



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](mailto:pi.nahep@sknau.ac.in)

No: SKNAU/NAHEP/Proc./2021-22/128

Date- 05.01.2022

Activity No.: IN-SKNAU-JOBNER-179285-CW-RFQ/ Renovation of Undergraduate Laboratories

To,

**PROSPECTIVE SUPPLIERS**

**SUBJECT: RE-INVITATION FOR QUOTATIONS FOR WORK OF RENOVATION OF UNDERGRADUATE LABORATORIES 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	Renovation of Undergraduate Laboratories at SKNCOA, Jobner	20.00	75 Days
2	Renovation of Undergraduate Laboratories 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.

  
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	Renovation of Undergraduate Laboratories at SKNCOA, Jobner	20.00	75 Days
2	Renovation of Undergraduate Laboratories 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 **“Renovation of Undergraduate Laboratories”**
  - 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.**
- be* 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.

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<u>Project Name</u>	<u>Name of Employer</u>	<u>Descrip- tion 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 comple- tion</u>	<u>Actual date of comple- tion</u>	<u>Remarks explaining reasons for delay and work completed</u>
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Existing commitments and on-going works:

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<u>Description of Work</u>	<u>Place &amp; State</u>	<u>Contract No. &amp; 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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*As*  
\* Enclose a certificate from Engineer concerned.

1.4 Proposed subcontracts and firms involved.

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

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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.

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

Description of the Works: **Renovation of Undergraduate Laboratories at SKNCOA, Jobner**

To:

The Principal Investigator  
IDP-NAHEP, SKNAU, Jobner

Subject: **Renovation of Undergraduate Laboratories 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 : \_\_\_\_\_

 \*\*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: **Renovation of Undergraduate Laboratories at COA, Lalsot**

To:

The Principal Investigator  
IDP-NAHEP, SKNAU, Jobner

Subject: **Renovation of Undergraduate Laboratories 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 : \_\_\_\_\_

*de* \*\*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**

*JK*

**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.

**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.

*to*

- 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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In the event of agreement not being reached, the matter will be referred for arbitration by a Sole Arbitrator not below the level of retired Superintending Engineer, PWD to

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 :- Renovation of UG Labs at SKNCOA Jobner.

Rates based on :- BSR PWD Jaipur City Circle 2019 &amp; 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
3.1.6	2	Providing and laying in position cement concrete including curing, compaction etc. complete in specified grade excluding the cost of centering and shuttering - All work up to plinth level. 1:4:8 (1 cement : 4 coarse sand : 8 graded stone aggregate 40mm nominal size).	20.00	Cum	3002.00	60040.00
5.8.3	3	Half brick masonry in Superstructure , above plinth level upto floor V level using bricks of designation 75 . Cement mortar 1 : 6 (1 cement : 6 coarse sand)	120.00	Sqm	503.00	60360.00
4.3	4	Providing and laying in position specified grade of cement concrete for RCC structural elements upto floor five level including curing, compaction, finishing with rendering in cement sand mortar 1:3 (1 cement: 3 coarse sand) and making good the joints and cost of plastizers ( if required) excluding the cost of centering, shuttering and reinforcement for Beams, suspended floors, roofs, grids having slopes up to 15°, landings, balconies, shelves, chajjas, lintels, bands, plain windows sills, staircases and spiral staircases etc. M20 grade Nominal Mix / Design Mix	12.00	Cum	4714.00	56568.00
4.10.2	5	Centering & shuttering with plywood or steel sheets including strutting, propping bracing both ways with steel props and removal of formwork for upto floor five level for :Suspended floors, roofs, landings, staircases, balconies, girders, cantilevers, bands, coping bed plates, anchor blocks, sills, chhajjas, lintel, beam, plinth beam etc.	115.00	Sqm	309.00	35535.00
4.13.3	6	Providing and fabricating reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding (including cost of binding wire) all complete up to floor five level. Thermo-mechanically Treated bars (Conforming of relevent IS code)	1200.00	Kg	64.00	76800.00
12.3.1	7	Plaster on new surface on walls in cement sand mortar 1:6 including racking of joint etc. complete fine finish : 25 mm thick	700.00	Sqm	176.00	123200.00
11.18.2	8	Kota stone slab flooring 25 mm thick 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)For area of each slab from 2001 to 5000 Sq.Cm	25.00	Sqm	930.00	23250.00
7.5.3	9	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	149.00	Sqm	2753.00	410197.00

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7.14	10	Providing and fixing 1st quality standard white, grey, ivory, fume red brown, light green, light blue and other light shades glazed tiles conforming to IS : 13753 & IS :15622 of size 200mm x 300mm in walls, floors, steps, pillars etc. laid on a bed of neat cement slurry finished with flush pointing in the white cement mixed with pigment to match the shade of the tile complete (excluding the cost of cement plaster on walls and pillar).	150.00	Sqm	613.00	91950.00
7.19.2	11	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	480.00	Sqm	946.00	454080.00
12.37.2b	12	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	1000.00	Sqm	10.00	10000.00
12.46.2	13	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade : One or more coats on old work.	150.00	Sqm	31.00	4650.00
12.46.1	14	_Do_ Two or more coats on new work	50.00	Sqm	63.00	3150.00
12.22.1	15	Providing and applying white cement based putty over plastered surface to prepare the surface even and smooth complete: <b>New Plastered Surface (three or more coats)</b>	500.00	Sqm	76.00	38000.00
12.37.1	16	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.	500.00	Sqm	68.00	34000.00
1.36.3	17	P & F <i>WVC wash basin</i> (1 <sup>st</sup> quality, I.S. : 2556 Mark) of approved make with C.I. brackets duly painted, 1 No. 15 mm C.P. Pillar cock (IS : 8934 Mark) & 32 mm C.P. brass waste coupling of approved make, 25 mm G.I. waste pipe complete including cutting & making good the wall.: Size 550 mm x 400 mm	80.00	Nos	2362.00	188960.00
1.38.9.1	18	P & F Kitchen & Lab. Sink of approved make with C.I. brackets duly painted, 40 mm C.P. waste coupling, C.P. Brass chain with rubber plug, 40 mm G.I. waste pipe up-to floor level complete including cutting and making good the wall & floor : 1.0 mm thick Salem stainless steel AISI -304 & IS 13983-1994 kitchen sink of approved make as per Engineer-in-charge with large waste coupling.18 x 16 x 6 16x14x6	10.00	Nos	3470.00	34700.00
1.48.2	19	P & F Grating of approved quality/make:Stainless Steel Sheet size 125mm dia. Heavy Quality of approved make	79.00	Nos	88.00	6952.00
2.7	20	P & F Bib Cock (IS : 8931 Mark), Superior quality of approved make:				
2.7.3	21	_Do_ C.P. Brass400gm ,15mm nominal bore.	10.00	Nos	536.00	5360.00
2.8.5	22	P & F <i>Stop Cock</i> (IS :8931 Mark), superior quality & of approved make:BrassConcealed Stop Cock 15mm.	10.00	Nos	917.00	9170.00
2.11.9	23	P & F <i>Ball Cock</i> (IS :1703 Mark) with Rod & P.V.C. Ball complete :Synthetic material (PTMT) of approved make 25 mm nominal size.	10.00	Nos	645.00	6450.00
2.12.1	24	P & F <i>Inlet Connection</i> (Angle Valves) Superior quality, of approved make, for Wash basin, Gyser etc. C.P. Inlet connection 15mm.Brass (IS : 8931 marked)	10.00	Nos	455.00	4550.00

2.1.1	25	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in Charge. (Concealed work including cutting chases and making good the walls etc.,) 15 mm nominal outer dia pipes	100.00	Rm	174.00	17400.00
2.1.3	26	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in Charge. (Concealed work including cutting chases and making good the walls etc.,) 25 mm nominal outer dia pipes	150.00	Rm	256.00	38400.00
3.16	27	P&F rigid PVC Pipe (IS:4985 mark) class II/ (4 Kg. /Cm2.) approved quality /make including joining the pipe with solvent cement rubber ring and lubricant.				
3.16.4	A	160 mm dia	50.00	Mtr	421.00	21050.00
3.16.3	B	110 mm dia	150.00	Mtr	256.00	38400.00
3.17	28	P&F rigid PVC pipe fittings (IS: 4985 mark) of approved quality /make including joining the pipe with solvent cement rubber ring and lubricant:				
3.17.3	A	110 mm dia Plain Tee	15.00	Each	170.00	2550.00
3.17.9	B	110 mm Bend 87.5	15.00	Each	146.00	2190.00
3.17.8	29	110mm Bend 45	10.00	Each	116.00	1160.00
		<b>Total of Part-A</b>				1863272.00
		<b>PART "B" Electric work for BSR 2021</b>				
E020100	30	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				
E020101	A	short point (upto 3 mtr)	30.00	Each	245.00	7350.00
E020102	B	Medium point (upto 6 mtr.)	35.00	Each	463.00	16205.00
E020103	C	Long point (upto 10 mtr.)	35.00	Each	648.00	22680.00
E020300	31	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 -1				
E020301	A	(a) On Board	10.00	Each	246.00	2460.00
E020302	B	(b) Short point (up to 3 mtr.)	10.00	Each	376.00	3760.00

E074200	32	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 -1	50.00	Each	397.00	19850.00
	33	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				
E040107	A	(a)2 x 2.5 sq. mm. + 1x1.5sqmm	250.00	Mtr	50.00	12500.00
E040114	B	(b)2 x 4.0 sq. mm. + 1 x 2.5 sq. mm.	195.00	Mtr	71.00	13845.00
E040118	C	(c)4 x 6.0 sq.mm	45.00	Mtr	160.00	7200.00
E073601	34	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	60.00	Each	310.00	18600.00
E060114	35	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	12.00	Each	284.00	3408.00
E060332	36	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	3.00	Each	590.00	1770.00
		<b>Total of Part-B</b>				<b>129628.00</b>
		<b>G.Total</b>				<b>1992900.00</b>

**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 )

*AR* (Rs. .... amount in words)

**Signature of Contractor**

**BILL OF QUANTITIES**

Annexure-IB

Name of work :- Renovation of U.G. Laboratories at COA, Lalsot.

Rates based on :- BSR PWD Dausa City Circle 2019 &amp; 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)	730.00	Kg	395.00	288350.00
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)	730.00	Kg	422.00	308060.00
16.2	3	Extra for shutters of sliding aluminum windows	200.00	Kg	42.20	8440.00
16.4.1	4	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.	52.00	Sqm	958.00	49816.00
16.5.2	5	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)	73.00	Sqm	828.00	60444.00

16.6.1	6	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. <b>With stainless steel cover plate</b>	5.00	Each	1265.00	6325.00
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.	5.00	Each	291.00	1455.00
7.14	6	Providing and fixing 1st quality standard white, grey, ivory, fume red brown, light green, light blue and other light shades glazed tiles confirming to IS : 13753 & IS :15622 of size 200mm x 300mm in walls, floors, steps, pillars etc. laid on a bed of neat cement slurry finished with flush pointing in the white cement mixed with pigment to match the shade of the tile complete (excluding the cost of cement plaster on walls and pillar).	190.00	Sqm	685.00	130150.00
12.2.3	7	Plaster on new surface on walls in cement sand mortar 1:4 including racking of joints etc. complete fine finish : <b>12mm thick</b>	190.00	Sqm	126.00	23940.00
14.56	8	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.	190.00	Sqm	11.00	2090.00
6.17.3	9	Supplying and fixing in walls machine cut and polished stone shelves, tands and in CM 1:3 with machine cut edges : <b>Kota stone minimum 30mm thick.</b>	25.00	Sqm	477.00	11925.00
S-1.40.2	10	P & F Kitchen & Lab. Sink of approved make with C.I. brackets duly painted, 40 mm C.P. waste coupling, C.P. Brass chain with rubber plug, 40 mm G.I. waste pipe up-to floor level complete including cutting and making good the wall & floor : <b>Fire clay glazed kitchen sink (I.S 771-1985 Marked) size 600 x 450 x 200 mm.</b>	3.00	Nos	3313.00	9939.00
S-2.37.2	11	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge. (Internal work Exposed on wall) : 20mm nominal outer dia pipes	50.00	Mtr	188.00	9400.00
S-2.6.4		P & F Pillar Cocks (IS :8934 Mark) of superior quality and approved make: <b>C.P. Pillar cock, Swan-neck with casted spout, 15mm nominal bore.</b>	30.00	Nos	1254.00	37620.00
E040100	30	Supplying and drawing FR PVC insulated & unsheathed flexible copper conductor as per PWD specification for electrical Works with ISI marked (IS:694) and as per IS 8130:2013 of 1.1kV grade. Wire should be made from 99.99% purity copper, class 5 stranding in acc. to IEC 60228 for lower watt loss, oxygen free (<10ppm) for less chances of oxidization and higher silver content for gives better conductivity, insulation PVC type A, flam eretardant as per IS 10810-53, better amperage rating as per VDE 0298 part 4, ,in existing surface or recessed PVC/MS conduit/ casing capping including all as per pre approved by Engineer-in-charge, making connections, etc. as required. OEM Must have its own in house NABL lab setup for all testing facilities for wires. For additional technical parameters of products/ work, refer Annexure "A" attached with this BSR .				
E040114		2 x 4.0 sq. mm. + 1 x 2.5 sq. mm.	100.00	Mtr	71.00	7100.00
E040119	31	__ Do __ 2 x 6.0 sq. mm. + 1 x 2.5 sq. mm.	150.00	Mtr	100.00	15000.00

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E030400	33	S & F following sizes of ISI marked (IS:14927 P-II) UPVC casing capping as per PWD specification for electrical Works along with all accessories like coupler, inner, outer, elbow, square box, tee, end cap etc. on surface with screws, expansion fasteners, All as per pre approved by Engineer-in-charge, making connections, testing etc. complete as required. For additional technical parameters of products /work , refer Annexure "A" attached with this BSR .				
E030402		25 mm x 12 mm	150.00	Mtr	25.00	3750.00
E074200	B	Supplying and fixing of power plug point with Modular accessories as per PWD specification for electrical Works, on hot dipped galvanized modular box of 18S WG with earthing terminal/ connector on surface or inrecessed with suitable size of modular face plate with grid plate and cover plate including cost of ISI marked modular 16amp. Switch (IS: 3854) and 3/5 pin 16 amp. socket outlet (IS:1293) [as per detailed irrespective item in BSR], making connection, testing, etc. as required. All as per pre approved by Engineer-in-charge. For additional technical parameters of products/ work, refer Annexure "A" attached with this BSR .	20.00	Each	397.00	7940.00
E140512	C	SITC of chemical Gel earthing system of Dual Pipe Technology made of with "B" Class GI Pipe as per IS 1239 (part-1): 2004 of Medium duty of following sizes as per points mentioned (a), (b), [c], (d), (e) below :- With Pipe in Pipe Technology (Outer pipe dia./ Inner pipe dia. ) Minimum 100 mm dia borewell : <b>GI pipe 2000 mm long, 80/50mm, Terminal 50mm x 6mm GI Strip</b>	2.00	Each	5007.00	10014.00
E140608	34	S & Laying following size earth wire/strip in horizontal or vertical run in ground/surface/recess including riveting, soldering, saddles, making connection etc. as required. <b>25mm x 3mm G.I. ( Hot Dipped ) Strip</b>	50.00	Mtr	50.00	2500.00
E150101	A	Making of hole in wall of required size for housing exhaust fan and making good the same, with cement plaster as required of following size: <b>Up to 457 mm size</b>	3.00	Each	282.00	846.00
E1502901	B	P&F of Heavy duty capacitor start, Double ball bearing 900/1400 RPM single phase ISI marked Exhaust fan,IS:2312 marked in existing opening including making connections testing etc. as required. : <b>300 mm sweep(900/1400 RPM)</b>	3.00	Each	2252.00	6756.00
<b>G.Total</b>						<b>1001860.00</b>

**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.

AR

Signature  
Name & Designation  
(Official address)

Place :  
Date :

Office seal