

**NAHEP**

INSTITUTIONAL DEVELOPMENT PLAN
National Agricultural Higher Education Project
Sri Karan Narendra Agriculture University
Jobner-303329, Distt. Jaipur (Rajasthan)



Phone: 01425-254022; Email ID: pi.nahep@sknau.ac.in

No: SKNAU/NAHEP/Proc./2021-22/129

Date-05.01.2022

Activity No.: IN-SKNAU-JOBNER-244108-CW-RFQ/ Modifications of Classrooms

To,

PROSPECTIVE SUPPLIERS

SUBJECT: RE- INVITATION FOR QUOTATIONS FOR WORK OF MODIFICATIONS OF CLASS ROOMS AT SKNCOA, JOBNER AND COA, LALSOT

Dear Sir,

1. You are invited to submit your most competitive quotation for the following works: -

Sr. No.	Brief Description of the Works	Approximate value of Works (Rs.) (Lakhs)	Period of Completion
1	Modifications of Class Rooms at SKNCOA, Jobner	20.00	75 Days
2	Modifications of Class Rooms at COA, Lalsot	10.00	75 Days

2. Government of India has received a financing from the International Bank for Reconstruction and Development (IBRD) in various currencies towards the cost of the National Agricultural Higher Education Project (NAHEP) and intends to apply part of the proceeds of this Loan to eligible payments under the contract for which this invitation for quotations is issued.
3. To assist you in the preparation of your quotation, we are enclosing the following:
- Detailed Bill of Quantities, with estimated rates and prices;
 - Instructions to Bidders (in two sections).
 - Draft Contract Agreement format which will be used for finalizing the agreement for this Contract.
4. **You are requested to provide your offer latest by 11:00 AM on 12/01/2022.**
5. Quotations will be opened in the presence of Bidders or their representatives who choose to attend at **2.00 PM on 12/01/2022** in the Office of IDP-NAHEP, SKNAU, Jobner.
6. We look forward to receiving your quotations and thank you for your interest in this project.

A. P.
5.1.2022
PI, IDP-NAHEP
Sri Karan Narendra Agriculture University,
Jobner-Jaipur

INSTRUCTIONS TO BIDDERS

SECTION – A

1. Scope of Works

The Principal Investigator, IDP-NAHEP, SKNAU Jobner invites quotations for the works as detailed in the table given below:

Sr. No.	Brief Description of the Works	Approximate value of Works (Rs.) (Lakhs)	Period of Completion
1	Modifications of Class Rooms at SKNCOA, Jobner	20.00	75 Days
2	Modifications of Class Rooms at COA, Lalsot	10.00	75 Days

The successful bidder will be expected to complete the works by the intended completion date specified above.

2. **Qualification of the bidder:** The bidder shall provide qualification information which shall include: -

- Total monetary value of construction works performed for each year of the last 3 years;
- Income tax clearance certificate from the concerned IT circle;
- Report on his financial standing (Balance sheet); and
- Details of any litigation, current or during the last 3 years in which the bidder is involved, the parties concerned and disputed amount in each case.

3. To qualify for award of the contract the bidder: -

- should have satisfactorily completed as a prime contractor at least one similar work of value not less than Rs. 5,00,000.00 in the last three years;
- should possess valid electrical license for executing building electrification works (in the event of the works being sub-contracted, the sub-contractor should have the necessary license);
- should possess required valid license for executing the water supply/sanitary works (in the event of the works being sub-contracted, the sub-contractor should have the necessary license);

4. Bid Price

- The contract shall be for the whole works as described in the Bill of quantities, drawings and technical specifications. Corrections, if any, shall be made by crossing out, initialing, dating and re writing.

- b. All duties, taxes and other levies payable by the contractor under the contract shall be included in the total price.
- c. The rates quoted by the bidder shall be fixed for the duration of the contract and shall not be subject to adjustment on any account.
- d. The rates should be quoted in Indian Rupees only.

5. Submission of Quotations

- 5.1. The bidder is advised to visit the site of works at his own expense and obtain all information that may be necessary for preparing the quotation.
- 5.2. **The bidder will submit separate quotation for each work mentioned at Sr. No. 1 and Sr. No. 2 in the table given at point no. 1 i.e., scope of work.**
- 5.3. The quotation submitted by the bidder shall comprise the following: -
 - a. **Quotation (separate for each work) in the format given in Section B.**
 - b. **Signed Bill of Quantities (Annexure I-A and Annexure I-B); and**
 - c. **Qualification information form given in Section B duly completed.**
- 5.4. The bidder shall seal the quotation in an envelope addressed to the **Principal Investigator, IDP-NAHEP, SKNAU, Jobner**. The envelope will also bear the following identification:
 - Quotation for **“Modifications of Class Rooms”**
 - Do not open before 02.00 PM on 12/01/2022.
- 5.5. Quotations must be received in the office of **IDP-NAHEP, SKNAU, Jobner** not later than the time and date given in the letter of invitation. If the specified date is declared a holiday, quotations shall be received up to the appointed time on the next working day.
- 5.6. Any quotation received after the deadline for submission of quotations will be rejected and returned unopened to the bidder.

6. Validity of Quotation

Quotation shall remain valid for a period not less than 60 days after the deadline date specified for submission.

7. Opening of Quotations

Quotations will be opened in the presence of bidders or their representatives who choose to attend on the date and time and at the place specified in the letter of invitation.

8. Information relating to evaluation of quotations and recommendations for the award of contract shall not be disclosed to bidders or any other persons not officially concerned with the process until the award to the successful bidder is announced.

9. Evaluation of Quotations

The Employer will evaluate and compare the quotations determined to be substantially responsive i.e. which

- a. **The quotations submitted will be evaluated separately for each work;**
- b. meet the qualification criteria specified in clause 3 above;
- c. are properly signed; and
- d. conform to the terms and conditions, specifications and drawings without material deviations.

10. Award of contract

The Employer will award the contract to the bidder whose quotation has been determined to be substantially responsive and who has offered the lowest evaluated quotation price and who meets the specified qualification criteria.

- 10.1. Notwithstanding the above, the Employer reserves the right to accept or reject any quotations and to cancel the bidding process and reject all quotations at any time prior to the award of contract.
- 10.2. The bidder whose bid is accepted will be notified of the award of contract by the Employer prior to expiration of the quotation validity period.
- 10.1. The Successful Bidder has to complete the work within the stipulated time given in the work order. If Bidder fails to execute the work within the given time then liquidated damage @0.05% per day will be deducted from the total contract value.

11. Performance Security

Within 15 days of receiving letter of acceptance, the successful bidder shall deliver to the **PI, IDP-NAHEP, SKNAU, Jobner** the performance security (bank draft in favor of the Employer) for an amount equivalent of 3% of the contract price. The Performance Security shall be valid till the expiry of the period of maintenance of the work, specified in clause 12.

12. Period of Maintenance:

The "Period of Maintenance" for the work is six months from the date of taking over possession or one full monsoon season whichever occurs later. During the period of maintenance, the contractor will be responsible for rectifying any defects in construction free of cost to the Employer.

13. Purchase of all construction materials including cement and steel as per the specifications (ISI certification marked goods wherever available) shall be the responsibility of the contractor.

SECTION - B

1. **Format for Qualification Information.**
2. **Format for Submission of Quotation.**
3. **Format of Letter of Acceptance.**

QUALIFICATION INFORMATION

1 For Individual Bidders

1.1 Principal place of business: _____

Power of attorney of signatory of Quotation.
[Attach copy]

1.2 Total value of Civil Engineering construction work performed in the last three years (in Rs. Lakhs)

2018-19 _____
2019-20 _____
2020-21 _____

1.3 Work performed as prime contractor (in the same name) on works of a similar nature over the last three years.

<u>Project Name</u>	<u>Name of Employer</u>	<u>Description of work</u>	<u>Contract No.</u>	<u>Value of contract (Rs.Lakhs)</u>	<u>Date of issue of work order</u>	<u>Stipulated period of completion</u>	<u>Actual date of completion</u>	<u>Remarks explaining reasons for delay and work completed</u>
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Existing commitments and on-going works:

<u>Description of Work</u>	<u>Place & State</u>	<u>Contract No. & Date</u>	<u>Value of Contract (Rs. Lakh)</u>	<u>Stipulated period of completion</u>	<u>Value of works* remaining to be completed (Rs. Lakhs)</u>	<u>Anticipated date of completion</u>
(1)	(2)	(3)	(4)	(5)	(6)	(7)

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* Enclose a certificate from Engineer concerned.

1.4 Proposed subcontracts and firms involved.

Sections of the works	Value of Sub-contract	Sub-contractor (name & address)	Experience in similar work
*	*	*	*
*	*	*	*
*	*	*	*
	*	*	*

1.5 Evidence of access to financial resources to meet the requirements of working capital : cash in hand, lines of credit, etc. List them below and attach copies of support documents.

1.6 Name, address, and telephone, telex, and fax numbers of the Bidders' bankers who may provide references if contacted by the Employer.

1.7 Information on litigation history in which the Bidder is involved.

Other party(ies)	Employer	Cause of dispute	Amount involved	Remarks showing present status

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QUOTATION I

Description of the Works: **Modifications of Class Rooms at SKNCOA, Jobner**

To:

The Principal Investigator
IDP-NAHEP, SKNAU, Jobner

Subject: **Modifications of Class Rooms at SKNCOA, Jobner.**

Reference: Letter No. dated..... from.....

Sir,

We offer to execute the Works described in your letter referred to above in accordance with the Conditions of Contract enclosed therewith at.....percentage above / below the estimated rates, i.e., for a total Contract Price of -

Rs. ** _____ [in figures]

Rs. _____ [in words]

This quotation and your written acceptance of it shall constitute a binding contract between us. We understand that you are not bound to accept the lowest or any quotation you receive.

We hereby confirm that this quotation is valid for 60 days as required in Clause 6 of the Instructions to Bidders.

Yours faithfully,

Authorized Signature : _____ Date: _____

Name & Title of Signatory : _____

Name of Bidder : _____

Address : _____

Ac **To be filled in by the Bidder, together with his particulars and date of submission at the bottom of this Form.

QUOTATION II

Description of the Works: **Modifications of Class Rooms at COA, Lalsot**

To:

The Principal Investigator
IDP-NAHEP, SKNAU, Jobner

Subject: **Modifications of Class Rooms at COA, Lalsot.**

Reference: Letter No. dated..... from.....

Sir,

We offer to execute the Works described in your letter referred to above in accordance with the Conditions of Contract enclosed therewith at.....percentage above / below the estimated rates, i.e., for a total Contract Price of -

Rs. ** _____ [in figures]

Rs. _____ [in words]

This quotation and your written acceptance of it shall constitute a binding contract between us. We understand that you are not bound to accept the lowest or any quotation you receive.

We hereby confirm that this quotation is valid for 60 days as required in Clause 6 of the Instructions to Bidders.

Yours faithfully,

Authorized Signature : _____ Date: _____

Name & Title of Signatory : _____

Name of Bidder : _____

Address : _____

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**To be filled in by the Bidder, together with his particulars and date of submission at the bottom of this Form.

**LETTER OF ACCEPTANCE
CUM NOTICE TO PROCEED WITH THE WORK**

(LETTERHEAD OF THE EMPLOYER)

Dated : _____

To : _____ [Name and address of the Contractor]

Dear Sirs,

This is to notify you that your Quotation dated _____ for execution of the _____ for the contract price of Rupees _____ [amount in words and figures], is hereby accepted by us.

You are hereby requested to furnish performance security for an amount of Rs. _____ (equivalent to 3% of the contract price) within 15 days of the receipt of the letter. The Performance Security in the form of Bank guarantee or a Bank draft in favour of(Employer) shall be valid till the expiry of the period of maintenance i.e. upto _____. Failure to furnish the Performance Security will entail cancellation of the award of contract.

You are also requested to sign the agreement form and proceed with the work not later than _____ under the instructions of the Engineer, _____ and ensure its completion within the contract period.

With the issuance of this acceptance letter and your furnishing the Performance Security, contract for the above said work stands concluded.



Yours faithfully,

**Authorized Signature
Name and title of Signatory**

**Draft Agreement form for
Construction through National Shopping**

ARTICLES OF AGREEMENT

This deed of agreement is made in the form of agreement on _____ day
_____ month _____ 199 ____, between the
_____ (Employer) or his authorized representative (hereinafter
referred to as the first party) and _____ (Name of the Contractor), S/O
_____ resident of _____ (hereinafter referred to as the second party),
to execute the work of construction of _____ (hereinafter referred to
as works) on the following terms and conditions.

2. Cost of the Contract

The total cost of the works (hereinafter referred to as the "total cost") is Rs. ____ as reflected in Annexure - 1.

3.1 Payments under its contract:

Payments to the second party for the construction work will be released by the first party in the following manner :-

50% of work done : 50% of Total Cost

On completion of work : 40% of Total Cost

Handover of the work : 10% of Total Cost

3.2 Payments at each stage will be made by the first party :

- (a) on the second party submitting an invoice for an equivalent amount ;
- (b) on certification of the invoice (except for the first installment) by the engineer nominated by the first party with respect to quality of works in the format in Annexure - 2; and
- (c) upon proper and justified utilization of at least 50 % of the previous installment and 100 % of any prior installment.

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4. Notice by Contractor to Engineer

The second party, on the works reaching each stage of construction, issue a notice to the first party or the Engineer nominated by the first party (who is responsible for supervising the contractor, administering the contract, certifying the payments due to the contractor, issuing and valuing variations to the contract, awarding extensions of time etc.), to visit the site for certification of stage completion. Within 15 days of the receipt of such notice, the first party or the engineer nominated by it, will ensure issue of stage completion certificate after due verification.

5. Completion time

The works should be completed in _____ (months/weeks/days) from the date of this Agreement. In exceptional circumstances, the time period stated in this clause may be extended in writing by mutual consent of both the parties.

6. If any of the compensation events mentioned below would prevent the work being completed by the intended completion date, the first party will decide on the intended completion date being extended by a suitable period :

- a) The first party does not give access to the site or a part thereof by the agreed period.
- b) The first party orders a delay or does not issue completed drawings, specifications or instructions for execution of the work on time.
- c) Ground conditions are substantially more adverse than could reasonably have been assumed before issue of letter of acceptance and from information provided to second party or from visual inspection of the site.
- d) Payments due to the second party are delayed without reason.
- e) Certification for stage completion of the work is delayed unreasonably.

7. Any willful delay on the part of the second party in completing the construction within the stipulated period will render him liable to pay liquidated damages. @ Rs. * _____ per day which will be deducted from payments due to him. The first party may cancel the contract and take recourse to such other action as deemed appropriate once the total amount of liquidated damages exceeds 2 % of the contract amount.

(Note : The amount of liquidated damages per day should be determined at 0.05 % of the contract value of the works and indicated here).

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8. Duties and responsibilities of the first party

- 8.1** The first party shall be responsible for providing regular and frequent supervision and guidance to the second party for carrying out the works as per specifications. This will include written guidelines and regular site visit of the authorized personnel of the first party, for checking quality of material and construction to ensure that it is as per the norms.
- 8.2** The first party shall supply 3 sets of drawings, specifications and guidelines to the second party for the proposed works.
- 8.3** Possession of the site will be handed over to the second party within 10 days of signing of the agreement.
- 8.4** The Engineer or such other person as may be authorized by the first party shall hold meeting once in a month where the second party or his representative at site will submit the latest information including progress report and difficulties if any, in the execution of the work. The whole team may jointly inspect the site on a particular day to take stock of activities.
- 8.5** The Engineer shall record his observations/instructions at the time of his site visit in a site register maintained by the second party. The second party will carry out the instructions and promptly rectify any deviations pointed out by the engineer. If the deviations are not rectified, within the time specified in the Engineer's notice, the first party as well as the engineer nominated by it, may instruct stoppage or suspension of the construction. It shall thereupon be open to the first party or the engineer to have the deviations rectified at the cost of the second party.

9. Duties and responsibilities of the second party

- 9.1** The second party shall :
- a) take up the works and arrange for its completion within the time period stipulated in clause 5;
 - b) employ suitable skilled persons to carry out the works ;
 - c) regularly supervise and monitor the progress of work ;
 - d) abide by the technical suggestions / direction of supervisory personnel including engineers etc. regarding building construction ;
 - e) be responsible for bringing any discrepancy to the notice of the representative of the first party and seek necessary clarification :

- f) ensure that the work is carried out in accordance with specifications, drawings and within the total of the contract amount without any cost escalation ;
- g) keep the first party informed about the progress of work ;
- h) be responsible for all security and watch and ward arrangements at site till handing over of the building to the first party ; and
- i) maintain necessary insurance against loss of materials/cash, etc. or workman disability compensation claims of the personnel deployed on the works as well as third party claims.
- f) Pay all duties, taxes and other levies payable by construction agencies as per law under the contract (First party will effect deduction from running bills in respect of such taxes as may be imposed under the law).

10. Variations / Extra Items

The works shall be carried out by the second party in accordance with the approved drawings and specifications. However, if, on account of site conditions or any other factors, variations are considered necessary, the following procedure shall be followed:-

- a) The second party shall provide the Engineer with a quotation for carrying out the Variation when requested to do so by the Engineer. The Engineer shall assess the quotation, which shall be given within seven days of the request before the Variation is ordered.
- b) If the quotation given by the second party is unreasonable, the Engineer may order the Variation and make a change to the Contract Price which shall be based on Engineer's own forecast of the effects of the Variation on the Contractor's costs.
- c) The second party shall not be entitled to additional payment for costs which could have been avoided by giving early warning.

11. Securities

The Performance Security shall be provided to the Employer no later than the date specified in the Letter of Acceptance and shall be issued in an amount and form and by a bank or surety acceptable to the Employer. The Performance Security shall be valid until a date 28 days from the date of issue of the Certificate of Completion in the case of a Bank Guarantee.

12. Termination

- 12.1 The Employer may terminate the Contract if the other party causes a fundamental breach of the Contract.

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- 12.2 Fundamental breaches of Contract include; but shall not be limited to the following:
- (a) the contractor stops work for 28 days and the stoppage has not been authorized by the Engineer;
 - (b) the Contractor has become bankrupt or goes into liquidation other than for a reconstruction or amalgamation;
 - (c) the Engineer gives Notice that failure to correct a particular Defect is a fundamental breach of Contract and the Contractor fails to correct it within a reasonable period of time determined by the Engineer;
 - (d) the Contractor does not maintain a security which is required;
- 12.3 Notwithstanding the above, the Employer may terminate the Contract for convenience.
- 12.4 If the Contract is terminated the Contractor shall stop work immediately, make the Site safe and secure and leave the Site as soon as reasonably possible.

13. Payment upon Termination

- 13.1 If the Contract is terminated because of a fundamental breach of Contract by the Contractor, the Engineer shall issue a certificate for the value of the work done less advance payments received up to the date of the issue of the certificate, less other recoveries due in terms of the contract, less taxes due to be deducted at source as per applicable law.
- 13.2 If the Contract is terminated at the Employer's convenience, the Engineer shall issue a certificate for the value of the work done, the reasonable cost of removal of Equipment, repatriation of the Contractor's personnel employed solely on the Works, and the Contractor's costs of protecting and securing the Works and less advance payments received up to the date of the certificate, less other recoveries due in terms of the contract and less taxes due to be deducted at source as per applicable law.

14. Dispute settlement

If over the works, any dispute arises between the two parties, relating to any aspects of this Agreement, the parties shall first attempt to settle the dispute through mutual and amicable consultation.

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be appointed by the first party. The Arbitration will be conducted in accordance with the Arbitration and Conciliation Act, 1996. The decision of the Arbitrator shall be final and binding on both the parties.

BILL OF QUANTITIES

Name of work :- Modification of class rooms at SKNCOA Jobner.

Rates based on :- BSR PWD Jaipur City Circle 2019 & Electrical Work of 2021.

PART -A

BSR Item no	S. No	Item Description	Quantity	Units	Rate	Total Amount
14.55	1	Dismantling old plaster or skirting, raking out joints and cleaning the surface for plaster including disposal of rubbish to the dumping ground within 50 meter lead.	300.00	Sqm	14.00	4200.00
12.3.1	2	Plaster on new surface on walls in cement sand mortar 1:6 including racking of joint etc. complete fine finish : 25 mm thick	300.00	Sqm	176.00	52800.00
7.5.3	3	Providing and fixing Granite stone slab mirror polished and machine edge cut in walls, pillars, steps, Shelves, Sills Counters, Floors etc. laid on 12mm (Av.) thick base of cement mortar 1:3 (1 cement : 3 coarse sand) jointing with white cement mortar 1:2 (1 white cement : 2 marble dust) with pigment to match the shade of the marble slab including grinding, rubbing and polishing complete. Jhunjhunu / Jalore (Red/Chocolate/Black/Pink Colour) Above 3601 Cm2 Slabs	20.00	Sqm	2753.00	55060.00
7.19.2	4	P & F 1st quality Heavy Duty Vitrified Double Charged tiles on floor, skirting and steps etc.in different sizes (thickness minimum 10mm) with water absorption less than or equal 0.08% and conforming to IS 15622 of approved make in all colour and shade, laid with 20 mm thick CM 1: 4 including grouting the joints with white cement and matching pigment etc complete. size 600 mm X 600mm	300.00	Sqm	946.00	283800.00
12.37.2b	5	Distempering with oil bound washable distemper of approved brand and manufacture to give an even shade including all scaffolding: Old work (one or more coats) including scrapping surface and necessary repairs. Same colour	2000.00	Sqm	10.00	20000.00
12.46.2	6	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade : One or more coats on old work.	50.00	Sqm	31.00	1550.00
12.46.1	7	_Do_ Two or more coats on new work	150.00	Sqm	63.00	9450.00
12.22.1	8	Providing and applying white cement based putty over plastered surface to prepare the surface even and smooth complete: New Plastered Surface (three or more coats)	600.00	Sqm	76.00	45600.00
12.37.1	9	Distempering with oil bound washable distemper of approved brand and manufacture to give an even shade including all scaffolding: New work (two or more coats) over and including scrapping and priming coat with cement primer.	600.00	Sqm	68.00	40800.00
10.2	10	Providing and fixing 20 mm thick precast terrazo tiles of approved make, with marble chips of size upto 6mm laid over roof with neat cement slurry mixed with pigment to match the shade of the tiles, including cutting ,grinding rubbing with machine complete on 20 mm thick bed of cement sand mortar 1 : 4.	300.00	Sqm	318.00	95400.00
10.22	11	Providing gola 75x75 mm in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 stone aggregate 10mm and down gauge) including finishing with cement mortar 1:3 (1 cement : 3 fine sand) as per standard design :	200.00	Mtr	101.00	20200.00
3.8	12	Providing & fixing precast cement concrete coping 1:2:4 mix 50 mm thick complete as per specification :	75.00	Sqm	334.00	25050.00

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16.1.1.2	13	Providing and fixing aluminum work for doors ,windows, ventilators and partition with extruded built up standard tubular / appropriate Z sections and other sections of approved make conforming to IS :733 and IS :1285, fixed with rawl plugs and screws or with fixing clips ,or with expansion hold fasteners including necessary filling up of gap. at junctions , at top ,bottom and sides with required PVC/neoprene felt etc. Aluminium section shall be smooth ,rust free, straight ,mitered and jointed mechanically wherever required including cleat angle Aluminium snap beading for glazing /paneling , C.P. brass/ stainless steel screws Al. Tower bolt & Al. handle & Al. Aldrop etc.,all complete as per architectural drawings and the directions of Engineer- in – charge .(Glazing and paneling to be paid for separately). For fixed portion Powder coating aluminum (minimum thickness of powder coating 50 micron) For fixed portion	300.00	Kg	319.00	95700.00
16.1.2.2	14	do For shutters builtup standard tubular sections of openable doors ,windows & ventilators including providing & fixing hinges / rollers etc. and making provision for fixing of fittings wherever required (lockes shall be paid for separately). Powder coating aluminum (minimum thickness of powder coating 50 micron)	950.00	Kg	346.00	328700.00
16.4.2	15	Providing and fixing 12 mm thick prelaminated three layer medium density (exterior grade) particle board Grade I, Type II conforming to IS : 12823 bonded formaldehyde synthetic resin ,of approved brand and manufacture in paneling fixed in aluminium doors ,windows shutters and partition frames with C.P. brass / stainless steel screws etc. complete as per architectural drawings and direction of engineer-in-charge.Prelaminated particle board with decorative lamination on both sides.	25.00	Sqm	993.00	24825.00
16.6.1	16	Providing and fixing double action hydraulic floor spring of approved brand and manufacture IS : 6315 marked, for doors including cost of cutting floors as required, embedding in floors and cover plates with brass pivot and single piece M.S. With stainless steel cover plate	5.00	Nos	1296.00	6480.00
16.5.2	17	Providing and fixing glazing in aluminium door, window ,ventilator shutters and partitions etc. with PVS / neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge.(Cost of aluminium snap beading shall be paid in basic item.) With float glass panes of 5.0 mm thickness (weight not less than 13.50 kg/sqm)	150.00	Sqm	820.00	123000.00
16.10.2	18	Providing and fixing expanded grill made of aluminum as per design and drawing having members section of size 7.5mm x 6.0mm and opening of size 102mm x 99mm to aluminum window/vent with required screws, Y and H aluminium sec (as per drawing) at the ends and middle joints respectively complete in all respect as per direction of engineer in charge. Powder coating aluminum (minimum thickness of powder coating 50 micron)	68.00	Sqm	1675.00	113900.00
16.12	19	Providing and fixing vertical Blinds , headrail shall be oriented aluminum alloy 50 mm vide x 18 mm high the thickness shall be 1.2 mm. Control unit shall be made of high grade polymer and shall be housed in side the headrail, which shall transfer motion from chain tilter to tilt rod. Chain tilter shall be made of plastic bead of diameter 4.5 mm through which 2 mm thick polyester code passes. Tilt rod shall be extruded aluminum having 3 key ways. Runner shall be moulded plastic and shall have to plastic wheels mounted on plastic exles to enable runner to slide unhindered in headrail. Luvcr shall be made of fabric 100 mm colour fast and shall have protective scotchgard coating to resist stains and dust. Bottom mechanism consist bottom weight made of powder coated galvanized steel for maximum corrosion resistance. The bottom weight shall be attached with bottom.	120.00	Sqm	1475.00	177000.00

	20	Providing and fixing 14 mm thick Acoustical with fine fissured tiles/ Mineral fibre high density tiles with butt edges false ceiling tiles of size 595x595 mm in true horizontal level suspended on inter locking metal grid of hot dipped galvanized steel sections (galvanized @ 170 gsm/sqm.) consisting of main "T" runner with suitably spaced joints to get required length and of size 24x38mm made from 0.30mm thick (minimum) sheet spaced at 1200mm center to center and cross "T" of size 24x25mm made of 0.30mm thick (minimum) sheet, 1200mm long spaced between main "T" at 600mm center to center to form a grid of 1200x600 mm and secondary cross "T" of length 600mm and size 24x25mm made of 0.30 mm thick (minimum) sheet to be interlocked at middle of the 1200x600mm panel to form grids of 600x600mm and wall angle of size 21x21x0.30 mm and laying false ceiling tiles of approved texture in the grid including, wherever, required, cutting/making, opening for services like diffusers, grills, light fittings, fixtures, smoke detectors etc. Main "T" runners to be suspended from ceiling using GI slotted cleats fixed to ceiling with 6 mm dia and 50mm long dash fasteners, 4mm GI adjustable rods with galvanized level clips spaced at 1200mm center to center along main T, bottom exposed width of 24mm of all T-sections shall be pre-painted with polyester paint, all complete at all heights as per specifications drawings and as directed by Engineer-in-Charge. (The tiles should of 90 % RH avg. NCR 0.55 light reflectance> 80% thermal conductivity K = 0.052-0.057 w/m K colour white. Fire performance class 0/class I(BS 476) with warranty against sag)	300.00	Sqm	966.00	289800.00
8.26	21	Providing and fixing IS : 3564 marked Aluminium die cast body tubular type universal hydraulic door closer with necessary accessories and screws etc. complete.	10.00	Nos	825.00	8250.00
		Total of Part-A				1821565.00
		PART "B" Electric work for BSR 2013				
E020500	22	Wiring of light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq. mm nominal size FR PVC insulated unsheathed flexible copper conductor 1.1 kV grade and 1.5 sq. mm nominal size FR PVC insulated unsheathed flexible copper earth conductor 1.1 kV grade (IS:694) of approved make in surface / recessed ISI marked medium duty PVC conduit & it's accessories, round tiles, Hot Dipped Galvanized Modular Box with earth terminal, screwless cage connectors for neutral looping in switch board & false ceiling point, 6 A Modular switch, Modular plate with grid plate, screws, making connections, testing etc. as required. Group- I				
E020501	A	short point (upto 3 mtr)	20.00	Each	245.00	4900.00
E020502	B	Medium point (upto 6 mtr.)	30.00	Each	463.00	13890.00
E020503	C	Long point (upto 10 mtr.)	30.00	Each	648.00	19440.00
E020700	23	Wiring of 3 pin 5 amp. Light plug point with 1.5 sq. mm nominal size FR PVC insulated unsheathed flexible copper conductor 1.1 kV grade and 1.5 sq. mm nominal size FR PVC insulated unsheathed flexible copper earth conductor 1.1 kV grade (IS:694) of approved make in surface / recessed ISI marked medium duty PVC conduit & it's accessories, Hot Dipped Galvanized M.S Modular box with earth terminal, screwless cage connectors for neutral looping in switch board , 6 A modular switch, 6 A modular socket, Modular plate with grid plate, screws, making connections, testing etc. as required. Group -I				
E020701	A	(a) On Board	10.00	Each	246.00	2460.00
E020702	B	(b) Short point (up to 3 mtr.)	10.00	Each	376.00	3760.00
E040800	24	Supplying and fixing of power plug point Modular accessories on hot dipped galvanized modular on surface or in recessed with suitable size of grid plate with cover plate including cost of modular 16 amp. Switch and socket outlet , making connection , testing , etc. as required. Group -I	40.00	Each	397.00	15880.00
	25	Supplying and drawing FR PVC insulated & unsheathed flexible copper conductor ISI marked (IS:694) of 1.1 kV grade and approved make in existing surface or recessed conduit/casing capping including making connections etc. as required Group-I				

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E040108	A	(a)2 x 2.5 sq. mm. + 1x1.5sqmm	100.00	Mtr	50.00	5000.00
E040117	B	(b)2 x 4.0 sq. mm. + 1 x 2.5 sq. mm.	150.00	Mtr	71.00	10650.00
E040121	C	(c)4 x 6.0 sq.mm	50.00	Mtr	160.00	8000.00
E073113	26	P & F following modular accessories made out of unbreakable and fire retardant poly carbonate with silver contacts including making connections testing etc. as required 5 step fan regulator 2 Module		Each	310.00	0.00
E060113	27	P&F 240/415 V AC MCB with positive isolation of breaking capacity not less than 10 KA (B/ C/ D tripping characteristic) ISI marked IS 8828(1996)]/ conforming to IEC 60898 in existing board/sheets including making connections with lugs, testing etc. as required. Single pole MCB , 40 A to 63 A rating, Group I	10.00	Each	284.00	2840.00
E060232	29	P&F 240/415 V isolator conforming to IS:13947-III/ IEC 60947-3 on existing board / sheet including making connections with lugs , testing etc. as required. Four pole isolator, 63 A rating , Group -1	5.00	Each	590.00	2950.00
	30	P&F IP20 LED ceiling / recessed / suspended mounting light fixture made from CRCA sheet steel housing, high purity / transmissivity diffuser for uniform light distribution. High efficiency driver electronics having efficiency > 85% and in compliance to IEC standards (Integral with light fixture). Power Consumption of 40W / 50W / 60W ~ 3000/3300/4200 lumens, System lumen efficacy of 70 - 80 lm/Watt output suitable for 2x36WFTL / 2x36W CFL / 3x36W CFL light fixtures, life time of 50,000 burning hours with 70% initial lumens maintained. CCT 3000°K & 4000°K.&6000°K.. Fixtures shall be CE compliance.36 W LED light fixture 2'x2' with acrylic /prismatic front cover.	35.00	Each	2535.00	88725.00
Total of Part-B						178495.00
G.Total						2000060.00

Gross Total Cost : Rs.

We agree to execute the works in accordance with the approved drawings and technical specifications at

percentage above/below the estimated rates, i.e., for a total contract price of Rs. (amount in figures)

(Rs. amount in words)

Signature of Contractor

BILL OF QUANTITIES

Name of work :- Modification of Class Rooms at COA, Lalsot.

Rates based on :- BSR PWD Dausa City Circle 2019 & Electrical Work of 2021.

PART -A

BSR Item no	S. No	Item Description	Quantity	Units	Rate	Total Amount
16.1.1.1	1	Providing and fixing aluminum work for doors ,windows, ventilators and partition with extruded built up standard tubular / appropriate Z sections and other sections of approved make conforming to IS :733 and IS :1285, fixed with rawl plugs and screws or with fixing clips ,or with expansion hold fasteners including necessary filling up of gap. at junctions , at top ,bottom and sides with required PVC/neoprene felt etc. Aluminium section shall be smooth ,rust free, straight ,mitered and jointed mechanically wherever required including cleat angle Aluminium snap beading for glazing /paneling , C.P. brass/ stainless steel screws Al. Tower bolt & Al. handle & Al. Aldrop etc.,all complete as per architectural drawings and the directions of Engineer- in – charge .(Glazing and paneling to be paid for separately). For fixed portion : Anodised aluminum (anodised transparent 81 dyed to required shade according to IS : 1868. (Minimum anodic coating of grade AC 15, Anodizing to be got done from approved Anodizer)	51.00	Kg	395.00	20145.00
16.1.2.1	2	Providing and fixing aluminum work for doors ,windows, ventilators and partition with extruded built up standard tubular / appropriate Z sections and other sections of approved make conforming to IS :733 and IS :1285, fixed with rawl plugs and screws or with fixing clips ,or with expansion hold fasteners including necessary filling up of gap. at junctions , at top ,bottom and sides with required PVC/neoprene felt etc. Aluminium section shall be smooth ,rust free, straight ,mitered and jointed mechanically wherever required including cleat angle Aluminium snap beading for glazing /paneling , C.P. brass/ stainless steel screws Al. Tower bolt & Al. handle & Al. Aldrop etc.,all complete as per architectural drawings and the directions of Engineer- in – charge .(Glazing and paneling to be paid for separately). For fixed portion : Powder coating aluminum (minimum thickness of powder coating 50 micron)	51.00	Kg	422.00	21522.00
16.4.1	3	Providing and fixing 12 mm thick prelaminated three layer medium density (exterior grade) particle board Grade I, Type II conforming to IS : 12823 bonded formaldehyde synthetic resin ,of approved brand and manufacture in paneling fixed in aluminium doors ,windows shutters and partition frames with C.P. brass / stainless steel screws etc. complete as per architectural drawings and direction of engineer-in-charge.: Pre-laminated particle board with decorative lamination on one side and balancing lamination on other side.	6.00	Sqm	958.00	5748.00

16.5.2	4	Providing and fixing glazing in aluminium door, window ,ventilator shutters and partitions etc. with PVS / neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge.(Cost of aluminium snap beading shall be paid in basic item.) With float glass panes of 5.0 mm thickness (weight not less than 13.50 kg/sqm)	5.00	Sqm	828.00	4140.00
16.8	5	Providing and fixing 100mm brass locks (best make of approved quality) for aluminium doors including necessary cutting and making good etc. complete.	3.00	Each	291.00	873.00
16.10.1	6	Providing and fixing expanded grill made of aluminum as per design and drawing having members section of size 7.5mm x 6.0mm and opening of size 102mm x 99mm to aluminum window/vent with required screws, Y and H aluminium sec (as per drawing) at the ends and middle joints respectively complete in all respect as per direction of engineer in charge. Anodised aluminum (anodised transparent 81 dyed to required shade according to IS : 1868. (Minimum anodic coating of grade AC 15, Anodizing to be got done from approved Anodizer)	42.00	Sqm	1759.00	73878.00
16.11	7	S&f fixed wire gauge of stainless steel of 14 mesh x 24 gauge to the aluminium window by Aluminium beading 20x3mm with suitable screws at not exceeding 150mm distance at all heights with all lead and lift with scaffolding.	42.00	Sqm	720.00	30240.00
16.12	8	Providing and fixing vertical Blinds , headrail shall be oriented aluminum alloy 50 mm wide x 18 mm high the thickness shall be 1.2 mm. Control unit shall be made of high grade polymer and shall be housed in side the headrail, which shall transfer motion from chain tilter to tilt rod. Chain tilter shall be made of plastic bead of diameter 4.5 mm through which 2 mm thick polyester code passes. Tilt rod shall be extruded aluminum having 3 key ways. Runner shall be moulded plastic and shall have to plastic wheels mounted on plastic exles to enable runner to slide unhindered in headrail. Luver shall be made of fabric 100 mm colour fast and shall have protective scotchgard coating to resist stains and dust. Bottom mechanism consist bottom weight made of powder coated galvanized steel for maximum corrosion resistance. The bottom weight shall be attached with bottom.	49.00	Sqm	1383.00	67767.00

10.28	9	Providing and fixing 15 mm thick Acoustical with fine fissured tiles/ Mineral fibre high density tiles with butt edges false ceiling tiles of size 595x595 mm in true horizontal level suspended on inter locking metal grid of hot dipped galvanised steel sections (galvanized @ 170 gsm/sqm.) consisting of main "T" runner with suitably spaced joints to get required length and of size 24x38mm made from 0.30mm thick (minimum) sheet spaced at 1200mm center to center and cross "T" of size 24x25mm made of 0.30mm thick (minimum) sheet, 1200mm long spaced between main "T" at 600mm center to center to form a grid of 1200x600 mm and secondary cross "T" of length 600mm and size 24x25mm made of 0.30 mm thick (minimum) sheet to be interlocked at middle of the 1200x600mm panel to form grids of 600x600mm and wall angle of size 21x21x0.30 mm and laying false ceiling tiles of approved texture in the grid including, wherever, required, cutting/making, opening for services like diffusers, grills, light fittings, fixtures, smoke detectors etc. Main "T" runners to be suspended from ceiling using GI slotted cleats fixed to ceiling with 6 mm dia and 50mm long dash fasteners, 4mm GI adjustable rods with galvanised level clips spaced at 1200mm center to center along main T, bottom exposed width of 24mm of all T-sections shall be pre-painted with polyester paint, all complete at all heights as per specifications drawings and as directed by Engineer-in-Charge. (The tiles should of 90 % RH avg. NCR 0.55 light reflectance> 80% thermal conductivity K = 0.052-0.057 w/m K colour white. Fire performance class 0/class I(BS 476) with warranty against sag)	403.00	Sqm	867.00	349401.00
7.5.3	10	Providing and fixing Granite stone slab mirror polished and machine edge cut in walls, pillars, steps, Shelves, Sills Counters, Floors etc. laid on 12mm (Av.) thick base of cement mortar 1:3 (1 cement : 3 coarse sand) jointing with white cement mortar 1:2 (1white cement : 2 marble dust) with pigment to match the shade of the marble slab including grinding, rubbing and polishing complete. Jhunjhunu / Jalore (Red/Chocolate/Black/Pink Colour): Above 3601 Cm2 Slabs	17.00	Sqm	3337.00	56729.00
7.8.2	11	Extra for providing edge moulding to 15-18mm thick marble/ Granite/Kota stone counters, Vanities etc. including machine polishing to edge to give high gloss finish etc. complete as per design approved by Engineer-in-Charge. Granite Work	210.00	Sqm	262.00	55020.00

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E150400	30	Providing & Fixing of ISO Certified company made BEE approved copper wounded 1200 mm sweep BLDC technology power saving ceiling fan with longer life span and low maintenance 5 star rated which can with stand on votage fluctuations from 140 volts to 240 volts, power factor not less then 0.9, service value (CMM/W) minimun 6.85, air delivery minimun 215 CMM, speed 350 RPM (to lerrance as per IS:3742019) THD less then 10% and complete with down rod upto 30cm with secondary support safety cable, cotter pin with 3x1.5 sq.mm pvc insulated flexible copper conductor making connection testing etc. as required. Appropriate OEM test certificate shall be submitted by contractor. All as per pre approved by Engineer-in-charge. For additional technical parameters of products/ work, refer Annexure"A" attached with this BSR .				
E150401		Without Remote	48.00	Each	2432.00	116736.00
E150900	31	Providing & Fixing of Heavy duty capacitor start, copper woind Double ball bearing 900/1400 RPM single phase Exhaust fan as per PWD specification for electrical Works, conforming to IS:2312 ISI marked in existing opening including making connections testing etc. as required. OEM shall be an ISO certified company. Appropriate OEM test certificate shall be submitted by contractor. All as per pre approved by Engineer-in-charge. For additional technical parameters of products/ work, refer Annexure "A" attached with this BSR .				
E150901		300 mm sweep(900/1400 RPM)	3.00	Each	2252.00	6756.00
E150100	33	Making of hole in wall (brick/ stone) of required size for housing exhaust fan and making good the same, with cement plaster as required of following size:				
E150101		Up to 457 mm size	3.00	Each	282.00	846.00
E170900	B	Providing & Fixing of IP 40 LED Surface/ Recessed/ suspended mounting Mid power SMD type LED Light fixture made from CRCA sheet steel housing, high purity/ transmisivity UV stabilized Non-yellowish diffuser for uniform light distribution. High efficiency with 2.5 KV internal/ external surge protection BIS certified isolated driver having efficiency >85%, with Short & Open circuit protection and incompliance to IEC standards (Integral with light fixture). System lumen efficacy of ≥ 120 lm/Watt, THD <10%, p.f. ≥ 0.95 , CRI >80, life time of minimum 50000 Burning Hours with, 70% of intial Lumen maintained till life ends, CCT 3000°K/ 4000°K/ 5700°K/ 6000°K/ 6500°K (As per ANSIB in), maximum power consumption should not more than the specified rating and Fixture shall be of BIS standard and trademark certificate (T.C.). Manufactures Word Mark/ Name Engraved/ Embossing/ Screen printing on housing. OEM must have its own in house NABL lab setup for all testing facilities for LED fixtures. (LM79/ LM80) certificate/ Reporke detectors etc. Main "T" runners to be suspended from ceiling using GI slotted cleats fixed to ceiling with 6 mm dia and 50mm long dash fasteners, 4mm GI adjustable rods with				

E170911	C	Recessed Mounting: 36W LED light fixture 2'x2' with acrylic / prismatic front cover.	69.00	Each	2346.00	161874.00
E010500	34	Wiring of light point/ fan point/ exhaust fan point/ call bell point as per PWD specification for electrical Works with ISI marked 1.5sq.mm nominal size FRPVC insulated unsheathed flexible copper conductor 1.1kV grade (IS:694) and 1.5sq.mm nominal size FRPVC insulated unsheathed flexible copper earth conductor 1.1kV grade (IS:694) inrecessed ISI marked MMS (IS:9537P-III) vergin material PVC conduit & it's all accessories (J.B., Bends etc.), roundtiles, 18 SWG Hot Dipped Galvanized Modular Box with earth terminal, 6 A Modular switch, Modular face plate with grid plate, 3 pin ceiling rose/ lamp Holder/ 3 pin connector, screws etc, making connections, all as per pre approved by Engineer-in-charge, testing etc. complete as required. For specification of copper Conductor, Phenolic Laminated sheet's & Electrical/ Wiring accessories refer Chapter E-04, E-05 & E-07. For additional technical parameters of products/ work, refer Annexure "A" attached with this BSR .				
E010502	A	Medium point (up to 6 mtr.)	30.00	Each	360.00	10800.00
E010503	B	Long point (up to 10 mtr..)	40.00	Each	465.00	18600.00
		G.Total				1001075.00

Gross Total Cost : Rs.

We agree to execute the works in accordance with the approved drawings and technical specifications at percentage above/below the estimated rates, i.e., for a total contract price of Rs. (amount in figures) (Rs. amount in words)

Signature of Contractor

Format of certificate

Certified that the works upto ----- level in respect of construction of ----- at ----- have been executed in accordance with the approved drawing and technical specifications.

dc

Signature
Name & Designation
(Official address)

Place :
Date :

Office seal