 INR Zero Only
1.37	Providing and fixing Black Out roller blinds of Mac/ Vista/ Aerolux make.	18.00 SQM	1000.000	0.00 INR Zero Only
1.38	Deep Cleaning of the finished auditorium building ground and first floor, staircase, corridors, surrounding areas upto 3 meters distance and handing over the building completely clean in all respects.	1.00 LUMP SUM	15000.000	0.00 INR Zero Only
2.00	ELECTRICAL WORKS			

2.01	Point wiring in PVC conduit, with modular type switch: Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required. Group C	6.00	POINT	1150.000	0.00	0 INR Zero Only
2.02	Point wiring in PVC conduit, with modular type switch:- Wiring for group controlled (looped) light point/fan point/exhaust fan point/ call bell point (without independent switch etc.) with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed PVC conduit,and earthing the point with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable etc. as required. Group C	44.00	POINT	750.000	0.00	INR Zero Only
2.03	Wiring for twin control light point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, 2 way modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.	10.00	POINT	1250.000	0.00	NR Zero Only
2.04	Circuit / Sub main wiring in PVC conduit :- Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class pvc conduit as required. 2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire.	500.00	Meter	175.000	0.00	0 INR Zero Only
2.05	Circuit / Sub main wiring in PVC conduit :- Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class pvc conduit as required. 2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire.	100.00	Meter	200.000	0.00	NR Zero Only
2.06	Circuit / Sub main wiring in PVC conduit :- Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class pvc conduit as required. 2 X 4 sq. mm + 1 X 4 sq. mm earth wire.	200.00	Meter	252.000	0.00	NR Zero Only
2.07	Circuit / Sub main wiring in PVC conduit :- Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class pvc conduit as required. 2 X 6 sq. mm + 1 X 6 sq. mm earth wire.	10.00	Meter	298.000	0.00	NR Zero Only
2.08	Circuit / Sub main wiring in PVC conduit :- Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class pvc conduit as required. 2 X 10 sq. mm + 1 X 6 sq. mm earth wire	10.00	Meter	393.000	0.00	NR Zero Only
2.09	Circuit / Sub main wiring in PVC conduit :- Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class pvc conduit as required. 4 x 6 sq.mm. + 2 x 6 sq.mm. Earth wire	10.00	Meter	472.000	0.00	NR Zero Only

2.10	Circuit / Sub main wiring in PVC conduit :- Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class pvc conduit as required. 4 x 10 sq.mm. + 2 x 6 sq.mm. Earth wire	50.00 Meter	651.000	0.00 INR Zero Only
2.11	Circuit / Sub main wiring in PVC conduit :- Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class pvc conduit as required. 4 x 16 sq.mm. + 2 x 6 sq.mm. Earth wire	10.00 Meter	902.000	0.00 INR Zero Only
2.12	S/F light plug point modular type accessories :- Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 3 pin 5/6 A modular socket outlet and 5/6 A modular switch, connections etc. as required.	10.00 EACH	390.000	0.00 INR Zero Only
2.13	S/F light plug point modular type accessories :-Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 5/6 & 15/16 A modular socket outlet and 15/16 A modular switch, connections etc. as required.	20.00 EACH	495.000	0.00 INR Zero Only
2.14	Supplying and fixing 3 pin, 5 A ceiling rose on the existing junction box/ wooden block including connections etc. as required.	10.00 Nos	78.000	0.00 INR Zero Only
2.15	Supply and fixing modular blanking plate on the existing modular plate & switch box excluding modular plate as required.	10.00 Nos	38.000	0.00 INR Zero Only
2.16	Supplying and fixing 5 amps. to 32 amps. rating, 240 volts `C' series, miniature circuit breaker (MCB)suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required. single pole	22.00 Nos	220.000	0.00 INR Zero Only
2.17	Supplying & fixing single pole, blanking plate in the existing MCB DB complete etc. as required.	2.00 Nos	10.000	0.00 INR Zero Only
2.18	Supplying and fixing following rating, double pole, (single phase and neutral), 240 V, residual current circuit breaker (RCBO), having a sensitivity current 300 mA in the existing MCB DB complete with connections, testing and commissioning etc. as required. 32 / 40 amps.	2.00 Nos	2514.000	0.00 INR Zero Only
2.19	Supplying and fixing following way, single pole and neutral, sheet steel, MCB distribution board, 240 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator) 6 way, Double door	1.00 Nos	1993.000	0.00 INR Zero Only
2.20	Supplying and fixing following way, single pole and neutral, sheet steel, MCB distribution board, 240 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator) 8 way, Double door	1.00 Nos	2200.000	0.00 INR Zero Only

2.21	Supplying and fixing following way, horizontal type TP&N, sheet steel MCB distribution board, 415 V on surface /recess, complete with tinned copper bus	1.00	Nos	4431.000	0.00	INR Zero Only
	bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required (But without MCB / RCCB / Isolators). 6 way (4 + 18), Double door					
2.22	Supplying and fixing following way, horizontal type TP&N, sheet steel MCB distribution board, 415 V on surface /recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required (But without MCB / RCCB / Isolators). 8 way (4 + 24), Double door.	1.00	Nos	6756.000	0.00	INR Zero Only
2.23	Supplying and fixing following rating, four pole, 415 V, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required. 63 A	1.00	Nos	1400.000	0.00	INR Zero Only
2.24	Supplying and fixing following rating, four pole, 415 V, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required. 40 A	1.00	Nos	1140.000	0.00	INR Zero Only
2.25	Supplying of following dimmable LED fitting on recess/surface made of metallic CRCA powder coated steel / aluminium body, minimum system efficacy 100 Lumens/watt. Electronic in buit driver, PF>0.9, suitable for 220V-240V 50Hz A.C. supply, in the existing false ceiling with S.S. chain hanging arrangements/ on surface as per site condition including making connections with 3x1.5sq.mm FRLS copper conductor cable in steel flexible pipe, testing and commissioning etc. required. SITC of Recessed mounted 24 watt LED down lighter made up of high pressure die cast aluminium housing complete as required. (Equivalent to Lighting Technologies, Havells, Philips, Osram, Wipro)	18.00	Nos	5000.000	0.00	INR Zero Only
2.26	Supplying of following LED fitting on recess/surface made of metallic CRCA powder coated steel / aluminium body, minimum system efficacy 100 Lumens/watt. Electronic in buit driver, PF>0.9, suitable for 220V-240V 50Hz A.C. supply, in the existing false ceiling with S.S. chain hanging arrangements/ on surface as per site condition including making connections with 3x1.5sq.mm FRLS copper conductor cable in steel flexible pipe, testing and commissioning etc. required. SITC of Step light Colour: Anthracite grey Material Aluminum Dimensions 201 x 91 x 35 Lamp Base LED Integrated Wattage 5W ((Equivalent to Philips Model No. B07LH1FXLR)	12.00	Nos	1500.000		INR Zero Only
2.27	Supplying of following LED fitting on recess/surface made of metallic CRCA powder coated steel / aluminium body, minimum system efficacy 100 Lumens/watt. Electronic in buit driver, PF>0.9, suitable for 220V-240V 50Hz A.C. supply, in the existing false ceiling with S.S. chain hanging arrangements/ on surface as per site condition including making connections with 3x1.5sq.mm FRLS copper conductor cable in steel flexible pipe, testing and commissioning etc. required. Supply of 1200 mm long 20 watt LED luminiare (Equivalent to Havells LUMILINEPLUSBS20WLED865SPCSS)	5.00	Nos	825.000	0.00	INR Zero Only
2.28	Installation, Testing and Commissioning of BAJAJ single LED Signage BESL 03 LED SSD WBB GREEN above the exit doors of the auditorium including providing fixing neccassry base plate, point wiring, fitting fixture etc. complete.	4.00	Nos	600.000	0.00	INR Zero Only

2.29	Supply installation testing of LEGRAND 8 WAY Conference Table POP UP BOX, with power , Lan , HDMI, Audio ,CGA & USB including all necessary associated hardware .	1.00	Nos	6000.000	0.00	INR Zero Only
3.00	FURNITURE WORKS					
3.01	Providing fixing Tip-up auditorium Chair (Godrej Glamour NXT or approved equivalent from Geeken, Featherlite, Durian, TSI, Polo). The design and color of the chair will be as approved by the college authorities. (CONTRACTOR WILL SUBMIT FULL SIZE SAMPLE OF THE CHAIR FOR APPROVAL FROM THE COLLEGE AUTHORITIES BEFOREHAND).	100.00	Nos	5000.000	0.00	INR Zero Only
3.02	Providing and Supplying factory made Podium table 8ft long x 2ft deep x 2.5ft high made with 25mm thick prelaminated HDF Board (all full round edges) with full Vanity panel on three sides and 3 internal vertical division panels of 1ft x 2.5ft for seating 3 persons on the TABLE. The design and color of the table will be as approved by the college authorities. The table will have provision for fixing electrical points. The table will have provision for 8 Way LEGRAND POP-UP Box for DATA/HDMI/ELEC. points.	2.00	Nos	20000.000	0.00	INR Zero Only
3.03	Providing and Supplying Podium Chairs (Mid Back without wheels) of design and color approved by college authorities (Godrej/ Featherlite/ Geeken/ Durian Make)	8.00	Nos	6500.000	0.00	INR Zero Only
4.00	FIRE FIGHTING WORKS					
4.01	Supplying, installation, testing and commissioning of electric driven terrace pump 450 lpm at 35 m Head 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 squirell cage induction motor TEFC type suitable for operation on 415 volts, 3 phase, 50 Hz, AC supply with IP55 class of protection for enclosure, horiziontal 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.	1.00	Nos	85291.000	0.00	INR Zero Only
4.02	Supplying, installation, testing and commissioning of Starter Panel for n Nos. electric driven terrace pump suitable for automatic operation complete in all respects, as required: (Terrace Pump)	1.00	SET	20000.000	0.00	INR Zero Only
4.03	Providing and fixing in position the industrial type pressure gauges with gun metal / brass valves complete as required	2.00	Nos	1250.000	0.00	INR Zero Only

4.04	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:	6.00 METER	624.000	0.00 INR Zero Only
4.05	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:	6.00 Meter	1677.000	0.00 INR Zero Only
4.06	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: 100 MM DIA	30.00 Meter	2310.000	0.00 INR Zero Only
4.07	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: 150MM DIA	6.00 Meter	3152.000	0.00 INR Zero Only
4.08	Supplying and fixing single headed Stainless Steel internal hydrant valve with instantaneous Stainless Steel coupling of 63 mm dia with cast iron wheel ISI marked conforming to IS 5290 (Type -A) with blank Stainless Steel cap and chain as required :	1.00 SET	5950.000	0.00 INR Zero Only
4.09	Supplying and fixing Single headed Stainless Steel external yard hydrant valve with 1 No. 63 mm dia instantaneous FM Stainless Steel coupling and cast iron wheel, ISI marked, conforming to IS 5290 (type A) with blank Stainless Steel cap and chain as required:	1.00 SET	5950.000	0.00 INR Zero Only
4.10	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: 80MM DIA	1.00 SET	4500.000	0.00 INR Zero Only
4.11	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: 100 MM DIA	1.00 SET	4800.000	0.00 INR Zero Only
4.12	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: 150MM DIA	1.00 SET	5500.000	0.00 INR Zero Only
4.13	Providing, installation, testing and commissioning of non-return valve of following sizes confirming to IS: 5312 complete with rubber gasket, GI bolts, nuts, washers etc.as required: 80MM DIA	1.00 SET	4500.000	0.00 INR Zero Only
4.14	Providing, installation, testing and commissioning of non-return valve of following sizes confirming to IS: 5312 complete with rubber gasket, GI bolts, nuts, washers etc.as required: 100MM DIA	1.00 SET	5500.000	0.00 INR Zero Only

4.15	Providing, installation, testing and commissioning of non-return valve of following sizes confirming to IS: 5312 complete with rubber gasket, GI bolts, nuts, washers etc.as required: 150MM DIA	1.00	SET	6500.000	0.00	INR Zero Only
4.16	Supplying, Fixing, Testing & Commissioning of Rubber Bellow of PN 1.6 rating complete to the entire satisfaction and direction of Fire Officer/Engr-in-Charge. 80MM DIA	1.00	EACH	6800.000	0.00	INR Zero Only
4.17	Supplying, Fixing, Testing & Commissioning of Rubber Bellow of PN 1.6 rating complete to the entire satisfaction and direction of Fire Officer/Engr-in-Charge. 100MM DIA	1.00	EACH	8900.000	0.00	INR Zero Only
4.18	Supplying, Fixing, Testing & Commissioning of Rubber Bellow of PN 1.6 rating complete to the entire satisfaction and direction of Fire Officer/Engr-in-Charge. 150MM DIA	1.00	EACH	9800.000	0.00	INR Zero Only
4.19	Providing, installation, testing and commissioning of stainless steel Y-strainer fabricated out of 1.6 mm thick stainless steel, Grade 304, sheet with 3 mm dia holes with stainless steel flange. 150MM DIA	1.00	SET	12790.000	0.00	INR Zero Only
4.20	Providing, installation, testing and commissioning of stainless steel Y-strainer fabricated out of 1.6 mm thick stainless steel, Grade 304, sheet with 3 mm dia holes with stainless steel flange. 80MM DIA	1.00	SET	9000.000	0.00	INR Zero Only
4.21	Supplying and fixing STAINLESS STEEL 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	4800.000	0.00	INR Zero Only
4.22	Supplying and fixing 30 meter long first-aid Hose Reel with MS construction spray painted in post office reqd, 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 equipmets on wall. Connections from riser with 25 mm dia stop gun metal valve & M.S. Pipe and socket.	1.00	SET	8200.000	0.00	INR Zero Only
4.23	Supplying & fixing STAINLESS STEEL 63 mm dia 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 :	2.00	EACH	2280.000	0.00	INR Zero Only
4.24	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 paintingwith synthetic enamel paint of approved shade as required.	1.00	SET	19500.000	0.00	INR Zero Only
4.25	Providing and fixing dual type pressure switch suitable for 1-20 Kg/cm2 including electrical connections setting of Cut-In and cut-Off pressure complete in all respects.	2.00	EACH	1890.000	0.00	INR Zero Only
4.26	Supplying and fixing of Drain test assembly as reqd. for suitable dia MS pipe connection conforming to IS code as required :	1.00	SET	4800.000	0.00	INR Zero Only

4.27	Supplying and fixing of Fire Man's Axe with heavy insulated rubber tested upto 20 KV and confirming to IS:926.	2.00	SET	480.000	0.00 INR Zero Only
4.28	Providing and fixing 25 mm nominal bore metal ball Valve with rotatory handel of approved quality.	2.00	EACH	1050.000	0.00 INR Zero Only
4.29	Providing and fixing 25 mm Air Release Valve with of approved quality.	1.00	EACH	1850.000	0.00 INR Zero Only
4.30	Providing and fixing M.S. structural work fabricated from standard sections, (MS rounds, angles, channels, slotted angle, nuts, bolt, flanges etc.) including cutting to size, drilling ,welding or insert plates including cost of (Hilti) fasteners, clamp in RCC structural members as directed, including two or more coats of synthetic enamel paint over one coat of primer after surface preparation including cutting and making good walls.	100.00	KG	140.000	0.00 INR Zero Only
4.31	Providing and fixing Fire Hose Cabinet door including door frame (Internal) fabricated from 16 gauge Alluminium Sheet powder coated with glazing above and below lock rail in front door with key and lock arrangement, painted "Fire Red" with powder coated paint "Fire Hose" written on front including suitable supports to place, approximately size (minimum) 1200x2100 mm or as per site suitable to house following; (i) Single Headed Outlet - 1Nos. (ii) First Aid Hose Reel - 1 No. (iii) Hose pipe 63 mm dia 15m long with male and female coupling at both ends 2 Nos. (iv) Branch pipe 63 mm dia - 1 No	1.00	Nos	9500.000	0.00 INR Zero Only
4.32	Supplying and fixing of Fire Hose Cabinet (External) 900mm x 600 mm x 500 mm made of 2mm thick MS sheet with 6 mm thick glazed glass doors i/c necessary locking arrangements suitable to accommodate external yard hydrant with butterfly valve, 2Nos. 15mtr.long Hose pipe, 1No. branch pipe, mounted on wall OR raised brick platform & duly painted with post office red externally and white internally with synthetic enamel paint complete in all respect, for external hydrant, as required.	1.00	Nos	6500.000	0.00 INR Zero Only
4.33	Supplying and fixing of ISI marked 6 KG ABC type fire extinguishers of following capacity ISI marked (IS: 15683) filled with MAP 90% stored pressure type ABC powder with jet pipe of standerd length comprising of easy snap safety seal, State of the art pressure gauge, Controllable discharge mechanism, Instalert, EPDM rubber hosepipe, squeeze grip valve, painting, clamp and dash fastners complete in all respect as required. 6 KG. (Make:- Guards, Kanex, Ceasefire)	2.00	Nos	4860.000	0.00 INR Zero Only
4.34	Supplying and fixing of 4.5 KG CO2 type fire extinguisher of following capacity ISI marked as per IS 15683,CO2 cylinder as per IS 7285 CCE approved, valve as per IS 3224,CO2 gas as per IS 307,Internal discharge tube as per IS 738 complete with wheel discharge valve, hose and horn duly charged with CO2 gas i/c fixing with bracket on existing wall complete as reqd. 4.5 Kg (Make:- Guards, Kanex, Ceasefire)	2.00	Nos	6700.000	0.00 INR Zero Only
4.35	Supply, Installation and programming of Microprocessor based conventional Fire Alarm Panel , 4 ZONE. Make: System Sensor/AGNI/Ravel/Apollo	1.00	Nos	15000.000	0.00 INR Zero Only

4.36	Installation of MCP (Manual Call Point). Make :system sensor/ AGNI/ Palex / Apollo	2.00	Nos	1500.000	0.00	INR Zero Only
4.37	Installation of Hooter (Make: system sensor / AGNI / Palex)	2.00	Nos	1500.000	0.00	INR Zero Only
4.38	Supply & Installation of optical Smoke Detector/Heat Detector/Multicriteria Detector. Make: System Sensor/Apollo/AGNI	2.00	Nos	1450.000	0.00	INR Zero Only
4.39	Supply and laying of 1.5mm 2core Red Coloured Fire Alarm Cable on surface for detection system with all required accessories. (Make: Polycab / Havells/Finolex)	80.00	METER	110.000	0.00	INR Zero Only
5.00	VRV HVAC: AIR COOLDED VARIABLE REFRIGERANT VOLUME/FLOW AIR CONDITIONING SYSTEM (DAIKIN / MITSUBISHI / TOSHIBA/ FUJITSU MAKE ONLY) The vendor may offer the outdoor units as per availability from the manufacturer, however keeping the tonnage same as per BOQ subject to approval by Consultant/Client.					
5.01	24 HP Outdoor Unit: Supply, Installation, testing & commissioning of Variable refrigerant volume/flow modular type air-conditioning system suitable to operate from 410+10% volt, 50 Hz,3 phase AC power supply for cooling & heating by using inverter driven capacity control compressors (Twin Rotary / Hermetically sealed scroll type) complete with individual controller and fittings with necessary wiring, connection & termination, painted MS frame for outdoor unit etc. as per quantity given below including full charging of R-410A refrigerant gas complete as per specifications. Suitable TPN isolator within MS enclosure should be Provided. Outdoors units of the VRV system shall be compact air cooled type. The outdoor units must be suitable for up to 225m refrigerant piping between outdoor unit & the farthest indoor units. Allowable level difference between outdoor unit & indoor units shall be 90 m in case of outdoor unit on top & 50 m in case of outdoor unit at bottom. Allowable level difference between various indoor units connected to one out door unit shall be up to 30 m. The outdoor units shall be suitable to operate within an ambient temperature range of "5 Deg C to 43 Deg C" in cooling mode; & "-20 Deg C to 15 Deg C" in heating	1.00	Nos	816560.000	0.00	INR Zero Only
5.02	The entire operation of outdoor units shall be through independent remotes of indoor units. No separate Start/ Stop function shall be Required. Complete refrigerant circuit, oil balancing/ equalizing circuit shall be factory assembled & tested. Outdoor unit shall have function of automatic refrigerant amount check periodically to confirm leakages. Outdoor unit shall have function of controlling evaporative refrigerant temperature to avoid cold draft, excessive cooling & for better energy efficiency. The ODU must deliver COP of minimum 4.70 at 50 % load.					

5.03	4 TR Indoor VRF Units (Nominal Capacity) - Ceiling Mounted Round/4way flow	6.00 Nos	45312.000	0.00 INR Zero Only
5.03	cassette type Unit:	0.00 NOS	45512.000	U.UU IINK Zeio Only
1	cassette type Unit:			
1				
1	(The indoor units capacity can be also as per availability from the manufacturer but			
	keeping the minimum capacity as required in BOQ subject to approval by			
	Consultant/Client.)			
	Supply, Installation, testing & commissioning of Ceiling Mounted Round/4way flow			
	cassette type Unit of suitable capacity suitable to operate from 230+10% volt, 50 HZ,			
	1 phase power supply with cordless remote control, fittings & required cable to			
	connect indoor unit to socket.Refrigerant Pipe size and gas quantity should suit to			
	the copper pipe length at actual. The capacity guarantee should be ensured by the			
	contractor/manufacturer. Each unit shall have high lift drain pump, and Low gas			
	detection system.			
F 04	Definement Dining for VDF evetors	40.00 METER	1005.000	0.00 IND Zero Only
5.04	Refrigerant Piping for VRF system:	18.00 METER	1805.000	0.00 INR Zero Only
	Supply & Installation of interconnecting suitable sizes of one end expanded			
	refrigerant copper pipe work, insulated with 13mm thick (pipe size upto 19.1mm dia)			
	& 19mm thick (pipe size above 19.1mm dia) closed cell electrometric nitrile rubber			
	tubular insulation between each set of indoor & outdoor units with outer mechanical			
	protection of aluminum cladding for all exposed pipes as per specification. All piping			
	inside the room shall be properly fixed/supported with suitable size of clamp/ M.S.			
	hanger and all external piping shall run in M.S. painted cable tray etc. as reqd.			
5.05	34.9 mm dia with 19mm thick nitrile rubber insulation	5.00 METER	1665.000	0.00 INR Zero Only
5.05	Refrigerant Piping for VRF system:	S.UU WETER	1005.000	U.UU IINK Zeio Only
	Supply & Installation of interconnecting suitable sizes of one end expanded			
	refrigerant copper pipe work, insulated with 13mm thick (pipe size upto 19.1mm dia)			
	& 19mm thick (pipe size above 19.1mm dia) closed cell electrometric nitrile rubber			
	tubular insulation between each set of indoor & outdoor units with outer mechanical			
	protection of aluminum cladding for all exposed pipes as per specification. All piping			
	inside the room shall be properly fixed/supported with suitable size of clamp/ M.S.			
	hanger and all external piping shall run in M.S. painted cable tray etc. as reqd.			
5.06	28.6 mm dia with 19mm thick nitrile rubber insulation	5.00 METER	1094.000	0.00 INR Zero Only
5.06	Refrigerant Piping for VRF system:	5.00 NIE I ER	1094.000	U.UU IINK ZEIO ONIY
	Supply & Installation of interconnecting suitable sizes of one end expanded			
	refrigerant copper pipe work, insulated with 13mm thick (pipe size upto 19.1mm dia)			
	& 19mm thick (pipe size above 19.1mm dia) closed cell electrometric nitrile rubber			
	tubular insulation between each set of indoor & outdoor units with outer mechanical			
	protection of aluminum cladding for all exposed pipes as per specification. All piping			
	inside the room shall be properly fixed/supported with suitable size of clamp/ M.S.			
	hanger and all external piping shall run in M.S. painted cable tray etc. as reqd.			
5.07	19.1 mm dia with 13mm thick nitrile rubber insulation Refrigerant Piping for VRF system:	25.00 METER	924.000	0.00 INR Zero Only
5.07		25.00 NIE I EK	924.000	U.UU IINK Zeio Only
	Supply & Installation of interconnecting suitable sizes of one end expanded			
	refrigerant copper pipe work, insulated with 13mm thick (pipe size upto 19.1mm dia)			
	& 19mm thick (pipe size above 19.1mm dia) closed cell electrometric nitrile rubber			
	tubular insulation between each set of indoor & outdoor units with outer mechanical			
	protection of aluminum cladding for all exposed pipes as per specification. All piping			
	inside the room shall be properly fixed/supported with suitable size of clamp/ M.S.			
	hanger and all external piping shall run in M.S. painted cable tray etc. as reqd.			
5.08	15.9 mm dia with 13mm thick nitrile rubber insulation Refrigerant Piping for VRF system:	5.00 METER	681.000	0.00 INR Zero Only
3.00	Supply & Installation of interconnecting suitable sizes of one end expanded	J.JJ IVIL I LIX	001.000	0.00 II W 2010 OTILY
	refrigerant copper pipe work, insulated with 13mm thick (pipe size upto 19.1mm dia)			
	& 19mm thick (pipe size above 19.1mm dia) closed cell electrometric nitrile rubber			
	tubular insulation between each set of indoor & outdoor units with outer mechanical			
	protection of aluminum cladding for all exposed pipes as per specification. All piping			
	inside the room shall be properly fixed/supported with suitable size of clamp/ M.S.			
	hanger and all external piping shall run in M.S. painted cable tray etc. as reqd.			
	12.7 mm dia with 13mm thick nitrile rubber insulation	l		

r						
5.09	Refrigerant Piping for VRF system: Supply & Installation of interconnecting suitable sizes of one end expanded refrigerant copper pipe work, insulated with 13mm thick (pipe size upto 19.1mm dia) & 19mm thick (pipe size above 19.1mm dia) closed cell electrometric nitrile rubber tubular insulation between each set of indoor & outdoor units with outer mechanical protection of aluminum cladding for all exposed pipes as per specification. All piping inside the room shall be properly fixed/supported with suitable size of clamp/ M.S. hanger and all external piping shall run in M.S. painted cable tray etc. as reqd. 9.5 mm dia with 13mm thick nitrile rubber insulation	14.00	METER	543.000	0.00	INR Zero Only
5.10	Refrigerant Piping for VRF system: Supply & Installation of interconnecting suitable sizes of one end expanded refrigerant copper pipe work, insulated with 13mm thick (pipe size upto 19.1mm dia) & 19mm thick (pipe size above 19.1mm dia) closed cell electrometric nitrile rubber tubular insulation between each set of indoor & outdoor units with outer mechanical protection of aluminum cladding for all exposed pipes as per specification. All piping inside the room shall be properly fixed/supported with suitable size of clamp/ M.S. hanger and all external piping shall run in M.S. painted cable tray etc. as reqd. 6.4 mm dia with 13mm thick nitrile rubber insulation	5.00	METER	505.000	0.00	INR Zero Only
5.11	Drain Piping for VRF system Providing & fixing of heavy duty PVC Pipe complete with fittings, supports as per specifications and duly insulated with 6 mm thickness of closed cell tubular nitrile rubber as required & as per specifications. 32 mm dia with 9 mm thick insulation	3.00	METER	254.000	0.00	INR Zero Only
5.12	Drain Piping for VRF system Providing & fixing of heavy duty PVC Pipe complete with fittings, supports as per specifications and duly insulated with 6 mm thickness of closed cell tubular nitrile rubber as required & as per specifications. 25 mm dia with 9 mm thick insulation	40.00	METER	222.000	0.00	INR Zero Only
5.13	Drain Piping for VRF system Providing & fixing of heavy duty PVC Pipe complete with fittings, supports as per specifications and duly insulated with 6 mm thickness of closed cell tubular nitrile rubber as required & as per specifications. 20 mm dia with 9 mm thick insulation	3.00	METER	189.000	0.00	INR Zero Only
5.14	Providing and fixing of control cable of 2 Core x 1.5 sqmm. shielded cable in Heavy duty PVC conduit (20mm dia.) complete in all respect & as required.	40.00	METER	212.000	0.00	INR Zero Only
5.15	Providing and fixing of control cable of 3 Core x 1.5 sqmm. shielded cable in Heavy duty PVC conduit (20mm dia.) complete in all respect & as required.	20.00	Meter	231.000	0.00	INR Zero Only
5.16	Providing and fixing of control cable of 8 Core x 0.75 sqmm. shielded cable in Heavy duty PVC conduit (20mm dia.) complete in all respect & as required.	20.00	Meter	195.000	0.00	INR Zero Only
5.17	Supply, Installation, testing and commissioning of necessary fittings, Y-joints and headers etc.	5.00	Nos	4248.000	0.00	INR Zero Only
5.18	Supplying, fixing, testing and commissioning of Main centralized controller intelligent touch manager (Push Button Type) suitable for groups of indoor units to be installed for control (BMS Compatible). All required accessories (hardware and software) to be provided for BMS connection.	1.00	Nos	88500.000	0.00	INR Zero Only

5.19	Gas Charging of complete VRF System comprising Outdoor unit of indoor unit including pressure testing.	10.00	KG	1239.000	0.00	INR Zero Only
5.20	Suitable MS powder coated stands for HVAC Out Door Unit (Chowki) .	2.00	Nos	2360.000	0.00	INR Zero Only
5.21	INLINE FAN: Supply, installation,testing and commissioning of Inline fan suitable for following capacities complete with sheet metal casing, electric motor and centrifugal fan suitable for operation on $220\text{V} \pm 10\%,50\text{Hz}$, 1 phase AC supply fitted with speed regulator, 15 Amp plug and wiring between the fan and the socket and accessories like gravity louvers , wire guard, bird screen & canvas connection etc. 600 CFM, 15mmwg static	1.00	Nos	12390.000	0.00	INR Zero Only
5.22	VRF ODU ELECTRICAL PANEL Supplying, assembling, erecting, connecting, testing and commissioning of dust, damp and vermin proof free floor standing factory built sheet steel enclosed non-draw out modular type entilation Panel outdoor type (IP-54 Protection) fabricated out of 2.0 mm thick CRCA sheet hinged doors of 1.6mm thick CRCA sheet, duly painted complete with earth bus, aluminium bus bar, numbering & sign writing, interconnection & including the cost of connection through bus bar / copper conductor flexible connection with necessary interlocking with existing panel as shown in drawing as per specification and mounted with the following: including control wiring with 1.5sqmm. & 2.5sqmm. PVC insulated FRLS copper conductor S/C cable for voltage & current respectively, cable alleys, cable gland plates in two half, etc. necessary metering protections & indications etc. complete as required. (Each starter should have remote control and interlocking facilities including auto manual switch, NO/NC contacts for automatic operation of fan in case of fire). NOTE: The following provisions shall be required to be made in the switchboard detailed below:	1.00	Nos	59000.000	0.00	INR Zero Only
5.23	The Switchboard shall have provision for entry of all PVC cables / bus duct from the top / bottom as required. All live accessible parts shall be shrouded and all equipment shall be ginger touch proof. The busbar insulation shall be with heat shrinkable sleeves SMC / DMC shrouds and busbar supports shall be used. Suitable tinned copper extension links for incoming / outgoing cables shall be provided wherever required. Control circuits includes breader control switch, outo manual selector switch, anti pumping relay, spring charging trip indication, TIMER, Control wiring, Auxiliary contactors MCB's as required at site. All fault level breaking capacity indicates shall be I.C.S. value at 415 volts. (ICS=ICU=ICW=100%) for 1 sec. All MCCB above 100 Amp shall have variable overload setting. All MCCB shall have with Rotary Handles. Space heater / light / air filter shall be provided for each vertical compartment.					

5.24	All meters shall be digital of size 96 mm x 96 mm. All indicating light shall be LED type. Interlocking wiring facility with fire alarm for starting the fan in case of fire (For smoke fan only). Wiring for micro switch for stopping the fan when fire damper closes (in case of Fan only) All starters shall be provided with suitable potential free contract for connections to the Building Automation System. Incoming: 80 Amp FP, 16 kA MCCB - 1 No. 3 Nos. Phase indication LED lamps with 2 Amps back up MCB, breaker 'ON/OFF' indicating light with 2A MCB. 1 No. Intelligent multi-function digital panel meters of class 0.5 accuracy, A (In each phase and neutral), KWHr with suitable rating CTs, CT shorting links, R,Y, B LED indicating lamp and 2 A control SP MCB's. Bus Bars: Electrolytic high conductivity aluminium three phase and neutral (full rated) busbars rated at 433V,50 Hz., 200 amps, 16kA, insulated with heat shrinkable coloured PVC sleeves & clip on shrouds for joints. Outgoing: All outgoing MCB/MCCB shall be provided with ON indication lamp with 2A SP MCB for back up. 3 Nos. 32Amp FP, 300mA ELCB					
6.00	AUDIO , VIDEO & LIGHTING WORKS					
6.01	SITC of Main FOH speaker having 12 inch woofer or better, min. 1.5-inch Compression driver; Frequency Response: 82Hz-18kHz or better; Nominal Dispersion: 90° H x 60° V or better; Power handling capacity: 250W or better; Nominal Impedance: 8Ω; Max SPL: 125 dB or better; Polyproylene enclosure, powder-coated finish; complete with all standard accessories as required. (EV, Bose, D& B, Audiotechnik)	2.00	Nos	35000.000	0.00	INR Zero Only
6.02	SITC of Mounting/ Hanging arrangement of speaker complete with all standard accessories as required. Heavy duty Powder coated MS frame /Bracket fixed with SS Dash Fasteners of HILTI / FISHER Make	2.00	EACH	7500.000	0.00	INR Zero Only
6.03	SITC of Active Subwoofer having 18" single driver; Frequency Response : 47Hz- 105Hz or better; Max SPL (Peak) : 132dB or better; Power handing capacity : 1200W or better; complete with all standard accessories as required (EV, Bose, D& B, Audiotechnik)	2.00	EACH	80000.000	0.00	INR Zero Only
6.04	SITC of Active Stage Monitor Speaker System having 12" single driver; Frequency Response: 65Hz - 18kHz orbetter; Max SPL (Peak): 126dB or better; Power handingcapacity: 1000W or better; complete with all standardaccessories as required. (EV, Bose, D& B, Audiotechnik)	2.00	EACH	48000.000	0.00	INR Zero Only
6.05	SITC of Dual-channel professional amplifier with 2 inputchannel, should have power output of 2x 350W @8Ω and2 x 660W @4Ω or better; Should have power outputBridged mode 2000W @4Ω Should have Frequencyresponse: 10Hz- 21kHz or better; Total harmonicdistortion (THD): ≤0.05% or better; Channelsperation(Crosstalk): ≤ -80 dB or better, S/N ratio >104dB or better, Built-in DSP feature complete with allstandard accessories as required. (Dynacord/Bose/Powersoft)	1.00	EACH	9000.000	0.00	INR Zero Only

6.06	SITC of Loudspeaker Management System 2 x 6 loudspeaker management system having 2x line inputs, 6x balanced outputs, input impedance > 50k Ω or better, CMRR: >45dB or better, Max. output level +22dBu or better, A/D performance Dynamic range >112dB Aweighted and D/A performance- Dynamic range 110dB Unweighted or better complete with standard accessories as required. (Behringer/ dbx)	1.00	EACH	30000.000	0.00 INR Zero Only
6.07	SITC of 16 channel analog mixer with 8 mic/line input or better & 2 stereo output or better; 2 or better group buses; 3 or better AUX / FX send, Frequency response: 20Hz- 20kHz or better; Phantom power: 48V or better; THD: 0.03% or better; complete with all standard accessories. (Yamaha/Behringer /Allen & Heath)	1.00	Nos	45000.000	0.00 INR Zero Only
6.08	SITC of Wireless Handheld microphone with Frequency response: 60Hz - 14kHz or better; Bandwidth: 24MHz; Total harmonic distortion (THD): < 0.9%; Signal to noise ratio: > 103 dB; Pattern: Cardioid; Microphone type: dynamic; RF Power: 10mW or better; Operating time: 8 hours or better complete with all standard accessories. (Shure /Sennheiser/ Clock Audio / ElectroVoice)	2.00	Nos	24000.000	0.00 INR Zero Only
6.09	SITC of Wireless Lavalier microphone with Frequency response: 60Hz - 14kHz or better; Bandwidth: 24MHz; Total harmonic distortion (THD): < 0.9%; Signal to noise ratio: > 103 dB; Pattern: Omnidirectional; Microphone type: Condenser; RF Power: 10mW or better; Operating time: 8 hours or better complete with all standard accessories. (Shure /Sennheiser/ Clock Audio / ElectroVoice)	1.00	Nos	28000.000	0.00 INR Zero Only
6.10	SITC of Wired handheld microphone with Frequency response : 50Hz - 16kHz or better; Pattern : Cardioid; Microphone type: Dynamic; Rugged metal housing; Sensitivity : 2.7mV/Pa or better, complete with all standard accessories. (Shure /Sennheiser/ Clock Audio / ElectroVoice)	2.00	Nos	5000.000	0.00 INR Zero Only
6.11	SITC of CD player complete with all standard accessories (Gemini/LG/Panasonic/Sony)	1.00	Nos	11000.000	0.00 INR Zero Only
6.12	SITC of 4 Point XLR Junction Box complete with all standard accessories	2.00	Nos	4000.000	0.00 INR Zero Only
6.13	SITC of 2 core 2.5 sqmm Speaker Cable complete with all standard accessories	100.00	meter	100.000	0.00 INR Zero Only
6.14	SITC of 2 core PVC insulated Microphone Cable complete with all standard accessories	300.00	METER	87.000	0.00 INR Zero Only
6.15	SITC of Connector & Patch Cords complete with all standard accessories	1.00	SET	8000.000	0.00 INR Zero Only
6.16	SITC of 9U Equipment Rack for housing all rack mountable equipments with internal wiring, front glass door; heat dessipation fans; movement wheels, power distribution units etc. complete with all standard accessories	1.00	EACH	12000.000	0.00 INR Zero Only

6.17	SITC of 6000 lumens laser Projector with 0.67" DMD technology or better; Contrast ratio (Native): 2,000:1 or better; Resolution: WUXGA or better; Inputs: 2 x HDMI or better, 1 x VGA or better, 1 x HDBaseT or better, 2x Audio in, 1x Mic in, 1x Audio out(3.5mm jack). Should have Horizontal & Vertical Keystone correction ±30°; should have 10-bit color display; Control: RS232 etc. complete. (Digital Projection/Barco / Christie / Panasonic)	1.00		300000.000	0.00 INR Zero Only
6.18	SITC of Mounting/hanging arrangement of Projector complete with all standard accessories.	1.00	Nos	10000.000	0.00 INR Zero Only
6.19	SITC of 150" motorized projection screen with 16:10 aspect ratio complete with all standard accessories (Somfy motor)	1.00	Nos	35000.000	0.00 INR Zero Only
6.20	SITC of Wall Plate type transmitter & Receiver extender with 1 x HDMI or better, 1 x VGA with audio input (Tx) or better, 1 x Twisted Pair output (Tx) or better; 1 x Twisted Pair Input (Rx) or better, 1x HDMI output(Rx) or better; transmission range: 70 meter or better; Auto-switching between inputs; Supports computer and video resolutions up to 4K or better; Max Data rate: 10.2 Gbps or better; HDCP 1.4 or better compliant; complete with all standard accessories. (Extron/Crestron/Lightware / Liberty AV)	1.00	Nos	50000.000	0.00 INR Zero Only
6.21	SITC of 1.8 meter HDMI-HDMI Cable complete with all standard accessories. (Belden/ Kramer / Liberty AV)	2.00	Nos	4500.000	0.00 INR Zero Only
6.22	SITC of 1.8 meter VGA-VGA with audio Cable complete with all standard accessories. (Belden/ Kramer / Liberty AV)	1.00	Nos	4000.000	0.00 INR Zero Only
6.23	SITC of of Twisted Pair Cable complete with all standard accessories	100.00	Nos	45.000	0.00 INR Zero Only
6.24	SITC of 100W High Quality LED Parcan Light complete with, Lamp source 3200K CCT Colour temperature CRI & TLCI Values above 95 COB LED source from Citizen/ Philips/ Osram/ Cree or reputed make (LM80 to be provided) DmX 512 dimming with 3 channel control Beam Angle of 9° / 25° / 45° Total Power Consumption of 165W High quality output replacing 1000W Halogen Par Flicker Free 100% for Tv & Film Cameras 11.7KHz Refresh Rate, Linear Dimming 0 ~ 100% Fuse and Internal safety protections Strobe option Adjustable 1~25 times/Sec Variable Fixture provided with Yoke of Manual Adjustment 5 Pin XLR for DmX , Black powder coated body. RDM Control options with latest technology (RDM ID to be specified) Certification having BIS compliant to IS 10322 (Part 5/ Sec 1):2012 CE Certification compliant to EN60598-1:2015, EN61437-2-13:2014 LM79 Certificates from NABL Acrediated laboratory. Brand embosed impact on the light body for genuine product. (Leksa Lighting / Kenson Solace / Aultra Lighting / Canara)	2.00	Nos	30114.000	D.00 INR Zero Only

0.05	CITO of 2000W LED Double Const 40 Double - Links - will const COT C.	4 00	Nas	45004.000	0.00 IND 7 0
6.25	SITC of 200W LED Profile Spot 19 Degree Light complete with, 3200K CCT Colour Temperature COB LED source from Citizen/ Philips/ Osram/ Cree or reputed make (LM80 to be provided) CRI & TLCI above 95, Strobe option Adjustable 1 ~ 25 times/ Sec 4 Kinds of dimming curves, Black finish housing, Manual Focus with 4 Beam shaping cutters Efficient and well-designed Lamp reflector Efficient Copper tube based Heat Sink for Heat Dissipation Sleek and Unique Designed Light weight body Fixture provided with Yoke of Manual Adjustment DmX 512 dimming with 1 or 3 Channel modes IP20 protection having Lux @ 3 Mtrs above 12040 suitable to illuminate the key presentor or talent on stage. RDM Control options with latest technology (RDM ID to be specified) Certification having BIS compliant to IS 10322 (Part 5/ Sec 1):2012 . CE Certification compliant to EN60598-1:2015, EN61437-2-13:2014 LM79 Certificates from NABL Acrediated laboratory. Brand embosed impact on the light body for genuine product (eksa Lighting / Kenson Solace / Aultra Lighting / Canara)	1.00	INOS	45024.000	0.00 INR Zero Only
6.26	SITC of 54 x 3W LED Par Light RGBW, Beam Angle 25° complete with LED source from Lumiled / Seoul / Nichia or reputed make (LM80 to be provided) (Leksa Lighting / Kenson Solace / Aultra Lighting / Canara) RGBW 3W Lamp source x 54 Pcs DmX 512 dimming with 8 Channel High Bright Red, Green, Blue, White LED's Source Unlimited Color Mixing through DmX 0 ~ 100% Linear dimming , In built presets for different colors Strobe Mode 20 times/Sec Data DmX through 3 / 5 Pin XLR's 65dB ~ 130dB Sound sensing capacity Power In and Out Connections High precision colors, IP20 protection Powder coated Black finish housing Having Sound Control & Master Slave Auto Run Mode Illuminate the Indoor stage with unlimited colour effects Rigidly built pressure die-casted Aluminium body. RDM Control options with latest technology (RDM ID to be specified) Certification having BIS compliant to IS 10322 (Part 5/ Sec 1):2012 CE Certification compliant to EN60598-1:2015, EN61437-2-13:2014 LM79 Certificates from NABL Acrediated laboratory. Brand embosed impact on the light body for genuine product.	2.00	Nos	10821.000	0.00 INR Zero Only
6.27	SITC of Light fixture mouting clamp Customized for suspending on fixed bars on stage Made up of Aluminium Die casted MS threaded T bolt with yellow passivation finish Complete with black powder coating matt black finish. Safeworking load 150 KG Suitable to Batten of size 30 OD to 60 OD (Leksa Lighting / Kenson Solace / Aultra Lighting / Canara)	5.00	Nos	1352.000	0.00 INR Zero Only
6.28	SITC of Light Fixture dual safety Chain made up of GI wire rope Bundled and twisted together Having load bearing capacity above 200 Kgs Sleve on the rope. Carabiner Clip (Leksa Lighting / Kenson Solace / Aultra Lighting / Canara)	5.00	Nos	570.000	0.00 INR Zero Only
6.29	SITC of Fixed on stage Lighting bar/winch of 6 Mtr length constructed with an single contruction light bar Made out of 48mm Outer Dai, 40 Nominal Bore, Mild Steel Pip It shall be hanged from the roof to accommodate various type of stage light fittings. It should hang from the roof with MS angle which is suspended from the fish plate of 5mm thickness which is fixed on the rcc roof with 4 anchor fastners of 10mm. Each fastnerMade out of 48mm Outer Dai, 40 Nominal Bore Material for the light bar shall be of Mild Steel Pipe Dual Barrel Arrangement and an additional End Caps on the Pipe end Powder coated with Matt black Texture Fixing Through Suspenders as per site conditions. Suspender prices are included (Leksa Lighting / Kenson Solace / Aultra Lighting / Canara)	1.00	Nos	15546.000	0.00 INR Zero Only

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6.30	SITC of Power Distribution Electrical panel having a Individual MCB control for 6 outgoing circuits Made up of MS Sheet metal fabricated housing Black powder coated Ivery connectors for the internal terminations and external outgoing connecting points, Fibre / brass glands of suitable size fitted MCB control for outgoing circuits. Custom built as per specification and project requirement. (Leksa Lighting / Kenson Solace / Aultra Lighting / Canara)	1.00	Nos	33558.000	0.00	INR Zero Only
6.31	SITC of High quality power junction box 4 way made up of MS Sheet metal fabricated housing. Snap fit fixing /15 (1.5mm) Total Max Rating 10A, 250V A.C 20°C to +70°C Operating Temp Moldings: Nylon, Flammability Rating UL94V-0 Black powder coated, fibre glands of suitable size fitted with Powercon or IEC connector Box 10A. Clamp arrangement for fixing or Raul plug arrangement for wall / floor fixing. (Leksa Lighting / Kenson Solace / Aultra Lighting / Canara)	5.00	Nos	1176.000	0.00	INR Zero Only
6.32	SITC of High quality power junction box 2 way made up of MS Sheet metal fabricated housing. Snap fit fixing /15 (1.5mm), Total Max Rating 10A, 250V A.C 20°C to +70°C Operating Temp Moldings: Nylon, Flammability Rating UL94V-0 Black powder coated, fibre glands of suitable size fitted with Powercon or IEC connector Box 10A. Clamp arrangement for fixing or Raul plug arrangement for wall/floor fixing. (Leksa Lighting / Kenson Solace / Aultra Lighting / Canara)	1.00	Nos	1430.000	0.00	INR Zero Only
6.33	SITC of High quality Dimming In junction box 1 way made up of MS Sheet metal fabricated housing High temperature resistant insulator material All metal housing offers best overall RF protection & electromagnetic shielding Black powder coated, fibre glands of suitable size fitted with 5 Pin DmX XLR Male socket Clamp arrangement for fixing or Raul plug arrangement for wall /floor fixing. (Leksa Lighting / Kenson Solace / Aultra Lighting / Canara)	4.00	Nos	1138.000	0.00	INR Zero Only
6.34	SITC of DmX Loop Junction Box having 1 No. of DmX 5 Pin XLR Female Socket & 1 No. DmX XLR Male Socket fitted on to a sheet metal fabricated compact Junction box powder coated with matt black texture finish paint. High temperature resistant insulator material All metal housing offers best overall RF protection & electromagnetic shielding. Clamp arrangement for fixing or Raul plug arrangement for wall /floor fixing. (Leksa Lighting / Kenson Solace / Aultra Lighting / Canara)	1.00	Nos	3112.000	0.00	INR Zero Only
6.35	SITC of Internal Earthing System with copper bare conductors all along the cable trays, metal parts and Installation Hardwares	1.00	Nos	20340.000	0.00	INR Zero Only
6.36	SITC of Black Powder coated cable trays made out of MS Sheet fabricated for a size of 40 x 75 x 40mm & 1.6 mm thickness undergone through 7 tank process with various chemical treatment to keep them rust free with perforation for heat dessipation provided with lid.	30.00	Nos	1310.000	0.00	INR Zero Only
6.37	SITC of DmX Male Female Connectors 5 Pin having rubber sheeth protection for Cross connecting DmX wiring connections. (Leksa Lighting / Kenson Solace / Aultra Lighting / Canara)	6.00	Nos	524.000	0.00	INR Zero Only
6.38	SITC of DmX Male Termination Connector 5 Pin soldered with required capacity of resistor for signal deframing. (Leksa Lighting / Kenson Solace / Aultra Lighting / Canara)	4.00	Nos	572.000	0.00	INR Zero Only
6.39	SITC of DmX Controller 12 Faders to control atleast 12 channels with Master control fader ,12 Set Scene saving options Master Fader Enabled Controller , LCD display access, Eeasy access key pads 12 Physical Fader unit for direct access Incremental Channel Up & Down Buttons DmX 512 protocol. (Leksa Lighting / Kenson Solace / Aultra Lighting / Canara)	1.00	Nos	24727.000	0.00	INR Zero Only

	Sq mm size.					
6.42	SITC of 5 Core DmX Cable with Sheathed housing on the cable, well designed insulation, low noise suitable to transmit DmX signal	150.00	meter	304.000	0.00	INR Zero Only
Total in				1	0.00	INR Zero Only
Quoted Rate in			Select		0.0000	Zero Only
Figures			o e le c i		0.0000	Zolo Olly
Quoted Rate in Words		INR Zero Only				