

(REVISED)
CONTRACT FROM THE EXECUTIVE OF WORKS
GOVERNMENT OF THE PUNJAB

PUNJAB BUILDING DEPARTMENT
TENDER/CONTRACT DOCUMENTS

Name of Work: - _____

Name of Contractor: - _____

Estimated Cost of Work Rs:- _____

Amount of Earnest Money Rs:- _____

Deposit at Call No:- _____

Treasury Challan No:- _____

Time Limit:- _____

Stereo LB No, 386 (revised)

Agreement No. -----

Stereo I.B No. 389 (revised)

Stereo I.B No. 28(revised)

Stereo I.B No. 29(revised)

UNIVERSITY OF AGRICULTURE, FAISALABAD
ITEM RATE TENDER & CONTRACT FOR WORKS

- | | | |
|---|------------------------------------|--|
| 1 | Name of work | Establishment of Sub-Campus of University of Agriculture Faisalabad at Depalpur-Okara (HEC Funded) (Completion of Missing Infrastructure) (Package-06)(Re-Tender) |
| 2 | Estimated cost | PKR: 57.80Million/- |
| 3 | Time for completion | (07-Months) |
| 4 | Amount of Bid Security | PKR----- Million (s) |
| 5 | Issued to | -----
----- |
| 6 | Pre-tender conference | ----- |
| 7 | Dead Line for submission of Tender | 28-09-2021 up to 10:00am ----- |
| 8 | Opening of Tender | 28-09-2021 up to 10:30am----- |
| 9 | Issued by | In charge, Tender Cell, University of Agriculture, Faisalabad.

Signature:-----

Date:----- |

OFFICE STAMP

Note: The officer opening the tender shall reject the tender which does not bear the stamp and signature of the issued official and which is not submitted by the same contractor to whom the tender form was issued

GENERAL DIRECTIONS FOR THE GUIDANCE OF THE TENDERER

1. These directions are provided to assist the tenderer in preparing and submitting his tender. The tender shall contain all information and data required to be furnished and shall be prepared and submitted in accordance with the instructions set forth herein.
2. All necessary documents, such as copies of specifications (excluding standard specification books, **MRS Rate (2nd Bi-Annual 2021, Okara)**, contract documents, including bill of quantities, estimated scheduled rates and any other documents required in connection with the preparation of tender or execution of works, signed by the engineer-in-charge will accompany the tender form and the cost of such annexed documents will be reflected in the cost of the tender form.
3. The tenderer will not be reimbursed for any costs of any kind, whatsoever, incurred in connection with the preparation and submission of his tender.
4. No single tender shall include more than one work. A tenderer who wishes to tender for two or more works shall submit tender for each work, separately.
5. The memorandum of work tendered for, and the schedule of materials and equipment to be supplied by the engineer-in-charge and the rates at which they are to be charged for (annexed hereto) shall be filled in the office of the engineer-in-charge before the tender form is issued. At this stage the tenderer should ensure that the tender form so issued is complete in all respects.
6. The tenderer shall note that the ultimate responsibility for the quality of work and its conformity with the specifications and drawings rests solely with the successful bidder whose tender is accepted.
7. The tenderer shall, at his own expense, inspect and examine the site and surroundings and obtain for himself, on his own responsibility, all information that may be necessary for preparing the tender and entering into contract, and shall determine and satisfy himself by such means as he may consider necessary or desirable as to all matters pertaining to the tender. The tenderer shall also satisfy himself before submitting his tender as to the nature of grounds, hydrological and climatic conditions, the form and nature of the site, the nature and lay out of the terrain, the availability of labour, water, electric power and transportation facilities in the area. The tenderer shall specially investigate into the sources of materials to be used for the works and satisfy himself about the quality and quantities of materials available for the completion of the work and the means of access to the site, the accommodation he may require and, in general, shall himself obtain all necessary information, as to the risks, contingencies and other circumstances which may influence or affect his tender. The engineer-in-charge shall not assume any responsibility regarding information gathered interpretation or deduction, which the tenderer may arrive at, from the date that may be furnished with the contract documents.
8. The tenderer shall fill up the Bill of Quantities ITEM WISE RATES which he is willing to undertake each item of work.
9. The tenderer shall quote his own unit rate in the Bill of quantities on which he is willing to undertake each item of work.
10. i. The tender shall work out the amount against each item of work in the Bill of Quantities and

will indicate the total amount of his tender (including the cost of Non-MRS items rates for which the rate and amount has already been filled in by the engineer-in-charge in the Bill of Quantities) on which he is willing to complete the works. The total amount worked out in the Bill of Quantities shall be entered by the tenderer in his tender as his tender price for the work. In case of discrepancy between amounts in figures and in words, the amount in words shall prevail.

- ii. Should any discrepancy be found in the amount of pay items or if a column of amount is found blank after filling in a unit rate, the unit rate filled by the tenderer will be extended in working out of the amount of the tender and the total amount of the bid schedule will be adjusted accordingly.
 - iii. If a unit rate is left blank, but the amount against the item is filled, the unit rate will be worked out on the basis of the amount divided by the quantity of the item shown in the bid schedule.
 - iv. If it is found that the tenderer has not entered any unit rate and amount against any of the pay items of the bid schedule, the engineer-in-charge shall fill in the blanks by noting the word "NIL" In such blanks at the time of opening of the tender. Such pay items shall be deemed to be covered by the rates of other items.
 - v. If the tenderer does not accept the adjusted/corrected amount of tender according to the above provision, his tender shall be rejected and the earnest money forfeited.
11. The tender which proposes any alteration in the works specified in the Bill of quantities or in the time allowed for carrying out the works or any other condition mentioned by the Engineer-in-charge, will be liable to rejection. The tenderer shall sign each and every page of the tender and contract documents, without making any alteration. All enclosures issued with the contract documents, shall be attached with the tender duly signed by the tenderer. Any addition or alteration made after filing the forms shall duly attested by the tenderer. Non-compliance of this condition shall render the tender liable to rejection.
12. The tenderer shall fill in the tender documents, in ink. Errors, if any, shall be scored out, and corrections re-written legibly and attested by the tenderer. Any addition or alteration made after filling the form shall be duly attested by the tenderer. Non-compliance of this condition shall render the tender liable to rejection. Any tender with unattested correction shall be attested by the tenderer in the presence of other tenderers at the time of opening of the tender except that no correction shall be permissible in the rate or amount of the bid schedule or in the tendered price after the opening of the tender.
13. Additional Clause (s) for a particular work shall be typed on separate sheet(s) by the Engineer-in-charge, which will be annexed to the contract documents specifying the number of sheets. The tenderer shall not add or delete any additional clause(s) in the additional clauses sheet (s), provided by the Engineer-in-charge.
14. The quantities mentioned in the Bill of Quantities are estimated quantities, to be used for preparing tenders, and the Engineer-in-charge does not expressly nor by implication agree that the actual amount of works to be performed will correspond therewith. No payment will be made on account of anticipated profits for work covered by the contract which is not performed, nor will any adjustment in the unit rates set forth in the bid schedule be made because of an increase or decrease in the actual quantities from the estimated quantities indicated therein, except as determined in accordance with the provisions of Clause 42 of the general conditions of contract.
15. No tender without earnest money shall be entertained, earnest money, calculated @ 2% of the estimated cost of the work (rounded suitably), shall be in the form of 'deposit at call receipt'. The earnest money of the unsuccessful tenderers shall normally be returned by the Treasurer, UAF within a week of opening of the tenders and in any

case not later than sixty (60) days following the date set for opening of tenders. In the event of the tender being accepted, or receipt for the earnest money forwarded therewith, shall thereupon be given to the contractor. The earnest money of the successful tenderer on execution of the contract covering work will be adjusted towards the amount of security deposit to be retained from the first amount (s) payable to the contractor under the contract.

16. The successful tenderer will be required to enter into a contract, furnish the performance security (where-ever required) and to commence the work within the time specified in the memorandum of work. Should the successful tenderer refuse or fail for any reason to enter into contract, or to furnish the performance security or to commence the work within the time specified in the memorandum of work, it should constitute a just cause for the annulment of the award and in the event of such annulment, the entire earnest money shall be forfeited to Government, as compensation for such default.
17. (i) The tender shall be signed by the person (s) duly authorized to do so. In the event of the tender being submitted by a firm, it shall be signed separately by each member thereof, or in the event of the absence of any partner, it shall be signed on his behalf by a person holding a power of attorney authorizing him to do so. Such power of attorney should be produced with the tender and it must disclose that the firm is duly registered under the Partnership Act, 1932, or any other law in force.
(ii) The tender submitted by a joint venture of two or more firms shall be accompanied by a document of formation of the joint venture, duly registered and authenticated by competent court, in which shall be stated precisely, the conditions under which it shall function, its period of validity, the person (s) authorized to represent it and accept it obligate, the participation of several firms forming the joint venture and any other information of necessary to permit a full appraisal of its function.
(iii) A tender submitted by a corporation must bear the seal of the corporation and be attested by its Secretary.
(iv) In all cases, the tender must be signed by an individual or individuals having powers to legally bind the firm, joint venture, corporation or companies on whose behalf they are signing.
18. Each tenderer shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender and of the rates and prices stated in the bid schedule which rates and prices shall, except in so far as it is otherwise expressly provided in the contract, cover all obligations under the contract and all matters and things necessary for the proper completion and maintenance of the works.
19. The tenderer may modify or withdraw his tender after submission, provided that the modification or notice of withdrawal is received in writing by the engineer-in-charge prior to the prescribed deadline for submission of tenders. The tenderer's modification or notice of withdrawal shall be prepared, sealed, marked and delivered, with the inner envelopes additionally marked "MODIFICATION or WITHDRAWAL as appropriate. No tender may be modified subsequent to the deadline for submission of tender. Withdrawal of a tender during the interval between the deadline for submission of tenders and the expiration of the period of tender validity i.e. sixty (60) days as specified by the tenderer in the Form of Tender may result in the forfeiture of the tender security.
20. The tenderer shall submit the original Tender Documents complete in all respects and keep a copy of the tender for his own record. The original should be sealed in an inner and an outer envelope, duly marking the envelopes as "ORIGINAL". The inner and

21. outer envelopes shall (a) be addressed to engineer-in-charge (b) and bear the following identification: Tender for (Name of Contract), (Reference Number of Tender), and the words "DO NOT OPEN BEFORE (Time and Date, set for opening)". The inner envelopes shall indicate the name and address of the tenderer to enable the tender to be returned unopened in case it is declared to have been received late or is otherwise unacceptable. If the outer envelope is not sealed and marked and instructed above, the Engineer-in-charge will assume no responsibility for the misplacement or premature opening of the tender submitted. A tender opened prematurely because of improper identification will be rejected.
22. The tenderer shall indicate in the space provided in the tender his full and proper address at which notice may be legally served on him and to which all correspondence in connection with his tender and the contract is to be sent.
23. The presentation of a tender implies full acceptance on the part of the tenderer of these instructions and all other conditions set forth in the contract document.
24. Any tender received by the Tender Cell after the deadline for submission of tenders prescribed in the Notice Inviting Tenders will be returned unopened to the tenderer.
25. The Engineer-in-charge or his duly authorized officer (not below the rank of Assistant Engineer) will open tenders in the presence of intending tenderers or their authorized agents, who may be present at the time. The officer opening the tender will announce the names of the tenderer, tender rates and the presence of requisite tender security.
26. Promptly after the opening of Tenders, the Engineer-in-charge will undertake a detailed evaluation of tenders. The Engineer-in-charge will determine whether each tender is substantially responsive to the requirements of the tender documents and conforms to all the terms, conditions and specifications of the tender documents without material deviation or reservation. If a tender is not substantially responsive to the requirements of the tender documents, it will be rejected by the engineer-in-charge and may not subsequently be made responsive by the tenderer having corrected or withdrawn the non-confirming deviation or reservation.
27. Except for information to be read out by the Engineer-in-charge at the time of opening tenders in accordance with Para 23 above, no information relating to the examination, clarification, evaluation and comparison of tenders and recommendations concerning the award of contract shall not be disclosed to tenderers or other persons not officially concerned with such process. Any effort by the tenderer to influence the process of examination, clarification, evaluation and comparison of tenders, and in decisions concerning award of contract, may result in the rejection of his tender.
28. To assist in the examination, evaluation and comparison of tenders, the Engineer-in-charge may ask tenderers individually for clarification of their tenders, including breakdowns of unit rates. The request for clarification and the response shall be in writing or by cable, but no change in the price or substance of the tender shall be sought, offered or permitted except as required to confirm the correction of arithmetical errors discovered by the Engineer-in-charge during the evaluation of the tender.
- 26 (A) In case the total tendered amount is less than 5% of the approved estimated (DNIT) amount, the lowest bidder will have to deposit additional performance security from the Scheduled Bank ranging from 5% to 10% and so on as under, within 15 days of issuance of notice or within expiry period of bid, whichever is earlier.

TOTAL TENDERED AMOUNT BELOW CORRESPONDING ESTIMATED COST.	ADDITIONAL PERFORMANCE SECURITY.
5%	5%
6%	6%
7%	7%
8%	8%
9%	9%
10%	10%
And so on	And so on

27. The Engineer-in-charge shall have the right of rejecting all or any of the tenders without assigning any reason thereof. The Engineer-in-charge will not be bound to award the contract to the lowest or to any other tenderer.
28. The unit rates and prices entered in the bid schedule will be the rates at which the contractor will be paid (subject to the adjustment specified in clause 55 of the annexed conditions) and shall be deemed to include all costs of performing the work, including income tax, super tax and/or other charges, duties and taxes of the Government, autonomous, semi-autonomous and local bodies, profits and costs of accepting the general risk, liabilities and obligations set forth in or implied from the contract.
29. Prior to the expiration of the period of tender validity (60 days) prescribed in the Tender Form or any extension thereof that may have been granted by the tenderer, the Engineer-in-charge will notify the successful tenderer by cable and confirm in writing by registered letter that his tender has been accepted. This letter of acceptance shall name the sum which will be paid in consideration of the execution, completion and maintenance of the works as prescribed in the contract, (hereinafter called the contract price). The notification of award will constitute the formation of the contract.
30. At the time, the Engineer-in-charge notifies acceptance of the tender to the tenderer he will send the tenderer the Form of Agreement provided in the tender documents, incorporating all agreements between the parties. Within fifteen (15) days of receipt of the of Agreement, the successful tenderer shall furnish the performance security (10% of the Contract Price) and sign the contract in the presence of the Engineer-in-charge.
31. After the successful tenderer has signed the -contract furnished adequate performance security the Engineer-in-charge will notify to the un-successful tenderers that they were unsuccessful.
32. The completion period will be reckoned from the date of delivering the award or the handing over of the site to the contractor, whichever is later.
33. A copy of the contract agreement may be obtained by the contractor at his own cost.

TENDER FOR WORK

To

The Incharge, Tender Cell

Dear Sir,

I/We.....

(Name of the contractor)

The undersigned tenderer, having examined the conditions of contract, specification, drawing bid schedule and addenda Nos..... there to, for the work of

(Name of the work)

and the works associated therewith, and having examined the site of the above named works, or having caused the site to be visited OR our behalf by my/our competent and reliable agent, and having satisfied myself/ourselves as to all conditions under which the above named work must be performed, hereby offer to execute, complete and maintain the whole of the above mentioned work including its ancillary works associated therewith, in accordance with the said contract documents, including the addenda indicated above, at tender price of Rs. (Rupees).....

Or such other sums as may be ascertained in accordance with the said conditions of contract and the rates, and the prices set forth in the bid schedule.

2. As security for the due performance of the undertaking and obligations of this tender, I/We submit herewith a deposit at call / Bank Guarantee receipt No..... dated. In the amount of Rs.....(Rupees.....from..... the.....BankBranch) drawn in favor of Treasurer UAF as earnest money, the full value of which will be absolutely forfeited to Government, without prejudice to any other rights or remedies of the said *Government*, should I/We withdraw or modify' the tender within its validity period of sixty (60) days, following the date of receipt of tender.
3. I/We understand that if my/our tender is accepted, the foil value of the earnest money as attached with the tender shall be detained by University towards the amount of security deposit specified in clause 48 of the said conditions of contract and item (d) of the Memorandum of work.
4. Should this tender be accepted by you; I/We hereby undertake: -
 - (a) To sign all the necessary documents for entering into a contract agreement in the form set out in the contract document within fifteen (15) days following your notification of such acceptance.
 - (b) To commence the work within the stipulated time named in item (f) of memorandum hereto annexed following the date of issuance of your order to proceed with or the handing over of the site, whichever is later and in the event of my/our failure to do so, the entire amount of earnest money deposited by me/us for which deposit at a call receipt is enclosed herewith, is to be absolutely forfeited to the University. On the commencement of work, I/We hereby also agree to abide by and fulfill all the terms or provisions of the said conditions of the contract annexed hereto so far as applicable and in default thereof, to forfeit and pay to the University the sums of money mentioned in the said conditions.
 - (c) To complete and deliver the whole work comprised in the contract within the time stipulated in item No. (g) of the Memorandum hereto annexed, subject to such extension in the time limit as may be granted under the conditions of contract.
 - (d) the furnishing of performance security under item (h) of the memorandum annexed hereto, in the sum equal to 10 (ten) percent of the cost of the work in same form sum equal to 10 (ten) percent of the cost of the work in the same form and on the same condition as are

prescribed by and to the satisfaction of the Engineer-in-charge.

5. I/We also agree that when materials and/or equipment for the work are provided by the t, the rates to be paid for them shall be as provided in Appendices annexed hereto.
6. I/We agree to abide by this tender for the period of sixty (60) days following the date set for receiving of tenders and it shall remain binding upon me/us and may be accepted by you at any time before the expiration of that period.
7. Unless and until a formal agreement is prepared and executed, this tender, together with your written acceptance thereof, shall constitute a binding contract between us, and shall be deemed for all purposes to be the contract agreement.
8. I/We understand that you are not bound to accept the lowest or any tender you may receive, and that you will not defray any expenses incurred by me/us in tendering.

Thanking you,

Yours faithfully,

(Signature of Tenderer)

Dated thisDay

NAME.....

Of20...

*Address.....

I hereby accept the above tender on behalf of the Government.

(Signature of Incharge, Tender Cell)

MEMORANDUM OF WORK

- | | | |
|----|---|--|
| a) | General Description | Establishment of Sub-Campus of University of Agriculture Faisalabad at Depalpur-Okara (HEC Funded)
(Completion of Missing Infrastructure)
(Package-06)(Re-Tender) |
| b) | Estimated Cost | PKR: 57.80Million/- |
| c) | Amount of earnest money to accompany the tender (to be furnished by the tenderer in the shape of “deposit at call” from a scheduled Bank of Pakistan) | Rs. 1.734Million/- |
| d) | Percentage of security deposit to be retained form the bills. | |
| | i) On the amount of work done up to Rs.5.0 million | Ten (10) percent |
| | ii) On the amount of work done beyond Rs.5.0 million. | Five (5) percent |
| e) | Mobilization period | Fifteen (15) calendar days |
| f) | Time allowed for completing the work after the expiry of mobilization period | -----calendar months |
| g) | Amount of performance security in the form of Bank Guarantee (see contract conditions clause 7 and General direction 26 (a) | Five (05) percent of the accepted tender price in the case of tenders with cost of exceeding Rs.50.00 million and as per general condition 26(a) for all tenders. |
| h) | Time period of maintenance (after the f issuance of certificate of completion) | One Year |

SUMMARY OF COST

ESTABLISHMENT OF SUB-CAMPUS OF UNIVERSITY OF AGRICULTURE FAISALABAD, AT DEPALPUR - OKARA (HEC FUNDED) BILL OF QUANTITIES

S/N	DESCRIPTION	AMOUNT (Rs.)
1	<input type="checkbox"/> CAR PARKING	
2	<input type="checkbox"/> MISSING ITEMS	
3	<input type="checkbox"/> LEFT OVER WORK OF ACADEMIC BLOCK	
4	<input type="checkbox"/> ENTRANCE GATE (Civil Works)	
5	<input type="checkbox"/> ENTRANCE GATE (Public Health Works)	
6	<input type="checkbox"/> ENTRANCE GATE (Electrical Works)	
7	<input type="checkbox"/> WAITING AREA (20'X25')	
8	<input type="checkbox"/> FOOTPATH 4' WIDE	
9	<input type="checkbox"/> TUBEWELL CHAMBER / OPERATOR ROOM	
10	<input type="checkbox"/> TUBEWELL CHAMBER ELECTRICAL WORKS	
11	<input type="checkbox"/> MONUMENT	
12	<input type="checkbox"/> WASTE COLLECTION PIT (6-Nos.)(AnsX6)	
13	<input type="checkbox"/> RAW WATER STABLING POND	
14	<input type="checkbox"/> GREEN HOUSE	
	TOTAL :	
	ADD 5 % PRA :	
	GRAND TOTAL :	
	IN MILLION :	

**ESTABLISHMENT OF SUB-CAMPUS OF UNIVERSITY OF AGRICULTURE FAISALABAD, AT DEPALPUR - OKARA
(HEC FUNDED)**

**ENGINEER'S COST ESTIMATE
CONSTRUCTION OF CAR PARKING**

Item No.	REF. Nos CH/ITEM	Description of Items	Unit	Qty	Rate (Rs.)	Rate Quoted by the Contractor	Amount (Rs.)
MRS, 2ND BI-ANNUAL-2021 (1st JULY-2021 to 31st DECEMBER -2021) DISTRICT OKARA							
		SCHEDULE ITEMS-A					
		Earth Work					
1	CH:3 item 47(a) P-33	Jungle clearance and removing within 100 ft. (30 m).a) light	1000 Sft	27,300.00	191.40		
2	CH:3 item 21 (b) P-30	Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling around structure with excavated earth, watering and ramming lead upto one chain (30 m) and lift upto 5 ft. (1.5 m) b) in ordinary soil.	1000 Cft	748.13	8,078.40		
		Filling, watering and ramming earth under floors:-					
3.1	CH:3 item 15 (i) P-29	i) with surplus earth from foundation, etc.	1000 Cft	523.69	3,867.60		
3.2	CH:3 item 15 (ii) + 17 (a, b & c) P-29	ii) with new earth excavated from outside,lead upto 5 mile (8 Km). (as per actual borrow pit lead)	1000 Cft	40,400.13	15,021.80		

4	CH:3 item 25 (i) P-30,31	Compaction of earthwork with power road roller, including ploughing, mixing, moistening earth to optimum moisture) content in layers, etc. complete: i) 95% to 100% maximum modified AASHO dry density.	1000 Cft	42,970.01	810.50		
		Plain and Reinforement Concrete					
5	CH:6 item 3 (b)(ii) P41	Cement concrete brick or stone ballast 1½ " to 2" (40 mm to 50 mm) gauge, in foundation and plinth:- (b) Ratio 1: 4: 8	100 Cft	374.06	15,212.70		
		Brick Work					
6	CH:7 item 4 (i) P53	Pacca brick work in foundation and plinth in:- i) Cement, sand mortar:-Ratio 1:5	100 Cft	748.13	22,219.85		
		Flooring					
7	CH:18 item 3 (a)(ii) P107	Providing and laying sub-base course of stone product of approved quality and grade, including placing, mixing, spreading and compaction of sub-base material to required depth, camber, grade to achieve 100% maximum modified AASHTO dry density, including carriage of all material to site of work except gravel and aggregate: (ii) Crushed stone aggregate.	100 Cft	10,815.00	4,951.50		
7.1	CH:18 item 3 (b) P107	(b) Subsequent carriage of gravel and crushed stone aggregate. (from Sargodha Quarry)	100 Cft	10,815.00	7,316.88		
8	Ch-10 item 43 P-72	Providing and laying Tuffpavers , having 7000PSI ,crushing strength of approved manufacturer, over 2" to 3" sand cushion i/cg routing with sand in joints i/c finishing to require slope. complete in all respect. (50% Grey / 50% Coloured)					

		c) 60-mm thick	P.Sft	21,630.00	105.80		
		Painting and Warnishing					
9	Ch-13 item 40 P- 92	Painting Traffic Lanes 5" wide (125mm), (1.5 mm thick), with thermoplastic (TP) Paint including Glass Beads, complete in al respect. (As per NHA Specification)	Per Rft.	2,937.90	32.25		
	Total "A"(Schedule items) C/o to Summary of Cost:						
		NON SCHEDULE ITEMS-B					
		Miscellenious					
1	N.S	Providing and fixing Concrete Kerb stone (Izhar (Pvt.) Ltd or approved equivalent) having size 300 mm x 350 mm x 150 mm over a bed of 2" thick cement concrete (1:4:8) and jointing with 3/4" thick cement mortar (1:3) i/c 6" x 12" cement concrete (1:4:8) for haunching in trapped shape including cost of painting Kerb Stone with reflective clorinated rubber (CR) paint, excavation and back filling, including drain as shown on drawings complete in all respect as approved by the Engineer Incharge.	Per/Rft	1,500.00	280.00		
2	MRS KPK 16-20-a	Providing and erection Traffic Road Sign Category 1, as shown on drawings complete in all respect as approved by The Engineer.	Each	12.00	11,770.00		
3	Ch 23, Item 26b	Supply, provide and fix in position PVC Pipe class B including proper joints complete in all respects, and system leak-free: a) 4" inside diameter	Per/Rft	60.00	318.30		

4	N.S	Providing and Fixing Tensile Membrane car parking shed comprising of PVC-Coated polyester fabric (750 gsm), support cloth (DIN 6000) polyester, tensile strength (DIN53354) 3300/3000N/5CM, tear strength (DIN 53356) 330/300N/5CM, adhesion strength 100N/5CM, low temperature-no crack at -30°C to +70°C, flame retardant B2/M2/NFA701/B1/M1, main pole 6" dia 4mm, secondary pipe 3" dia 2.5mm, bracing pipe 2.5" dia 2.5mm including cost of foundation excavation, PCC, RCC with anchor / j-bolt etc. i/c all allied works , as specified by the manufacturer complete in all respect, as per drawings and approved by The Engineer.	Per/Sft	12,568.50	850.00		
		Total "B"(Schedule items) C/o to Summary of Cost:					
		Net Total (A+B)					

**ESTABLISHMENT OF SUB-CAMPUS OF UNIVERSITY OF AGRICULTURE FAISALABAD, AT DEPALPUR - OKARA
(HEC FUNDED)**

**ENGINEER'S COST ESTIMATE
CONSTRUCTION OF MISSING ITEMS**

Item No.	REF. Nos CH/ITEM	Description of Items	Unit	Qty	Rate (Rs.)	Rate Quoted by the Contractor	Amount (Rs.)
MRS, 2ND BI-ANNUAL-2021 (1st JULY-2021 to 31st DECEMBER -2021) DISTRICT OKARA							
		SCHEDULE ITEMS-A					
		SURFACE DRAINAGE					
1	Ch.3 Item 44 P-33	Earthwork excavation in open cutting for sewers and manholes as shown in drawings including shuttering and timbering, dressing to correct section and dimensions separately. according to templates and levels, and removing surface water, in all types of soil except shingle, gravel and rock:-	1000 Cft	5,100	5,755.20		
1.1	Ch.3 Item13(a) P-29	Rehandling of earthwork:a) Lead upto a single throw of Kassi, phaorah or shovel	1000 Cft	5,100	1,914.00		
2	CH:21 item 1 P127	Providing and laying R.C.C. pipe, moulded with cement concrete 1:1½:3, with spigot socket or collar joint, etc. including cost of reinforcement, conforming to B.S. 5911: Part I: 1981, Class "L" including carriage of pipe from factory to site of work, lowering in trenches to correct alignment and grade, jointing, cutting pipes where necessary, finishing and testing, etc., complete.					
		iii) 225 mm (9") i/d	Rft.	472.50	427.60		

3	Ch-20 item 6 (i) P-126	Constructing Punjab Standard Drains. of cement concrete 1:2 ½ :5, with cement concrete bedding ratio 1:6:12, complete, laid to lines, grades, slopes and shapes, rendering exposed surface of concrete with 1:1 cement, sand mortar, ¼" (6 mm) thick, as per Engineer's drawing:-i) e) Type V	Per Rft.	3,500.00	483.65		
4	Ch 7, Item 5 i	Pacca Brick Work in G.F upto 10ft height in Cement Sand Mortar Ratio 1:4	100 cft	3,200	24,429.05		
5	Ch 6, Item 9c	Fabrication of Mild Steel Reinforcement including cutting, bending, laying in position, carriage, binding wire, labour. Deformed Bar Grade 60	100kg	2,200	20,230.10		
6	Ch 6, Item 6 a 3	Reinforced Cement Concrete for slabs, beams Ratio 1:2:4	cft	1,100	414.00		
7	Ch 26, Item 43 ii	Providing and fixing barbed wire fencing, with 4 horizontal and two cross wires, with R.C.C. 1:2:4 posts, 5.5'x6"x9" (1.68mx150mmx225 mm) at 8 ft. (2.45 m) centre to centre, reinforced with 4 No. 3/8" (10 mm) dia vertical bars and 1/8" (3 mm) dia stirrups 12" (300 mm) centre to centre, complete in all respects. in cement concrete 1:4:8 base of size 12"x12"x21"	100 Rft	94.50	37,974.20		
	Total "A"(Schedule items) C/o to Summary of Cost:						
		NON SCHEDULE ITEMS-B					
		Miscellenious					

1	N.S	Providing and fixing Concrete Kerb stone (Izhar (Pvt.) Ltd or approved equivalent) having size 300 mm x 350 mm x 150 mm over a bed of 2" thick cement concrete (1:4:8) and jointing with 3/4" thick cement mortar (1:3) i/c 3" x 3" cement concrete (1:4:8) for haunching in trapped shape including cost of painting Kerb Stone with reflective chlorinated rubber (CR) paint, excavation and back filling, as shown on drawings complete in all respect as approved by The Engineer.	Per/Rft	945.00	280.00		
2	N.S	Providing and fixing Heavy Duty Hydraulic Door Closer Japan make M/s Ryobi / Newstar or equal, fixing to aluminium / wooden door complete in all respects. as per sample approved by The Engineer.	Each	15.00	9,120.00		
3	N.S	M.S Stair Case consisting of 4" dia M.S pipe and M.S steps of 1.5" x 1.5 "x 1/8"angle iron and M.S. chequerred plate 1/8" thickness, railing 1-1/2" dia M.S. pipe hand rail and bracing at mid level 1-1/2" dia M.S. pipe balusters 3' high on each step including all steel members, 2 coats of anti rust red oxide primer with 3 min. coats of ICI Enamel paint or approved equal, including welding and connections with concrete/masonry,i/c foundation etc., complete in all respect as per drawings and instruction of The Engineer.	Job	3.00	102,000.0		
4	N.S	Providing and Fixing Fiberglass Shed including 3-play (2 mm) fiber sheet and 1"x1", 18 gauge box pipe with frame its civil works, M.S works, covering sheet and any associated work (silicon, bolting with rawal plug etc.) as shown in drawings and specifications complete in all respects, as approved by The Engineer.	Per/Sft	265.00	630.00		

5	N.S	Providing and Laying Pre-Cast Security Barrier (5'x2'x3') (Izhar (Pvt.) Ltd, Banu Mukhtar or approved equivalent), i/c painting in solid black and yellow color with reflective chlorinated rubber (CR) paint, as shown on drawings complete in all respect as approved by The Engineer.	Each	4.00	15,000.00		
6	N.S	Providing and fixing steel grated small gate(5'X8'), complete with locking arrangement, angle iron frame 2"x2"x3/8" (50x50x10 mm) and 3/4" (20 mm) square bars 4" (100 mm) centre to centre., including R.C.C. columns (9"x9") with foundation and Fair Face Gutka cladding upto required height using special gutka of size 9"x2-1/4"x2-1/4", all rough and finish hardware, two coats of anti rust red oxide paint with two coats of enamel paint (ICI make or approved equivalent) complete in all respects as per approved drawing and as directed by the Engineer.	Job	1.00	70,000.00		
7	N.S	Providing and Fixing of Precast Boundary Wall (Izhar (Pvt.) Ltd or approved equivalent) comprising of H-Columns (6"x6-1/2" 12'-6" ft), Horizontal Precast Planks (2" x 12" x 8'), Horizontal Coloured Strip (2" x 12" x 8') and Column Cap (9" x 9"), i/c Precast Plinth Beam, Excavation, P.C.C (1:4:8), P.C.C (1:2:4), with back filling, complete in all respects., as shown on drawings as approved by The Engineer.	Per/Rft	450.00	2,256.00		
8	N.S	Repair of Leakage / Seepage of existing 20,000 gallon O.H.W.T with Sika Top Seal 107 or Eqvl i/c cleaning ,testing & disinfecting with all type of labour and material at any height, complete in all respects, as approved by The Engineer.	Job	1.00	65,000.00		

9	N.S	Providing and installtion of ceiling fan 56" Size G.F.C/PAK Made. (Energy Efficient Fan as approved by PEECA)	Each	297	6617		
10	N.S	Supply, installation and commissioning of Exhaust Fans 2 Way of following sizes plastic body, louvers, all necessary fixing accessories, make Asia, Climax, PAK National complete in all respects. (Energy Efficient Fan as approved by PEECA)12" dia (Plastic Body).	Each	109	4138		
11	N.S	Providing and installtion of wall bracket fan 18" Size Lahore Fan. (Energy Efficient Fan as approved by PEECA)	Each	53	4858		
12	N.S	Repair, installation, connection of Existing ATS Panel and termination of existing cables, complete in all respect.	Job	1	55000		
13	N.S	Repair, installation, connection of Existing 50 KVA Transformer and termination of existing cables, complete in all respect.	Job	1	110000		
		Total "B"(Non-Schedule items) C/o to Summary of Cost:					
		Net Total (A+B):					

**ESTABLISHMENT OF SUB-CAMPUS OF UNIVERSITY OF AGRICULTURE FAISALABAD, AT DEPALPUR - OKARA
(HEC FUNDED)**

ENGINEER'S COST ESTIMATE

CONSTRUCTION OF LEFT OVER WORK OF ACADEMIC BLOCK

Item No.	REF. Nos CH/ITEM	Description of Items	Unit	Qty	Rate (Rs.)	Rate Quoted by the Contractor	Amount (Rs.)
MRS, 2ND BI-ANNUAL-2021 (1st JULY-2021 to 31st DECEMBER -2021) DISTRICT OKARA							
		SCHEDULE ITEMS-A					
		Wood Work					
1	CH:12 item 7(a) P-78	First class deodar wood wrought joinery in doors and windows, etc. panelled, or panelled or glazed, or fully glazed, fixed in position, including chowkat, holdfast, hinges, tower bolts, chocks, rubber stop, cleats/G.I. clamps, handles and chord with hooks, etc. complete (excluding sliding bolt or lock):-a) 2" thick (50 mm)	Per Sft.	106.00	1,535.75		
2	CH:12 item 50 P-85	Providing and fixing 1½" (40mm) thick solid flush door shutter (Approved Factory Manufactured) with commercial ply (5 mm thick) on both sides double pressed and deodar wood lipping 1½"x3/8" (40mm x 10mm) around shutter including chromium plated fitting, iron hinges with aluminium kick plate 22 SWG on both sides & finger plate complete in all respect.	Per Sft.	2,407.00	403.80		

3	CH:12 item 51 P-85	Providing and fixing panelled door of M.S. sheet, with forged door leaves of M.S. sheet 22 SWG fitted in hollow frame chowkat 3"x4½" (75 mmx113 mm) made of M.S. sheet 18 SWG filled with plain cement concrete 1:3:6 etc. complete with all fittings and hammer painting, including carriage to site and fixing in position.	Per Sft.	49.00	532.45		
4	CH:12 item 58 P-86	Providing and fixing ornamental wooden architrave 3" x(1½" tapered to ¼") all along the door frame complete in all respect. b) Deodar wood architrave	Per Sft.	5,026.00	57.65		
5	CH:12 item 21 P-80	Providing and fixing, approved quality mortice lock.	Each	20.00	634.10		
6	CH:12 item 18 (iii) P-80	Providing and fixing sliding bolt to doors:- iii) brass sliding bolt, 10" (250 mm) long	Each	67.00	597.55		
7	CH:12 item 54 P-85	Providing and fixing M.S. flat ½"x1/8" (13mm x 3mm) grill including ¾" x 1/8" (20 mmx3 mm) M.S. flat frame, in windows of approved design, including painting three coats, complete in all respects.	Per Sft.	2,782.00	316.75		
		Painting and Warnishing					
8	CH:13 item 7 (a) P87	French polishing complete:-a) on new work	100 Sft.	212.00	3,846.55		
9	CH:13 item 5 (c)(i)+(iix2)) P88	Preparing surface and painting of doors and windows any type (including edges 3 Coats New Surface	100 Sft.	4,815.00	1,941.75		
		Metal Work					

10	Ch-25 item 52 P-173	Providing and fitting all types of glazed aluminium windows of anodised bronze colour partly fixed and partly sliding using deluxe sections of approved manufacturer having frame size of 100 x 20 mm (4"x3/4") and leaf frame sections of 50 x 20 mm (2"x3/4"), all of 1.6mm thickness including 5 mm thick imported tinted glass with rubber gasket using approved standard latches, hardware etc., as approved by the Engineer in-charge.	Per/Sft	2,982.00	498.50		
11	Ch-25 item 53 P-173	Providing and fixing Aluminum Fly screen comprising of Fiber/Aluminum wire gauze (Malasian) fixed in aluminum frame of approved manufacturer brownze Colour / powder coated of size 1-1/2"x1/2" and 1.6 mm thick with rubber gasket i/c cost of Hardware as approved and directed by the engineer incharge. complete in all respect.	Per/Sft	1,491.00	330.05		
		I.T Work and Partition Walls					
12	Ch.3 Item 44 P-33	Excavation of trenches in all kinds of soil, except cutting rock, for pipelines upto 5 ft. (1.5 m) depth from ground level, including trimming, dressing sides, leveling the beds of trenches to correct grade and cutting pits for joints, etc. complete in all respects.	1000 Cft	35,055	5,755.20		
13	Ch.3 Item 13(a) P-29	Rehandling of Earthwork complete in all respects as per specifications and as directed by the Engineer Incharge a) Lead up to a single throw of kassi	1000 Cft	23,136	1,914.00		
14	Ch.7 Item 30 P-58	Supplying and filling sand under floor; or plugging in wells.	100Cft	3,500	1,999.00		
15	Ch 7, Item 23	Dry Brick Pitching	100Cft	1,200	16,938.00		

16	Ch 7, Item 5 i	Pacca Brick Work in G.F. upto 10ft height Ratio 1:5	100Cft	625	23,869.85		
17	Ch 11, Item 11c	Cement Plaster 1:5 upto 20ft height. 3/4" Thick	100sft	1,500	2,979.00		
	Total "A"(Schedule items) C/o to Summary of Cost:						
		NON SCHEDULE ITEMS-B					
		Flooring					
1	N.S (Input Rates 2021)	Providing and laying Porcelain tiles flooring (full body) 16" x 16" Master, or approved equivalent laid over 3/4" thick cement sand mortar (1:3) including setting the tiles with Bond (Stile, or approved equivalent) i/c filling joints with Grout (Stile, or approved equivalent) of matching color i/c cutting, leveling, washing and curing complete in all respect as per Specifications, and as per sample approved by The Engineer. (Master, DWV series Polished (Dark color) class SB)	Per/Sft	10,980.0	261.00		
2	N.S	Providing and laying Porcelain tiles flooring (full body) 16" x 4" Master, or approved equivalent laid over pre-plastered surface including setting the tiles with Bond (Stile, or approved equivalent) i/c filling joints with Grout (Stile, or approved equivalent) of matching color i/c cutting, leveling, washing and curing complete in all respect as per Specifications, and as per sample approved by The Engineer. (Master, DWV series Polished (Dark color) class SB) Dado/ Skirting	Per/Sft	884.61	269.00		
		Miscellenious					
3	MRS KPK 12-44-C	Providing and fixing suspended false-ceiling system Gypsum Plaster of Paris with all accessories complete in all respects	Per/Sft	3,430.00	172.00		

4	MRS KPK 10-26-c	Providing and fixing 3/4" thick Pre-polished Sunny Grey Marble Slab uniform texture full width and length laid over 1/2" thick cement sand mortar (1:4) including setting the tiles with Bond (Stile, or approved equivalent) i/c filling joints with Grout (Stile, or approved equivalent) of matching color i/c silicon filling around frame, cutting, leveling, washing, curing and beveling charges on exposed edges complete in all respect as per Specifications, and as per sample approved by The Engineer. (FOR WINDOWS SILL)	Each	850.00	182.52		
5	N.S	Providing, fixing, jointing and testing Polypropylene Random (PPR) pipes or approved equivalent pressure pipe for hot & cold water as per DIN 8077-8078, PN-20 for pipes and DIN 16962, PN-25 for fittings (polyfusion welded joints) inside building including fittings and specials (sockets, tees, elbows, bends, crosses, reducers, adaptor, plugs and union etc.) supported on walls or suspended from roof slab or run in chases including pipe hangers, supports, cutting and making good the chases and holes, complete in all respects.					
		40 mm	Rft.	564.00	379.00		
		50mm	Rft.	330.00	578.00		
		63mm	Rft.	220.00	890.00		
6	N.S	Providing and installing Gas geyser "CANON" including fitting & fitting accessories, complete in all respect as per specifications and drawings					
		6 Gallon Instant Geyser and Electric	Nos.	2.00	17,842.00		
		Switch & Sockets.					
7	N.S	Supply and fixing of Fan Dimmer Switched	Each	166.00	1,920.00		

		Clipsal made					
		Exhaust Fans					
8		Supply, installation and commissioning of Exhaust Fans copper plastic body, (Energy Efficient model) G.F.C or eqv. Made, NEECA/PEECA Approved.					
	N.S	12" dia (Plastic Body).	No	18.00	4,138.22		
		Ceiling Fan					
9	N.S (Input Rates 2021)	Supply, installation and commissioning of Ceiling fan 56" complete all necessary fixing accessories complete in all respect (Energy Efficient PAK Fan Deluxe model) as approved by PEECA.	Nos.	225.00	6,617.28		
		I.T Infrastructure					
10	CH:23 item 42(b)	Providing, laying, cutting, jointing, testing and disinfecting High Density Polyethylene Pipe (HDPE-100) working pressure pipe in trenches. complete in all respects:-PN-8 (SDR-21)					
		i) 3" (90mm)	Rft.	7,790.00	122.45		
11	N.S	Provision made for horizontal boring to avoid the cutting of roads.complete in all respect as per Specifications, and as approved by The Engineer. 8" dia pipe	No.	5.00	14,000.00		
12	N.S	Provision made for Warning Tap 30 cm. Wide complete in all respect as per Specifications, and as approved by The Engineer.	Per/Rft	7,490.00	23.00		
		Total "B"(Schedule items) C/o to Summary of Cost:					
		Net Total (A+B)					

CONSTRUCTION OF ENTRANCE GATE
ENGINEER'S COST ESTIMATE
CIVIL WORKS

Item No.	REF. Nos CH/ITEM	Description of Items	Unit	Qty	Rate (Rs.)	Rate Quoted by the Contractor	Amount (Rs.)
MRS, 2ND BI-ANNUAL-2021 (1st JULY-2021 to 31st DECEMBER -2021) DISTRICT OKARA							
		SCHEDULE ITEMS-A					
		Earth Work					
1	CH:3 item 47(a) P-33	Jungle clearance and removing within 100 ft. (30 m).a) light	1000 Sft	2,907.75	191.40		
2	CH:3 item 21(b) P-30	Excavation in foundation of building and other sructures, including debelling,dressing,refilling around structure with excavated eart,watering and ramming lead upto one chain 100ft and lift upto 5 ft.in ordinary soil.	1000 Cft	1,423.80	8,078.40		
3	CH:3 item 15 P-29	Filling, watering and ramming earth under floors:					
3.1	CH:3 item 15(i) P-29	i) with surplus earth from foundation, etc.	1000 Cft	949.20	3,867.60		
3.2	CH:3 item 15 (ii) + 17 (a, b & c) P-29	ii) with new earth excavated from outside,lead upto 5 mile (8 Km). (as per actual borrow pit lead)	1000 Cft	1,389.47	15,021.80		
		Anti-Termite					

4	CH:26 item 42 P-177	Spraying anti-termite liquid mixed with water in the ratio of 1:40.	100 Sft	1,573.95	263.75		
		Plain and Reinforement Concrete					
5	CH:6 item 5 P-42	Cement concrete plain including placing, compacting , finishing and curing complete (including screening and washing of stone aggregate):-					
5.1	(i)	Ratio 1: 4: 8	100 Cft	128.10	19,686.00		
5.2	(f)	Ratio 1: 2: 4	100 Cft	24.10	25,014.00		
6	CH:6 item 6 P-42	Providing and laying reinforced cement concrete (including prestressed concrete), using coarse sand and screened graded and washed aggregate, in required shape and design, including forms, moulds, shuttering, lifting, compacting, curing, rendering and finishing exposed surface, complete (but excluding the cost of steel reinforcement, its fabrication and placing in position, etc.):-					
6.1	(a)(ii)	Reinforced cement concrete in slab of rafts / strip foundation, base slab of column and retaining walls; etc and other structural members other than those mentioned in i) above not requiring form work (i.e. horizontal shuttering) complete in all respects:-					
		Foundation					
6.1.1	(2)	Type B (nominal mix 1: 1½: 3)	Per Cft	444.00	335.45		
6.2	(a)(i)	Reinforced cement concrete slabs, beams, girders, Lintels and other structural members laid in situ or precast laid in position, or prestressed members cast in situ, complete in all respects:-					

		GROUND FLOOR					
6.2.1	(a)(i)(2)	Type B (nominal mix 1: 1½: 3)	Per Cft	221.23	446.45		
6.2.2	(a)(i)(3)	Type C (nominal mix 1: 2: 4)	Per Cft	306.38	414.00		
		FIRST FLOOR					
6.2.1	(a)(i)(2)	Type B (nominal mix 1: 1½: 3)	Per Cft	42.19	475.15		
6.2.3	(a)(i)(3)+(d)	Type C (nominal mix 1: 2: 4)	Per Cft	521.00	442.70		
		Steel Reinforcement					
7	CH:6 item 9 (c) P-45	Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of rust from bars) (c) Deformed bar (Grade 60)	100Kg	5,226.56	20,230.10		
8	CH:6 item 33 (b)(ii) P-48	Providing and laying damp proof course of cement concrete 1:2: 4(using cement, sand and shingle), including bitumen coating :- (b) with 2 coats of bitumen:	100 Sft	100.18	6,614.75		
9	CH:6 item 35 (b-ii-b) P-50	Providing and laying vertical damp proof course with cement sand plaster and bitumen coating (b) with 2 coats of bitumen:- ii) Ratio 1:3 b) ¾ " thick (20 mm)	100 Sft	138.08	4,536.85		
		Brick Work					
10	CH:7 item 4 (i) P-53	Pacca brick work in foundation and plinth in:- Cement, sand mortar:-Ratio 1:6	100 Cft	462.63	21,799.60		
		GROUND FLOOR					

11	CH:7 item 5 (i) P-54	Pacca brick work in ground floor :- Cement, sand mortar:-Ratio 1:6	100 Cft	1,086.88	23,449.60		
		FIRST FLOOR					
12	Ch-7 item 5 (i) & 6 (i) P-54	Pacca brick work in first floor:- Cement, sand mortar:-Ratio 1:6	100 Cft	1,047.75	24,466.00		
		SECOND FLOOR					
13	Ch-7 item 5 (i) & 6 (ii) P-54	Pacca brick work in second floor :- Cement, sand mortar:-Ratio 1:6	100 Cft	78.75	25,733.20		
14	Ch-7 item 9 P-55	Extra labour for arch work in brick masonry, including labour for centring and decentring.	100 Cft	113.40	1,887.60		
		Flooring					
15	Ch-7 item 30 P-58	Supplying and filling sand under floor; or plugging in wells	100 Cft	386.03	1,999.00		
16	Ch-10 item 3 P-68	Providing, laying, watering and ramming brick ballast 1½ to 2"(40 mm to 50 mm) gauge mixed with 25 % sand, for floor foundation, complete in all respects	100 Cft	405.33	5,465.70		
17	Ch-10 item 22 P-70	1½"(40 mm) thick mosaic flooring, consisting of ½ "(13mm) mosaic topping of one part of cement and marble powder in the ratio of 3:1 and two parts of marble chips, laid over 1"(25 mm) thick floor of 1:2:4 cement concrete, including rubbing and polishing complete with finishing :- (a) using grey cement	100 Sft	124.16	13,457.20		
18	Ch-10 item 15 c) P-69	Providing and laying topping of cement concrete 1:2:4, including surface finishing and dividing in panels:- 1½"(40 mm) thick	100 Sft	113.40	4,678.85		
18	Ch-10 item 42 (a) P-72	Providing and fixing marble strip of any shade for dividing the mosaic flooring into panels a) Size 1½" x 3/8" (40 x 10 mm)	Per Rft	149.66	9.25		

19	Ch-10 item 43(b) P-72	Providing and laying Tuff pavers, having 7000PSI, crushing strength of approved manufacturer, over 2" to 3" sand cushion i/c grouting with sand in joints i/c finishing to require slope . complete in all respect.(50% Grey / 50% Coloured) b) 60-mm thick	P.Sft	840.00	105.80		
		Surface Rending					
17	Ch-11 item 10 (b) P-74	Cement plaster ratio 1:3 under soffit of RCC roof slabs only , upto 20' height. 3/8" (10 mm) thick. (ceiling plaster)	100 Sft	677.51	2,628.85		
18	Ch-11 item 9 (b) P-74	Cement plaster 1:4 on internal walls upto 20' (6 m) height, 1/2" (13 mm) thick.	100 Sft	1,205.40	2,302.10		
19	Ch-11 item 9 (c) P-74	Cement plaster 1:4 on external walls upto 20' (6 m) height, 3/4" (20 mm) thick.	100 Sft	943.03	3,071.40		
20	Ch-11 item 18 (b) P-75	Cement pointing struck joints, on walls, upto 20' (6.00 m) hieght:-b) ratio 1:3	100 Sft	1,541.93	2,389.20		
		Wood Work					
21	Ch-12 item 50 P-85	Providing and fixing 1½" (40mm) thick solid flush door shutter (Approved Factory Manufactured) with commercial ply (5 mm thick) on both sides double pressed and deodar wood lipping 1½"x3/8" (40mm x 10mm) around shutter including chromium plated fitting, iron hinges with aluminium kick plate 22 SWG on both sides & finger plate complete in all respect.	Per/Sft	77.18	403.80		
22	Ch-12 item 58 P-86	Providing and fixing ornamental wooden architrave 3" x (1½" tapered to ¼") all along the door frame complete in all respect.b) Deodar wood architrave	Per/Sft	77.18	57.65		

23	Ch-12 item 21 P-80	Providing and fixing, approved quality mortice lock.	Each	4.00	634.10		
24	Ch-12 item 18 (iii) P-80	Providing and fixing sliding bolt to doors:- iii) brass sliding bolt, 10" (250 mm) long	Each	4.00	597.55		
		Painting and Warnishing					
25	Ch-13 item 31 (a)+(bx2) P-91	Preparing surface and painting with emulsion paint:- 3 Coats New Surface	100 Sft	1,977.06	2,200.75		
26	Ch-13 item 32A (a)(i+ii) P-91	Providing and applying weather shield paint of approved quality on external surface of building including preparation of surface, application of primer complete in all respect:- 2 Coats New Surface	100 Sft	277.20	3,116.00		
27	Ch-13 item 5 (c) (i+iiix2) P-88	Preparing surface and painting of doors and windows any type (including edges) 3 Coats New Surface	100 Sft	154.35	1,941.75		
28	Ch-13 item 5 (d) (i+iiix2) P-88	Preparing surface and painting guard bars, gates of iron bars, gratings, railing (including standards, braces, etc.) and in similar open work:- 3 Coats New Surface	100 Sft	564.90	1,303.38		
28	Ch-13 item 7 P-89	French polishing complete:-	100 Sft	44.10	3,846.55		
		Metal Work					

29	Ch-25 item 52 P-173	Providing and fitting all types of glazed aluminium windows of anodised bronze colour partly fixed and partly sliding using delux sections of approved manufacturer having frame size of 100 x 20 mm (4"x¾") and leaf frame sections of 50 x 20 mm (2"x¾"), all of 1.6mm thickness including 5 mm thick imported tinted glass with rubber gasket using approved standard latches, hardware etc., as approved by the Engineer in-charge.	Per/Sft	46.73	498.50		
30	Ch-25 item 53 P-173	Providing and fixing Aluminum Fly screen comprising of Fiber/Aluminum wire guaze (Malasian) fixed in aluminum frame of approved manufacturer brownze Colour / powder coated of size 1-1/2"x1/2" and 1.6 mm thick with rubbe gas ket i/c cost of Hardwares as approved and directed by the engineer incharge.complete in all respect.	Per/Sft	23.36	330.05		
		Roofing & Water Proofing					
31	Ch-9 item 5 P-62 + Ch-26 item 37(iix2) P-176	Single layer of tiles 9"x4½"x1½" (225x113x40 mm) laid over 4"(100 mm) earth and 1" (25 mm) mud plaster without Bhoosa, grouted with cement sand 1:3 on top of RCC roof slab, provided with 34 lbs. per %Sft. or 1.72 Kg/Sq.m bitumen coating sand blinded.i/c P/L double layer polythene sheet 500 gauge	100 Sft	408.71	9177.55		
32	Ch-9 item 15 P-64	Khuras on roof 2'x2'x6" (600 x 600 x 150 mm).	Each	5.00	603.60		
33	Ch-9 item 16 P-64	Bottom Khuras of brick masonry in cement mortar 1:6, 4'x2'x4½" (1200x600x113 mm) over 3" (75 mm) cement concrete 1:4:8.	Each	5.00	1,010.15		
	Total "A"(Schedule items) C/o to Summary of Cost:						

		NON SCHEDULE ITEMS-B					
		Fair Face Gutka Cladding					
1	N.S	Providing and fixing Fair Face Gutka cladding upto required height using special gutka of size 9"x2-1/4"x2-1/4" i/c cutting ghutka where necessary laying in 1:3 cement sand motor mixed with red oxide pigment with 3/8" thick joints an nominal filling the gap complete i/c cost of steel nails at every 2 ft center to center horizontally and in every 4th course vertically of cladding, embedded half in the wall and half embedded in cladding complete in all respect and as approved and directed by The Engineer.	Per/Sft	2,642.00	300.00		
		Flooring					
2	N.S	Providing and laying CERAMIC FLOOR TILES (PREMIUM) Size 12"x12" (CFT MATT) Master, or approved equivalent laid over 3/4" thick cement sand mortar (1:3) including setting the tiles with Bond (Stile, or approved equivalent) i/c filling joints with Grout (Stile, or approved equivalent) of matching color i/c cutting, leveling, washing and curing complete in all respect as per Specifications, and as per sample approved by The Engineer.	Per/Sft	21.00	191.00		
		Skirting / Dado					

3	N.S	Providing and laying CERAMIC WALL TILES (PREMIUM) size 12"x18" (Master, or approved equivalent) laid over pre-plastered surface including setting the tiles with Bond (Stile, or approved equivalent) i/c filling joints Grout (Stile, or approved equivalent) of matching color i/c cutting, leveling, washing and curing complete in all respect as per Specifications, and as per sample approved by The Engineer. Dado	Per/Sft	132.30	200.00		
		Kerb stone					
4	N.S	Providing and fixing Concrete Kerb stone (Izhar (Pvt.) Ltd or approved equivalent) having size 300 mm x 350 mm x 150 mm mm of 3500 PSI crushing strength over a bed of 4" thick cement concrete (1:2:4) and jointing with 3/4" thick cement mortar (1:3) i/c 6" x 12" cement concrete (1:2:4) for haunching in trapped shape including cost of painting Kerb Stone with reflective chlorinated rubber (CR) paint, excavation and back filling, as shown on drawings complete in all respect as approved by The Engineer.	Per/Rft	315.00	280.00		
		Windows Sill					
5	N.S	Providing and fixing 3/4" thick Pre-polished Boticina Marble Slab uniform texture full width and length laid over 3/4" thick cement sand mortar (1:3) including setting the tiles with Bond (Stile, or approved equivalent) i/c filling joints with Grout (Stile, or approved equivalent) of matching color i/c cutting, leveling, washing, curing and beveling charges on exposed edges complete in all respect as per Specifications, and as per sample approved by The Engineer.	Per/Sft	14.70	389.00		

		Entrance Steps / Podium					
6	N.S	Providing and fixing 3/4" thick pre-polished Granite Marble Slab uniform texture full width laid over 3/4" thick cement sand mortar (1:3) including setting the tiles with Bond (Stile, or approved equivalent) i/c filling joints with Grout (Stile, or approved equivalent) of matching color i/c cutting, leveling, washing, curing and beveling charges on exposed edges complete in all respect as per Specifications, and as per sample approved by The Engineer.	Per/Sft	11.03	784.00		
		Miscellaneous					
7	N.S	Providing and fixing M.S grill consisting of 1" x 1", 16-SWG M.S square pipe frame with 2 rows of horizontally & equal dividing panels vertically in the same frame and 1/2" M.S square bars 5" c/c welded to each other & frame horizontally with 2 rows of equal dividing in three panels vertically as per approved drawing and design in windows i/c hold fast, grouting hold fast in cement concrete (1:2:4) and enamel painting 3-coats with one base coat of red oxide paint complete in all respect as approved and directed by The Engineer.	Per/Sft	46.73	276.00		
8	N.S	Providing and fixing Hala Tiles (Stile & Approved Equivalent) on facing of approved size color and shade laid over pre-plastered surface including setting the tiles with Bond (Stile, or approved equivalent) i/c filling joints with Grout (Stile, or approved equivalent) of matching color i/c cutting, leveling, washing, curing and cost of scaffolding fixing at any height in any floor, complete in all respect as per Specifications, as approved by The	Per/Sft	636.69	252.00		

		Engineer.					
9	N.S	Providing and fixing S.S logo (UNIVERSITY OF AGRICULTURE FAISALABAD DEPALPUR CAMPUS) 22 SWG of 2' Height and proportionally wide with all hardware and any type of labour i/c cost of scaffolding fixing at any height in any floor, complete in all respect as per Specifications, as approved by The Engineer.	Job	1.00	144,500.0		
10	N.S	Providing and fixing 1000mm wide M.S Stair comprising M.S. W-section 2No. posts weighing W10 x 26 lbs/ft welded on M.S. base plate fixed on pedestal with anchor bolts and W10 x 12 and [4 x 5.4 lbs/ft at each landing level, including channel section [8 x 11.5 both sides support for stair with risers 280mm wide M.S. chequered plate 8mm thick, railing 25mm dia M.S. pipe hand rail and bracing at mid level 25mm dia M.S. pipe & L: 62.5 x 62.5 x 10mm balusters 900mm high on each step including all steel members, 2 coats of anti rust red oxide primer with 2-3 min. coats of ICI Enamel paint or approved equal, including welding and connections with concrete/masonry, etc., complete in all respect as per drawings and instruction of the Engineer.	Job	1.00	102,000.0		
11	N.S	Supply, provide and fix in position uPVC rain water down pipe lines conforming to ISO 3633:1991 and BS 3505 1968 (wall thickness 3.2mm) including proper joints complete in all respects, and system leak-free:					
		4" dia	Rft	79.80	189.00		

12	N.S	Provide and fix uPVC plain bends with grating (as rain water inlets at roof), water tight connection leak-free:					
		4" dia	Each	5.00	1,400		
13	N.S	Provide and fix uPVC shoe bends (as rain water outlets), water tight connection leak-free:					
		4" dia	Each	5.00	1,000		
		Total "B"(Non-Schedule items) C/o to Summary of Cost:					
		Net Total (A+B):					

**ESTABLISHMENT OF SUB-CAMPUS OF UNIVERSITY OF AGRICULTURE FAISALABAD, AT DEPALPUR – OKARA
(HEC FUNDED)**

CONSTRUCTION OF ENTRANCE GATE

ENGINEER'S COST ESTIMATE

PUBLIC HEALTH WORKS

Item No.	REF. Nos CH/ITEM	Description of Items	Unit	Qty	Rate (Rs.)	Rate Quoted by the Contractor	Amount (Rs.)
MRS, 2nd BI-ANNUAL-2021 (1st JULY-2021 to 31st DECEMBER -2021) DISTRICT OKARA							
	-	<u>Schedule Items (A)</u>					
		Part-1: Plumbing Fixtures					
1	Ch 19 item 3(i)/P-117	Providing and fitting glazed earthen ware water closet, squatter type (Orisa pattern), combined with foot rest. i) white	Each	1.00	1349.20		
2	Ch 19 item 12(i)/P-118	Providing and fitting plastic made low down flushing cistern 13.63 litre (3 gallons) capacity, including bracket set, copper connection, etc. complete. i) white	Each	1.00	1575.60		
3	Ch 19 item 27/P-120	Providing and fixing chromimum plated tee stop cock 15mm (½")	Each	3.00	467.80		
4	Ch 19 item 17/P-118	Providing and fixing, chromimum plated toilet paper holder	Each	1.00	430.05		
5	Ch 19 item 18(i)/P-119	Providing and fixing, chromium plated towel rail:- i) 60 cm (24") long, and 2 cm (¾") dia	Each	1.00	373.85		
6	Ch 19 item 6(i)/P-117	Providing and fitting glazed earthen ware wash hand basin 56x40 cm (22"x16") including bracket set, waste pipe and waste coupling, etc. i) white, with pedestal	Each	1.00	2778.75		
7	Ch 19 item 15/P-118	Providing and fixing, chromium plated soap dish.	Each	1.00	204.40		
		<u>Part-2: Sewerage System</u>					

		Earthwork excavation in open cutting for sewers and manholes as shown in drawings including shuttering and timbering, dressing to correct section and dimensions according to templates and levels, and removing surface water, in all types of soil except shingle, gravel and rock:- (FOR PIPES)					
8	Ch 3 item 42(i)/P-32	i) 0 ft. to 7.0 ft. (0 to 2.10 m) depth	1000 Cft	90	6,683.30		
9	Ch 3 item 15(i)/P-29	Filling, watering and ramming earth under floors:-					
		i) with surplus earth from foundation, etc.	1000 Cft	90	3,867.60		
10	Ch 7 item 30/P-58	Supplying and filling sand under floor; or plugging in wells	100 Cft	8	1,999.00		
11	Ch 21 item 1(ii)/P-127	Providing and laying R.C.C. pipe, moulded with cement concrete 1:1½:3, with spigot socket or collar joint, etc. including cost of reinforcement, conforming to B.S. 5911: Part I: 1981, Class "L" including carriage of pipe from factory to site of work, lowering in trenches to correct alignment and grade, jointing, cutting pipes where necessary, finishing and testing, etc., complete.					
		ii) 150 mm (6") i/d	Rft	15	220.95		
Total "A"(Schedule items) C/o to Summary of Cost:							
	-	<u>Non Schedule Items (B)</u>					
		<u>Part-1: Plumbing Fixtures</u>					
1	NS	Providing and fixing C.P. Muslim Shower with double bib cock of best quality, with C.P. flexible pipe of, complete in all respect as per specifications and drawings.	Each	1.00	4,520.00		

2	NS	Providing and fixing 15 mm dia C.P. mixer with C.P pipe 15 mm dia, of complete including pipe connections, all fittings, testing etc.					
		a) Wash basin mixer	Each	1.00	7,630.00		
3	NS	Providing and fitting (4") uPVC "P" trap of Complete in all respect as per drawings, Specification & Engineer In Charge.	Each	1.00	3,361.00		
4	NS	Providing and fixing best quality distortion free imported Belgium glass (beveled) mirrors 5mm thick with hard board backing, chromium plated screws/brackets, complete in all respects as per specifications and drawings.	Sft	4.00	420.00		
		<u>Part-2: Water Supply System</u>					
5	NS	Providing, fixing, jointing and testing Polypropylene Random (PPR) pipes, pressure pipe for cold/hot water as per DIN 8077-8078, PN-20 for pipes and DIN 16962, PN-25 for fittings (polyfusion welded joints) inside building including fittings and specials (sockets, tees, elbows, bends, crosses, reducers, adaptor, plugs and union etc.) supported on walls or suspended from roof slab or run in chases including pipe hangers, supports, cutting and making good the chases and holes, complete in all respects.					
		25mm dia	Rft	30	170.00		
		32mm dia	Rft	50	265.00		
6	NS	Providing and installing ball valves of following nominal dia, including jointing, fitting, painting, testing, complete in all respects to match with PPR and PE pipes of following diameters.					
		32 mm	Nos.	3.00	2,761.00		

7	NS	Providing and installing Gas geyser “CANON” including fitting & fitting accessories, complete in all respect as per specifications and drawings.					
		6 Liter Instant Geyser	Nos.	1.00	15,442.00		
8	NS	Providing and installing Plastic Tank 200 GALLON (DURA PLUS) Capacity including fitting & fitting accessories, complete in all respect as per specifications and drawings.	Nos.	1.00	19,350.00		
		<u>Part-3: Sewerage System</u>					
9	NS	Providing, laying, fixing and testing uPVC Nicasi soil, waste, vent and rain water as per ISO 3633:1991 or equivalent BS specifications including uPVC fittings with solvent cement jointing or rubber ring joints, as approved by the Engineer complete in all respects, including clamps, bends, tees, Y-tees, cowls, reducers, sleeves, clean out, waterproof sleeves, roof drain, etc., embedded in floors and walls, clamped to walls, suspended from slab (common hanger shall be used for pipe hanging and fiber glass tray under pipes), painted MS horizontal and vertical pipe hangers of approved design making requisite no. of holes and making good the same complete in all respect as per specifications and drawings.					
		2" i.d	Rft	10	302.00		
		3" i.d	Rft	60	472.00		
		4" i.d	Rft	15	724.00		
10	NS	Providing, fixing, cutting, jointing and testing uPVC Vent Cowel on Vent Pipes with solvent cement jointing, rates include cost of cutting & pipe fittings of the following diameter:					
		2" i.d	Nos	1.00	259.00		

11	NS	Providing, laying, fixing and testing floor drain (multifloor trap) uPVC including extension grating and stainless steel cover grating best quality as approved Engineer, complete in all respect as per specifications and drawings.	Nos.	2.00	2,074.00		
12	NS	Providing and constructing 2'x2' manhole with brick work including excavation, backfilling, RCC work PCC 1:2:4 cambering, plastering in 1:5 inside & outside, water proofing etc., upto 6' depth and size including ladder top slab, 24" heavy duty C.I. Manhole cover with frame as shown on the drawings, complete in all respect as per specifications and drawings.	Each	1.00	22,180.00		
13	NS	Providing and making Gully trap 6"x6" internal size including 4.5" thick brick masonry (1:4), 1/2" th. Plastering (1:3) i/side, brick blast 3" thick benching with PCC 1:4:8 4" thick. with cement finish, including steel grating cover, chamber 3" dia uPVC Pipe with S-trap and connection with manhole. complete in all respect as per specifications, drawings & Engineer in charge.	Each	1.00	3,194.00		
14	NS	Providing and making top khurra/R.W.C.B using 3" thick plain cement concrete 1:2:4 matching with roof tiles with steel trowel finishing at desired level including curing, finishing, complete in all respect as per specifications and drawings.					
		i) 1'x1'.	Each	3.00	1,130.00		
Total "B"(Schedule items) C/o to Summary of Cost :							
Net Total (A+B) :							

**ESTABLISHMENT OF SUB-CAMPUS OF UNIVERSITY OF AGRICULTURE FAISALABAD, AT DEPALPUR -
OKARA (HEC FUNDED)**

CONSTRUCTION OF ENTRANCE GATE

ENGINEER'S ESTIMATE

ELECTRICAL WORKS

Item No.	REF. Nos CH/ITEM	Description of Items	Unit	Qty	Rate (Rs.)	Rate Quoted by the Contractor	Amount (Rs.)
AMMENDED MRS, 2nd BI-ANNUAL-2021 (01.07.2021 to 31.12.2021) DISTRICT OKARA							
		SCHEDULE ITEM-A					
		Internal Electrification					
A.01		Light Circuits					
		Supply, installation and commissioning of light circuit wiring, to be wired with 4x2.5mm sq. (1P+1N+1PE) PVC insulated 300/500 V grade wire make Pakistan Cable, Newage, Fast Cables, in and including cost of 1" dia. heavy duty PVC conduit make Beta , Popular recessed in , walls, Roof slab, or on surface or above false ceiling or as required as per site conditions, all PVC conduit accessories, pull boxes, steel pull wires , complete in all respects. Each circuit shall have independent PE.					
	CH: 24 Item 10 (a)-iii P-144	Supply and erection of single core PVC insulated copper conductor cables in prelaidd PVC pipe/M.S conduit G.I pipe/wooden strip batten/wooden casing and capping/G.I wire/trenches (rate for cables only) i) Cost of 1x 2.5 mm (7/0.029")	Rft	560.00	18.35		

	CH: 24 Item 3 (iii) P-143	Supply and erection of PVC pipe for wiring recessed in wall including inspection boxes pull boxes, hooks, cutting jharries, and repairing surface, etc, complete with all specials ii) Cost of 25mm	Rft	186.67	70.50		
A.02		1-Light Point Controlled By One Switch					
		Wiring of one light point controlled by one switch and wired with 3x1.5 mm sq. (P+N+PE) PVC insulated wires 300/500 V. grade makePakistan Cable, Newage, Fast Cables, in and including cost of 3/4" dia. heavy duty PVC conduit make Beta , Popular installed on RCC slab, above false ceiling, recessed in wall, columns slabs or above light carrier all PVC conduit accessories, 3" high PVC junction boxes, pull boxes, steel pull wires, PVC flexiable conduit from ceiling junction box to light fixture flush type plate switches, including cost of back boxes and switches of 10 Amps.					
	CH: 24 Item 10 (a)-i P-144	Supply and erection of single core PVC insulated copper conductor cables in prelaidd PVC pipe/M.S conduit G.I pipe\wooden strip batten/wooden casing and capping/G.I wire/trenches (rate for cables only) i) Cost of 1x 1.5 mm (3/0.029")	Rft	1,020.00	14.05		
	CH: 24 Item 3 (ii) P-143	Supply and erection of PVC pipe for wiring recessed in wall including inspection boxes pull boxes, hooks, cutting jharries, and repairing surface, etc, complete with all specials ii) Cost of 20mm	Rft	340.00	61.00		
A.03		Point -Point Wiring					
		Same as per item No. A.02 but Loop wiring of a light point from first light point on same switch circuit, complete in all respects.					

	CH: 24 Item 10 (a)-i P-144	Supply and erection of single core PVC insulated copper conductor cables in prelaid PVC pipe/M.S conduit G.I pipe\wooden strip batten/wooden casing and capping/G.I wire/trenches (rate for cables only) i) Cost of 1x 1.5 mm (3/0.029")	Rft	990.00	14.05		
	CH: 24 Item 3 (ii) P-143	Supply and erection of PVC pipe for wiring recessed in wall including inspection boxes pull boxes, hooks, cutting jharries, and repairing surface, etc, complete with all specials ii) Cost of 20mm	Rft	330.00	61.00		
A.04		3-Light Points Controlled By One MCB					
		Wiring of 03 light points controlled by one MCB and wired with 3x2.5 mm sq. (P+N+PE) PVC insulated wires 300/500 V. grade makePakistan Cable, Newage, Fast Cables, in and including cost of 1" dia. heavy duty PVC conduit make Beta , Popular recessed in , walls, Roof slab, or on surface or above false ceiling or as required as per site conditions, all PVC conduit accessories, pull boxes, steel pull wires , complete in all respects. The Cost of MCB is not included.					
	CH: 24 Item 10 (a)-iii P-144	Supply and erection of single core PVC insulated copper conductor cables in prelaid PVC pipe/M.S conduit G.I pipe\wooden strip batten/wooden casing and capping/G.I wire/trenches (rate for cables only) i) Cost of 1x 2.5 mm (7/0.029")	Rft	840.00	18.35		
	CH: 24 Item 3 (iii) P-143	Supply and erection of PVC pipe for wiring recessed in wall including inspection boxes pull boxes, hooks, cutting jharries, and repairing surface, etc, complete with all specials ii) Cost of 25mm	Rft	210.00	70.50		
A.07		Wall Bracket / Ceiling Fan Point					

		Same as Item No. A.02 mentioned above but wiring of Wall Bracket / Ceiling fan point including cost of 10 Amp switch with M.S box 16 SWG with earth terminal.					
	CH: 24 Item 10 (a)-i P-144	Supply and erection of single core PVC insulated copper conductor cables in prelaid PVC pipe/M.S conduit G.I pipe\wooden strip batten/wooden casing and capping/G.I wire/trenches (rate for cables only)i) Cost of 1x 1.5 mm (3/0.029")	Rft	240.00	14.05		
	CH: 24 Item 3 (ii) P-143	Supply and erection of PVC pipe for wiring recessed in wall including inspection boxes pull boxes, hooks, cutting jharries, and repairing surface, etc, complete with all specials ii) Cost of 20mm	Rft	80.00	61.00		
A.08		1-13 Amps Switch Socket					
		Supply and wiring of one 3pin 13 Amps light plug socket outlet point from distribution board with single core 2x4mm2(P+N) PVC insulated 300/500 volt grade cable in & including PVC conduit recessed in walls/R.C.C. slab, or installed on surface of Ceiling, all conduits accessories, junction boxes, pull boxes etc. 2.5mm2 cable as PC excluding cost of 3 pin 13 Amps switch & socket outlet make CLIPSAL, Legrand , ABB or approved equivalent installed on & including 16 SWG sheet steel board recessed in walls complete in all respects and as per specifications & drawings.					
	CH: 24 Item 10 (a)-iv P-144	Supply and erection of single core PVC insulated copper conductor cables in prelaid PVC pipe/M.S conduit G.I pipe\wooden strip batten/wooden casing and capping/G.I wire/trenches (rate for cables only) i) Cost of 1x 4 mm (7/0.036")	Rft	240.00	25.60		

	CH: 24 Item 10 (a)-iii P-144	Supply and erection of single core PVC insulated copper conductor cables in prelaid PVC pipe/M.S conduit G.I pipe\wooden strip batten/wooden casing and capping/G.I wire/trenches (rate for cables only) i) Cost of 1x 2.5 mm (7/0.029")	Rft	80.00	18.35		
	CH: 24 Item 3 (iii) P-143	Supply and erection of PVC pipe for wiring recessed in wall including inspection boxes pull boxes, hooks, cutting jharries, and repairing surface, etc, complete with all specialsii) Cost of 25mm	Rft	80.00	70.50		
A.09		Loop-Loop- 13 Amps Switch Socket					
		Same as item No.A.12 above but loop wiring of 13A power socket outlet with 2x4mm ² (P+N) & 1x2.5mm ² as CPC from point to point excluding cost of one 15A 3 pin switch socket outlets with make CLIPSAL, Legrand, ABB or approved equivalent installed on & including 16 SWG sheet steel boards recessed in walls /columns.					
	CH: 24 Item 10 (a)-iv P-144	Supply and erection of single core PVC insulated copper conductor cables in prelaid PVC pipe/M.S conduit G.I pipe\wooden strip batten/wooden casing and capping/G.I wire/trenches (rate for cables only) i) Cost of 1x 4 mm (7/0.036")	Rft	60.00	25.60		
	CH: 24 Item 10 (a)-iii P-144	Supply and erection of single core PVC insulated copper conductor cables in prelaid PVC pipe/M.S conduit G.I pipe\wooden strip batten/wooden casing and capping/G.I wire/trenches (rate for cables only) i) Cost of 1x 2.5 mm (7/0.029")	Rft	20.00	18.35		

	CH: 24 Item 3 (iii) P-143	Supply and erection of PVC pipe for wiring recessed in wall including inspection boxes pull boxes, hooks, cutting jharries, and repairing surface, etc, complete with all specials ii) Cost of 25mm	Rft	20.00	70.50		
A.10		Loop-Loop- 5 Amps Switch Socket					
		Same as item No.A.12 above but loop wiring of 5A power socket outlet with 2x4mm2(P+N) & 1x2.5mm2 as CPC from point to point excluding cost of one 15A 3 pin switch socket outlets with make CLIPSAL, Legrand, ABB or approved equivalent installed on & including 16 SWG sheet steel boards recessed in walls /columns.					
	CH: 24 Item 10 (a)-iv P-144	Supply and erection of single core PVC insulated copper conductor cables in prelaid PVC pipe/M.S conduit G.I pipe\wooden strip batten/wooden casing and capping/G.I wire/trenches (rate for cables only) i) Cost of 1x 4 mm (7/0.036")	Rft	360.00	25.60		
	CH: 24 Item 10 (a)-iii P-144	Supply and erection of single core PVC insulated copper conductor cables in prelaid PVC pipe/M.S conduit G.I pipe\wooden strip batten/wooden casing and capping/G.I wire/trenches (rate for cables only) i) Cost of 1x 2.5 mm (7/0.029")	Rft	120.00	18.35		
	CH: 24 Item 3 (iii) P-143	Supply and erection of PVC pipe for wiring recessed in wall including inspection boxes pull boxes, hooks, cutting jharries, and repairing surface, etc, complete with all specials ii) Cost of 25mm	Rft	120.00	70.50		
A.12		Power Cables and PVC Conduit					
		L.T. Power Cables					

		Supply at site, installation, testing and commissioning of PVC insulated armoured copper conductor cable 600 / 1000 Volt grade in prelaidd conduits / trenches to be installed as per routes shown on drawings including cost of all necessary materials, connections, identification tags, cables lugs properly crimped at both ends for the following sizes complete in all respects. Actual length of cables to be installed shall be practically measured at site by the Contractor, duly authenticated by the employers electrical engineer before placing the order with the manufacturer, however, approximate length of cables are shown herewith. Payments shall be made as per actual length installed.make Pakistan Cable, Newage Cable, Fast Cable or eqv..					
a)		PVC insulated, PVC sheathed 4 core 660/1100 volt grade cable, armoured with G.I. wire 16 SWG.					
I	CH: 24 Item 13 (c)-vi P-145	4 core 16mm sq. cable from Meter Panel Board to DBs.	Rft	350.00	274.85		
b)		single core PVC insulated, PVC sheathed copper conductor, 660/1100 volts grade cable Circuit Protective Conductor (CPC)					
I	CH: 24 Item 11 (v) P-145	1 core 6mm sq.	Rft	350.00	39.10		
A.13		PVC Conduit					
		Supply at site of PVC conduit heavy duty to be concealed in RCC slabs, walls, floor, columns above false ceiling or as required as per site conditions including cost of all PVC conduit					

		accessories, steel pull wires, complete in all respects.					
i)	CH: 24 Item 6 (i) P-143	2" DIA PVC Conduit	Rft	350.00	136.80		
ii)	CH: 24 Item 3(iii) P-143	25 mm i/d	Rft	200.00	70.50		
		Total "A"(Schedule items) C/o to Summary of Cost:					
		NON SCHEDULE ITEM-B					
B.01		Switch & Sockets.					
I	Appendix 'c' Page No-1	Providing and fixing of 8 gang switch 10 Amp with back box (6"x3"). Make Clipsal Austrila, Legrand, ABB or eqv.	Each	3.00	2,196.87		
Ii	Appendix 'c' Page No-2	Providing and Fixing of Switched Socket 5 Amp with back box (3"x3"). Make Clipsal Austrila, Legrand, ABB or eqv.	Each	9.00	680.58		
iii	Appendix 'c' Page No-3	Providing and Fixing of Universal Switched Socket 13 Amp with back box (3"x3"). Make Clipsal Austrila, Legrand, ABB or eqv.	Each	3.00	800.58		
B.02		<u>Distribution Board</u> (DBLP-1G)					

		<p>Fabrication, supply at site, installation, testing, commissioning and connections of wires / cables of Distribution Boards “Light / Power” concealed / open type to be installed as and where shown on drawing, made of MS sheet 16 SWG degreased and derusted, zinc phosphated, finished with electro-static powder coating of 50 micron thickness in approved colour, DB housing to comply with protection class IP-44 with hinged door, flexible earthing strap lockable handle, catcher, earthing bar, neutral strip, internal wiring from MCBs terminating on cable terminal blocks, including cost of all necessary materials complete in all respects. DBs shall be manufactured by PEL, Technobuild, Ibbad Switchgear or Eqv.</p> <p><u>Incoming</u></p> <p>1- 75 Amps 3 pole Moulded Case Circuit Breaker (MCCB) RC: 16 KA.</p> <p><u>Outgoing</u></p> <p>18- 10/16/20 Amps Single Pole MCB RC: 6 KA</p> <p>1- Internal power wiring, and control wiring, thimbles, tie, and cable tray. Backled & safety sheet for live equipment.</p> <p>Provision of spaces for future MCB's of rating 10 Amps but <u>EXCLUDING</u> the cost of breakers.</p>					
B.03	Appendix 'c' Page No-5	Fitting and Fixtures.	No.	1	61,560.00		

		Incandescent Fittings					
		Supply, instalation, testing and commissioning of LED road light with imported chip , campitble imported driver with IP 66 rating , built in Aluminium Alloy + lens housing , input voltage AC 85-285V Frequency 50-60 Hz , beam angle 140° LED Life span 60000 Hours, colour Warm white 3000K ,as per specifications and to the approval of the Consultant/ The Engineer, Make Philips, SunLight, Lumilux eqv.					
i)	Appendix 'c' Page No-6	Supply and installation of Down light fixture with 17 watt Surface mounted LED Downlighter, complete with all necessary materials / accessories, complete in all respects.	No	11.00	2,192.64		
ii)	Appendix 'c' Page No-7	Supply and installation of LED Indoor Wall Bracket Light 14 Watt, complete with all necessary materials / accessories, complete in all respects	No	6.00	1,568.64		
iii)	Appendix 'c' Page No-8	Supply and installation of LED Outdoor IP-65 Wall Washer Light 14 Watt, complete with all necessary materials / accessories, complete in all respects	Nos.	22.00	4,179.17		
iv)	Appendix 'c' Page No-9	Supply and installation of 100 Watt Flood Light Warm Color Philps or Lumilux, complete with all necessary materials / accessories, complete in all respects	Nos.	6.00	17,468.64		
B.03		Ceiling Fan					
	N.S	Supply, installation and commissioning of Ceiling fan 56" complete all necessary fixing accessories complete in all respect (Energy Efficient PAK Fan Deluxe model) as approved by PEECA.	Nos.	2.00	5,300.00		
B.04		Wall Bracket Fan					

	Appendix 'c' Page No-10	Supply, installation and commissioning of Wall Bracket Fan 14" complete all necessary fixing accessories complete in all respect manufactured by make Lahore Fan, PAK Fan , GFC Fan	Nos.	2.00	5,687.28		
B.02		Exhaust Fans					
		Supply, installation and commissioning of Exhaust Fans 2 Way of following sizes plastic body, louvers, all necessary fixing accessories, make Asia, Climax, PAK National complete in all respects. (Energy Efficient Fan as approved by PEECA)12" dia (Plastic Body).					
a)	N.S	12" dia (Plastic Body).	No	1.00	4,610.00		
B.05		CCTV System IP Base					
		<u>Data Wiring of Camera</u>					
i							
	Appendix 'c' Page No-11	Supply, Installation and commissioning of wiring as per drawing wired with CAT- 6 23 AWG, UTP Cable UL Listed, run in pre laid conduit from CCTV point to Data Switcher, including all installation accessories. Make Delpro (UK), Belden, Schneider, Actual quantities shall be measured as per site & paid accordingly. Complete in all respects	Rft	3,000.00	50.58		
ii		<u>Power Wiring of Network Switch</u>					
	Appendix 'c' Page No-12	Supply, Installation and commissioning of wiring for Power with flexible 3C, 2.5 Sq.mm, Fire Resistant Shielded Cable (Fire Rating for 2 hours) in pre laid conduit from pre laid Conduit. Make Delpro (UK) / Belden/ Covican (Italy), or as specified in appendix-A as approved equivalent by engineer's Incharge or consultants, Actual quantities shall be measured as per site & paid accordingly. Complete in all respects	Rft	100.00	95.16		

iii		<u>Network Switch</u>					
	Appendix 'c' Page No-13	Supply, Installation and commissioning of 16 port POE Network Switch Make CISCO, 3M, Schnieder as approved equivalent by engineer's Incharge or consultants, Actual quantities shall be measured as per site & paid accordingly. Complete in all respects	Nos.	1.00	58,800.00		
iv	-	<u>CAT-6 UTP 1 METER PATCH CORD</u>					
	Appendix 'c' Page No-14	Supply, installation and connections of CAT-6 UTP 1 meter Patch cord Factory Fabricated and UL Listed with anti Snag Boots- Gold over nickel plated. Make Delpro (UK) Schneider as approved Eqavlent by engineer's Incharge or consultants, Actual quantities shall be measured as per site & paid accordingly. Complete in all respects	No	8.00	516.00		
v	-	<u>CAT-6 UTP 3 METER PATCH CORD</u>					
	Appendix 'c' Page No-15	Supply, installation and connections of CAT-6 UTP 3 meter Patch cord Factory Fabricated and UL Listed with anti Snag Boots- Gold over nickel plated. Make Delpro (UK), Schneider as approved Eqavlent by engineer's Incharge or consultants, Actual quantities shall be measured as per site & paid accordingly. Complete in all respects	No	3.00	828.00		
vi	-	<u>CAT-6 UTP 16 PORT SLIDING PATCH PANEL</u>					
	Appendix 'c' Page No-16	Supply, installation & connections of CAT-6 UTP 16 Port sliding Patch Panel loaded with one piece tool less I/O's VDIB112241U-/VDIB17726- U12 having u shaped smart bridle- Must be UL Listed. The patch panel	Rft	1.00	3,600.00		

		must have two side buttons for locking mechanism .Make Delpro (UK), Schneider or as approved equivalent by engineer's Incharge or consultants, Actual quantities shall be measured as per site & paid accordingly. Complete in all respects					
vii	-	<u>CABLE ORGANIZER MADE WITH METAL</u>					
	Appendix 'c' Page No-17	Supply and installation of Cable Organizer made with metal, high graded epoxy powder coating and slideable top- Should be UL Listed. for Rack-mount Front Cable Organizer ACTRJ1-UC MPM Schneider as approved equivalent by engineer's Incharge or consultants, Actual quantities shall be measured as per site & paid accordingly. Complete in all respects	Rft	1.00	4,200.00		
viii	-	<u>Dome / Bullet - IP - Camera</u>					
	Appendix 'c' Page No-18	Supply and installation of IP Dome / Bullet Night Vision CCTV, 4MP Model D2404, H.264/H.265 Compatible with 2592x1520 Effective Pixels and Varifocal Lens (2.8~12mm), With upto 40- 50 Meter IR Distance, 40 PCS LED, IP65/66 Weatherproof and Vandalproof, complete in all respects make make Delpro (UK).	Nos.	8.00	42,600.00		
ix	-	<u>Network Video Recorder</u>					
	Appendix 'c' Page No-19	Supply, installation and connections of 16 channel NVR Model NC2485 with 4K Display output that support digital video stream with HDMI cable as required at site. Make Delpro (UK), approved equivalent by consultant or Engineer Incharge, including Brand New 4TB	Nos.	1.00	120,000.0		

		Hard drive Sata .Actual quantities shall be measured as per site & paid accordingly. Complete in all respects.					
X		<u>MONITOR</u>					
	Appendix 'c' Page No-20	Supply, installation and connections of 55" SMART BACKLIT LED 1080p monitor with operation capacity of 24/7 wit 3 year warranty. make by Samsung, TCL, LG or as specified in appendix-A approved equivalent by consultant or Engineer Incharge, Complete in all respects Actual quantities shall be measured as per site & paid accordingly. Complete in all respects.	Nos.	1.00	118,800.0		
B.06		<u>TELEPHONE SYSTEM</u>					
I		<u>Telephone Outlet</u>					
	Appendix 'c' Page No-21	Supply and installation of Single Shutter Face Plate including I/Os with bracket and UTP Cat-6 Keystone Jack make : Norden, clipsal, 3M,complete in all respect as approved by the site incharge. RJ-45 outlet, including Plastic Wall Box Clipsal	Each	3	1,597.80		
ii		<u>CAT-6 CABLE FOR TELEPHONE SYSTEM</u>					
	Appendix 'c' Page No-11	Supply, Installation and commissioning of wiring as per drawing wired with CAT- 6 23 AWG, UTP Cable UL Listed, run in pre laid conduit from CCTV point to Data Switcher, including all installation accessories. Make Delpro (UK), Belden /Schneider or as specified in appendix-A as approved equivalent by engineer's Incharge or consultants, Actual quantities shall be measured as per site & paid accordingly. Complete in all respects	Rft	1500	50.58		

iii	-	<u>Close Circuit Junction Box (CCJB)</u>					
		Supply and fabrication of close circuit junction boxes 16 SWG to be concealed in wall with 2 coats of antirust paint, earthing terminal, complete in all respects.					
	Appendix 'c' Page No-22	Junction boxes of appropriate size 4"x7".	Nos.	1.00	2,468.64		
	Total "B"(Non-Schedule items) C/o to Summary of Cost:						
	Net Total (A+B):						

**ESTABLISHMENT OF SUB-CAMPUS OF UNIVERSITY OF AGRICULTURE FAISALABAD, AT DEPALPUR - OKARA
(HEC FUNDED)**

ENGINEER'S COST ESTIMATE

CONSTRUCTION OF WAITING AREA (20'X25')

Item No.	REF. Nos CH/ITEM	Description of Items	Unit	Qty	Rate (Rs.)	Rate Quoted by the Contractor	Amount
MRS, 2ND BI-ANNUAL-2021 (1st JULY-2021 to 31st DECEMBER -2021) DISTRICT OKARA							
		SCHEDULE ITEMS-A					
		Earth Work					
1	CH:3 item 47(a) P-33	Jungle clearance and removing within 100 ft. (30 m).a) light	1000 Sft	836.85	191.40		
2	CH:3 item 21 (b) P-30	Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling around structure with excavated earth, watering and ramming lead upto one chain (30 m) and lift upto 5 ft. (1.5 m) b) in ordinary soil.	1000 Cft	604.80	8,078.40		
		Filling, watering and ramming earth under floors:-					
3.1	CH:3 item 15 (i) P-29	i) with surplus earth from foundation, etc.	1000 Cft	423.36	3,867.60		
3.2	CH:3 item 15 (ii) + 17 (a, b & c) P-29	ii) with new earth excavated from outside,lead upto 5 mile (8 Km). (as per actual borrow pit lead)	1000 Cft	1,229.17	15,021.80		
4	CH:3 item 24	Compaction of earthwork (soft, ordinary or hard soil) :-b) Compaction by rolling with animal	1000 Cft	1,735.16	1,339.80		

	(b)(ii) P-30	driven roller/hand rammed:ii) ordinary soil					
		Plain and Reinforcement Concrete					
5	CH:6 item 3 (b)(ii) P41	Cement concrete brick or stone ballast 1½ " to 2" (40 mm to 50 mm) gauge, in foundation and plinth:- (b) Ratio 1: 4: 8	100 Cft	170.10	15,212.70		
1	CH:6 item 5 (f) P42	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate): (f) Ratio 1: 2: 4	100 Cft	11.77	25,014.00		
		Brick Work					
6	CH:7 item 4 (i) P53	Pacca brick work in foundation and plinth in:- i) Cement, sand mortar:-Ratio 1:5	100 Cft	324.25	22,219.85		
7	CH:7 item 7 (i) P54	Pacca brick work other than building upto 10ft. (3 m) height.i) cement, sand mortar:-Ratio 1:5	100 Cft	354.38	23,036.40		
		Surface Rendring					
8	Ch-11 item 9 (c) P-74	Cement plaster 1:4 on external walls upto 20' (6 m) height, 1/2" (13 mm) thick.	100 Sft	472.50	3,071.40		
9	Ch-11 item 9 (b) P-75	Cement pointing struck joints, on walls, upto 20' (6.00 m) hieght:-b) ratio 1:3	100 Sft	472.50	2,389.20		
		Painting and Varnishing					
10	Ch-13 item 32A (a)(i+ii) P-89	Providing and applying weather shield paint of approved quality on external surface of building including preparation of surface, application of primer complete in all respect:-a) new surface:2-Coats	100 Sft	496.13	3,116.00		
		Flooring					

11	Ch-10 item 43 P- 68	Providing, laying, watering and ramming brick ballast 1½" to 2"(40 mm to 50 mm) gauge mixed with 25% sand, for floor foundation, complete in all respects.	100 Cft.	278.67	5,465.70		
12	Ch-10 item 43(b) P-72	Providing and laying Tuffpavers , having 7000PSI ,crushing strength of approved manufacturer, over 2" to 3" sand cushion i/cg routing with sand in joints i/c finishing to require slope. complete in all respect. (50% Grey / 50% Coloured)					
		a) 50-mm thick	P.Sft	836.85	94.70		
	Total "A"(Schedule items) C/o to Summary of Cost:						
		NON SCHEDULE ITEMS-B					
		Miscellenious					
1	N.S	Providing and fixing Concrete Kerb stone (Izhar (Pvt.) Ltd or approved equivalent) having size 300 mm x 350 mm x 150 mm over a bed of 2” thick cement concrete (1:4:8) and jointing with 3/4" thick cement mortar (1:3) i/c 6” x 12” cement concrete (1:4:8) for haunching in trapped shape including cost of painting Kerb Stone with reflective clorinated rubber (CR) paint, excavation and back filling, as shown on drawings complete in all respect as approved by The Engineer.	Per/Rft	140.70	280.00		
2	N.S	Providing and Fixing Concrete Garden Bench of approved design and finish, as shown on drawings, complete in all respect as approved by The Engineer.	Each	5.00	9,600.00		

3	N.S	Providing and Fixing Fiberglass Shed including 3-play fiber sheet (3mm FRP Sheet) (Syed Tensile Structure or Eqvl) and 1.5"x1.5", 18 gauge box pipe (2'x2'). frame, 6 Nos. poles 4" dia 14 gauge i/c cost of foundation excavation, PCC, RCC with anchor / j-bolt etc. i/c all allied works as shown in drawings and specifications complete in all respects, as approved by The Engineer.	Per/Sft	800.00	630.00		
		Total "B"(Schedule items) C/o to Summary of Cost:					
		Net Total (A+B)					

**ESTABLISHMENT OF SUB-CAMPUS OF UNIVERSITY OF AGRICULTURE FAISALABAD, AT DEPALPUR - OKARA
(HEC FUNDED)**

ENGINEER'S COST ESTIMATE

CONSTRUCTION OF FOOTPATH 6' WIDE

Item No.	REF. Nos CH/ITEM	Description of Items	Unit	Qty	Rate (Rs.)	Rate Quoted by the Contractor	Amount (Rs.)
MRS, 2ND BI-ANNUAL-2021 (1st JULY-2021 to 31st DECEMBER -2021) DISTRICT OKARA							
		SCHEDULE ITEMS-A					
		Earth Work					
1	CH:3 item 47(a) P-33	Jungle clearance and removing within 100 ft. (30 m).a) light	1000 Sft	6,300.00	191.40		
2	CH:3 item 21 (b) P-30	Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling around structure with excavated earth, watering and ramming lead upto one chain (30 m) and lift upto 5 ft. (1.5 m) b) in ordinary soil.	1000 Cft	656.00	8,078.40		
		Filling, watering and ramming earth under floors:-					
3.1	CH:3 item 15 (i) P-29	i) with surplus earth from foundation, etc.	1000 Cft	470.00	3,867.60		
3.2	CH:3 item 15 (ii) + 17 (a, b & c) P-29	ii) with new earth excavated from outside,lead upto 5 mile (8 Km). (as per actual borrow pit lead)	1000 Cft	2,667.00	15,021.80		
4	CH:3 item 24 (b)(ii) P-30	Compaction of earthwork (soft, ordinary or hard soil) :-b) Compaction by rolling with animal driven	1000 Cft	3,284.00	1,339.80		

		roller/hand rammed:ii) ordinary soil					
		Plain and Reinforcement Concrete					
5	CH:6 item 3 (b)(ii) P41	Cement concrete brick or stone ballast 1½ " to 2" (40 mm to 50 mm) gauge, in foundation and plinth:- (b) Ratio 1: 4: 8	100 Cft	263.00	15,212.70		
6	Ch-6 item 10 P-45	Precast cement concrete solid or face blocks (1:2:4),including cost of templates.	Per Cft	1,050.00	233.05		
		Flooring					
7	Ch-10 item 3 P-68	Providing, laying, watering and ramming brick ballast 1½" to 2"(40 mm to 50 mm) gauge mixed with 25% sand, for floor foundation, complete in all respects.	100 Cft.	2,099.00	5,465.70		
8	Ch-10 item 43 P-72	Providing and laying Tuffpavers , having 7000PSI ,crushing strength of approved manufacturer, over 2" to 3" sand cushion i/cg routing with sand in joints i/c finishing to require slope. complete in all respect. (50% Grey / 50% Coloured)					
		a) 50-mm thick	P.Sft	6,300.00	94.70		
	Total "A"(Schedule items) C/o to Summary of Cost:						
		NON SCHEDULE ITEMS-B					
		Miscellenious					
1	N.S	Providing and fixing Concrete Kerb stone (Izhar (Pvt.) Ltd or approved equivalent) having size 300 mm x 350 mm x 150 mm over a bed of 2" thick cement concrete (1:4:8) and jointing with ¾" thick cement mortar (1:3) i/c 6" x 12" cement concrete (1:4:8) for haunching in trapped shape including cost of painting	Per/Rft	1,600.00	388.00		

		Kerb Stone with reflective chlorinated rubber (CR) paint, excavation and back filling, as shown on drawings complete in all respect as approved by the Engineer Incharge.					
		Total "B"(Schedule items) C/o to Summary of Cost:					
		Net Total (A+B)					

**ESTABLISHMENT OF SUB-CAMPUS OF UNIVERSITY OF AGRICULTURE FAISALABAD, AT DEPALPUR - OKARA
(HEC FUNDED)**

CONSTRUCTION OF TUBEWELL CHAMBER / OPERATOR ROOM

ENGINEER'S ESTIMATE

Item No.	REF. Nos CH/ITEM	Description of Items	Unit	Qty	Rate (Rs.)	Rate Quoted by the Contractor	Amount (Rs.)
MRS, 2ND BI-ANNUAL-2021 (1st JULY-2021 to 31st DECEMBER -2021) DISTRICT OKARA							
		SCHEDULE ITEMS-A					
		Earth Work					
1	CH:3 item 47(a) P-33	Jungle clearance and removing within 100 ft. (30 m).a) light	1000 Sft	255.75	191.40		
2	CH:3 item 21(b) P-30	Excavation in foundation of building and other sructures, including debelling,dressing,refilling around structure with excavated eart,watering and ramming lead upto one chain 100ft and lift upto 5 ft.in ordinary soil.	1000 Cft	815.85	8,078.40		
3	CH:3 item 15 P-29	Filling, watering and ramming earth under floors:					
3.1	CH:3 item 15 P-29 (i)	i) with surplus earth from foundation, etc.	1000 Cft	543.90	3,867.60		
		Anti-Termite					
4	CH:25 item 42 P-177	Spraying anti-termite liquid mixed with water in the ratio of 1:40.	100 Sft	1,304.63	263.75		
		Plain and Reinforement Concrete					

5	CH:6 item 3 (b) P-41	Cement concrete brick or stone ballast 1½ " to 2" (40 mm to 50 mm) gauge, in foundation and plinth:-(b) Ratio 1: 4: 8	100 Cft	145.43	15,212.70		
6	CH:6 item 6 P-42	Providing and laying reinforced cement concrete (including prestressed concrete), using coarse sand and screened graded and washed aggregate, in required shape and design, including forms, moulds, shuttering, lifting, compacting, curing, rendering and finishing exposed surface, complete (but excluding the cost of steel reinforcement, its fabrication and placing in position, etc.):-					
6.1	(a)(i)	Reinforced cement concrete slabs, beams, girders, Lintels and other structural members laid in situ or precast laid in position, or prestressed members cast in situ, complete in all respects;-					
		GROUND FLOOR					
	(a)(i)(3)	Type C (nominal mix 1: 2: 4)	Per Cft	142.14	414.00		
		Steel Reinforcement					
7	CH:6 item 9 (c) P-45	Fabrication of mild steel reinforcement for cement concrete, including cutting, bending, laying in position, making joints and fastenings, including cost of binding wire and labour charges for binding of steel reinforcement (also includes removal of rust from bars) (c) Deformed bar (Grade 60)	100Kg	456.98	20,230.10		
8	CH:6 item 33 (b)(ii) P-48	Providing and laying damp proof course of cement concrete 1:2: 4(using cement, sand and shingle), including bitumen coating :- (b) with 2 coats of bitumen:	100 Sft	100.80	6,614.75		

9	CH:6 item 35 (a)(b- ii-b) P-49	Providing and laying vertical damp proof course with cement sand plaster and bitumen coating (b) with 2 coats of bitumen:- ii) Ratio 1:3 b) ¾ " thick (20 mm)	100 Cft	134.40	4,219.90		
		Brick Work					
10	CH:7 item 4 (i) P-53	Pacca brick work in foundation and plinth in:- Cement, sand mortar:-Ratio 1:6	100 Cft	608.34	21,799.60		
		GROUND FLOOR					
11	CH:7 item 5 (i) P-54	Pacca brick work in ground floor :- Cement, sand mortar:-Ratio 1:6	100 Cft	579.60	23,449.60		
		Flooring					
12	Ch-7 item 30 P-58	Supplying and filling sand under floor; or plugging in wells	100 Cft	248.16	1,999.00		
13	Ch-10 item 3 P-68	Providing, laying, watering and ramming brick ballast 1½ to 2"(40 mm to 50 mm) gauge mixed with 25 % sand, for floor foundation, complete in all respects	100 Cft	195.02	5,465.70		
14	CH:6 item 5 (f) P-42	Cement concrete plain including placing, compacting , finishing and curing complete (including screening and washing of stone aggregate):-Ratio 1: 2: 4	100 Cft	124.21	25,014.00		
15	CH:10 item 15 (e) P-69	Providing and laying topping of cement concrete including surface finishing and dividing in panels:-(e) 2"(50 mm) thick	100 Sft.	745.24	5,913.30		
16	CH:10 item 42 (a) P-72	Providing and fixing marble strip of any shade for dividing the mosaic flooring into panels a) Size 1½" x 3/8" (40 x 10 mm)	Per Rft.	469.50	9.25		
		Surface Rendring					
17	Ch-11 item 10 (b) P-74	Cement plaster ratio 1:3 under soffit of RCC roof slabs only , upto 20' height. 3/8" (10 mm) thick.	100 Sft	220.50	2,628.85		

18	Ch-11 item 9 (b) P-74	Cement plaster 1:4 upto 20' (6 m) height. 1/2" (13 mm)	100 Sft	609.00	2,302.10		
19	Ch-11 item 18 (b) P-75	Cement pointing struck joints, on walls, upto 20' (6.00 m) hieght:-b) ratio 1:3	100 Sft	764.40	2,389.20		
		Wood Work					
20	Ch-12 item 51 P- 85	Providing and fixing panelled door of M.S. sheet, with forged door leaves of M.S. sheet 22 SWG fitted in hollow frame chowkat 3"x4½" (75 mmx113 mm) made of M.S. sheet 18 SWG filled with plain cement concrete 1:3:6 etc. complete with all fittings and hammer painting, including carriage to site and fixing in position.	Per/Sft	29.40	532.45		
		Painting and Warnishing					
21	Ch-11 item 22 P- 75	Priming coat of chalk under distemper.	100 Sft	870.98	198.70		
22	Ch-11 item 23 (a)(iii) P- 75	Distempering:-a) new surface:-iii) three coats	100 Sft	870.98	782.50		
23	Ch-13 item 5 (c) P-88	Preparing surface and painting of doors and windows any type (including edges) 3 Coats New Surface	100 Sft	58.80	1,941.75		
		Metal Work					

24	Ch-25 item 44 P-172	Providing and fixing windows consisting of M.S. section frame 2"x1½", (50x40mm) leaves frame 1½"x1" (40x25mm) box section frame for glazing 3/8"x3/8" (10x10mm) using 16 SWG sheet 'U' shaped rubber supported with 1"x1/8" (25x3mm) M.S. flat for fixing 3/16" (5 mm) thick glass panes M.S. box section ½"x½" (13x13mm) of 16 SWG for fixing 24 SWG wire gauze on outer side by means of ¾"x1/8" (20x3mm) M.S. flat and screws including grill of M.S. flat ½"x1/8" (13x3mm) or ¼"x¼" (6x6mm) square bar with independent frame of ½"x½" (13x13mm) box section of 16 SWG i/c all C.P. fitting and painting 3 coats complete in all respect.	Per/Sft	12.60	599.00		
25	Ch-25 item 10 P-168	Fabrication of heavy steel work, with angle, tees, flat iron round iron and sheet iron for making trusses, girders, tanks, etc., including cutting, drilling, reworking, handling, assembling and fixing, but excluding erection in position.	100 Kg	121.80	20,931.15		
		Roofing & Water Proofing					
26	Ch-9 item 5 P-62 + Ch-26 item 37(iix2) P-176	Single layer of tiles 9"x4½"x1½" (225x113x40 mm) laid over 4" (100 mm) earth and 1" (25 mm) mud plaster without Bhoosa, grouted with cement sand 1:3 on top of RCC roof slab, provided with 34 lbs. per %Sft. or 1.72 Kg/Sq.m bitumen coating sand blinded.i/c P/L double layer polythene sheet 500 gauge	100 Sft	268.54	9177.55		
27	Ch-9 item 15 P-62	Khuras on roof 2'x2'x6" (600 x 600 x 150 mm).	Each	1.00	603.60		
28	Ch-9 item 16 P-62	Bottom Khuras of brick masonry in cement mortar 1:6, 4'x2'x4½" (1200x600x113 mm) over 3" (75 mm) cement concrete 1:4:8.	Each	1.00	1,010.15		

29	Ch-21 item 15-A P-130	Providing and fixing 6" thick R.C.C. manhole cover with tee shaped C.I. frame of 22" I/d (frame weighing 37.324 Kg. or one maund as per Standard Drawing STD/PD No. 6, of 1977, complete in all respect.	Per set	1.00	11,439.10		
	Total "A"(Schedule items) C/o to Summary of Cost:						
		NON SCHEDULE ITEMS-B					
		Miscellenious					
1	N.S	Providing and fixing Chain Pulley Block of 5 ton capacity with 5 meter length of chain as shown in drawing and as approved by the Engineer Incharge. The cost also includes the labour and tool plant.	Each	1.00	13,200.00		
2	Ch 23, Item 26 b	Supply, provide and fix in position PVC Pipe Class B, 4" Dia for rain water down pipe.					
		4" dia	Rft	20.00	318		
3	Ch 23, Item 37 B	Provide and fix PVC plain bends BSS Class B					
		4" dia	Each	6.00	405		
		Total "B"(Schedule items) C/o to Summary of Cost:					
		Net Total (A+B)					

**ESTABLISHMENT OF SUB-CAMPUS OF UNIVERSITY OF AGRICULTURE FAISALABAD, AT DEPALPUR - OKARA
(HEC FUNDED)**

**CONSTRUCTION OF TUBEWELL CHAMBER / OPERATOR ROOM ELECTRICAL WORKS
ENGINEER'S ESTIMATE**

Sr No.	REF. Nos CH/ITEM	Item. No.	Description	Unit	Qty	Rate (Rs.)	Rate Quoted by the Contractor	Amount (Rs.)
AMMENDED MRS, 2nd BI-ANNUAL-2021 (01.07.2021 to 31.12.2021) DISTRICT OKARA								
A) Schedule Items								
1		1.1	<u>Light Circuits.</u>					
			Supply, installation and commissioning of light circuit wiring, to be wired with 3x2.5mm sq. (1P+1N+1CPC) PVC insulated 300/500 V grade wire, manufactured by M/s. Pakistan Cables Ltd,Pioneer Cables,Newage Cables in and including cost of 3/4" dia. heavy duty PVC conduit make Beta, Shavyl or Premium, recessed in , walls, Roof slab, or on surface or above false ceiling or as required as per site conditions, all PVC conduit accessories, pull boxes, steel pull wires , complete in all respects. Each circuit shall have independent CPC. Maximum wiring of 2 light circuits can be pulled through 1" dia. PVC conduit. (CK=8)					

	[Ref: Item 10 (a-iii)/24]]	i	Supply and erection of single core PVC insulated copper conductor cables in prelaidd PVC pipe/M.S conduit G.I pipe\wooden strip batten/wooden casing and capping/G.I wire/trenches (rate for cables only) i) Cost of 1 No. 1x 2.5 mm (7/0.029")	Rft	180	18.35		
	[Ref: Item 3(iii)/24]	ii	Supply and erection of PVC pipe for wiring recessed in wall including inspection boxes pull boxes, hooks, cutting jharries, and repairing surface, etc, complete with all specials ii) Cost of 25mm	Rft	60	70.5		
		1.2	<u>1st Light Point Controlled By One Switch</u>					
			Wiring of first light point controlled by one switch and wired with 2x1.5 mm sq.(P+N) PVC insulated wires 300/500 V grade, manufactured by M/s. Pakistan Cables Ltd,Pioneer Cables,Newage Cables in and including cost of 3/4" dia. heavy duty PVC conduit make Beta, Shavyl or Premium, recessed in wall, columns slabs or above light carrier all PVC conduit accessories, 3" high PVC junction boxes, pull boxes, steel pull wires, PVC flexible conduit from ceiling junction box to light fixture with brass chuck nut including 1.5mm sq. PVC insulated wire of colour green as CPC, M.S. sheet steel switch box 16 SWG with earth terminal and 2 coats of enameled paint, M.S. box shall be of the same size as that of 1, 2 or 3 gang flush type plate switches,					

			including cost of gang type light switches 10 amps (CK=33) MAKE Bush, Clipsal.					
	[Ref: Item 10 (a-i)/24]	i	Supply and erection of single core PVC insulated copper conductor cables in prelaid PVC pipe/M.S conduit G.I pipe/wooden strip batten/wooden casing and capping/G.I wire/trenches (rate for cables only) i) Cost of 1 No. 1x 1.5 mm (3/0.029")	Rft	80	14.05		
	[Ref: Item 3(ii)/24]	ii	Supply and erection of PVC pipe for wiring recessed in wall including inspection boxes pull boxes, hooks, cutting jharries, and repairing surface, etc, complete with all specials ii) Cost of 20mm	Rft	30	61		
		1.3	<u>Point- Points Wiring</u>					
			Same as Item No. 1.2 but Loop wiring of a light point from fist light point with 2x1.5 mm sq.(P+N) PVC insulated wires 300/500 V grade, manufactured by M/s. Pakistan Cables Ltd,Pioneer Cables,Newage Cables in and including cost of 3/4" dia. heavy duty PVC conduit make Beta, Shavyl or Premium recessed in wall, columns slabs or above light carrier all PVC conduit accessories, 3" high PVC junction boxes, pull boxes, steel pull wires, PVC flexible conduit from ceiling junction box to light fixture with brass chuck nut including 1.5mm sq. PVC insulated wire of colour green as CPC, M.S. sheet steel switch box 16 SWG with					

			earth terminal and 2 coats of enameled paint. make Clipsal, Bush.. (CK=70)					
	[Ref: Item 10 (a-i)/24]	i	Supply and erection of single core PVC insulated copper conductor cables in prelaidd PVC pipe/M.S conduit G.I pipe\wooden strip batten/wooden casing and capping/G.I wire/trenches (rate for cables only)i) Cost of 1 No. 1x 1.5 mm (3/0.029")	Rft	60	14.05		
	[Ref: Item 3(ii)/24]	ii	Supply and erection of PVC pipe for wiring recessed in wall including inspection boxes pull boxes, hooks, cutting jharries, and repairing surface, etc, complete with all specials ii) Cost of 20mm PVC pipe	Rft	30	61		
		1.4	<u>1- 13 Amps Switch Socket</u>					
			Wiring and fixing of one 13A light plug sockets from DB to point with 2x1 core 4 mm sq. + 1x2.5mm sq. CPC, PVC wires 300/500 Volt grade, M/s. Pakistan Cables Ltd,Pioneer Cables,Newage Cables in and including cost of 1" dia. heavy duty PVC conduit, make Beta, Shavyl or Premium recessed in walls, floor, above false ceiling or as required as per site conditions, all PVC conduit make Beta accessories, pull boxes, steel pull wires, M.S. box shall be made of 16 SWG sheet steel with earth terminal having 2 coats of antirust paint , M.S. box shall be of the same size as that of 1-13Amps					

			switch socket, including cost of 13 Amps 3 pin combined switch socket make BUSH Pakistan. Wiring shall be done directly from the MCB installed in the respective DB without any claim of circuit. (CK=10)					
	[Ref: Item 10 (a-iv)/24]	i	Supply and erection of single core PVC insulated copper conductor cables in prelaidd PVC pipe/M.S conduit G.I pipe\wooden strip batten/wooden casing and capping/G.I wire/trenches (rate for cables only) i) Cost of 1x4 mm ² (7/0.036")	Rft	120	25.6		
	[Ref: Item 10 (a-iii)/24]	ii	Supply and erection of single core PVC insulated copper conductor cables in prelaidd PVC pipe/M.S conduit G.I pipe\wooden strip batten/wooden casing and capping/G.I wire/trenches (rate for cables only) ii) Cost of 1x2.5 mm ² (7/0.029")	Rft	60	18.35		
	[Ref: Item 3(ii)/24]	iii	Supply and erection of PVC pipe for wiring recessed in wall including inspection boxes pull boxes, hooks, cutting jharries, and repairing surface, etc, complete with all specials iii) Cost of 25 mm PVC pipe	Rft	60	70.5		
		1.5	<u>Loop-Loop- 13 Amps Switch Socket</u>					

			<p>Same as above item No. 1.4 but loop wiring of 13A light plug socket outlet from DB to point with 2x1 core 4 mm sq. + 1x2.5mm sq. CPC, PVC wires 300/500 Volt grade, make M/s. Pakistan Cables Ltd, Pioneer Cables, Newage Cables in and including cost of 1" dia. heavy duty PVC conduit, make Beta, Shavyl or Premium recessed in walls, floor, above false ceiling or as required as per site conditions, all PVC conduit make Beta accessories, pull boxes, steel pull wires, M.S. box shall be made of 16 SWG sheet steel with earth terminal having 2 coats of antirust paint, M.S. box shall be of the same size as that of 1-13Amps switch socket, including cost of 13 Amps 3 pin combined switch socket make BUSH Pakistan. Wiring shall be done directly from the MCB installed in the respective DB without any claim of circuit.</p>					
	[Ref: Item 10 (a-iv)/24]	i	<p>Supply and erection of single core PVC insulated copper conductor cables in prelaidd PVC pipe/M.S conduit G.I pipe\wooden strip batten/wooden casing and capping/G.I wire/trenches (rate for cables only) i) Cost of 1x4 mm² (7/0.036")</p>	Rft	80	25.6		
	[Ref: Item 10 (a-iii)/24]	ii	<p>Supply and erection of single core PVC insulated copper conductor cables in prelaidd PVC pipe/M.S conduit G.I pipe\wooden strip batten/wooden casing and capping/G.I</p>	Rft	40	18.35		

			wire/trenches (rate for cables only) ii) Cost of 1x2.5 mm2 (7/0.029")					
	[Ref: Item 3(ii)/24]	iii	Supply and erection of PVC pipe for wiring recessed in wall including inspection boxes pull boxes, hooks, cutting jharries, and repairing surface, etc, complete with all specialsiii) Cost of 25 mm PVC pipe	Rft	40	70.5		
		1.6	<u>1 x 3 Pin 20 Amps Switch Socket</u>					
			Wiring and fixing of one 20A power sockets outlet with 2x 4mm2(P+N) & 1x2.5mm2 as CPC single core cables from DB to point_ combined switch socket outlet creamic Base with Rocker Switch (Shuttered) Silver Point, Neon Light Heavy duty 2P+E, 20A,250V. PVC wires 300/500 Volt grade, M/s. Pakistan Cables Ltd,Pioneer Cables,Newage Cables in and including cost of 1" dia. heavy duty PVC conduit, make Beta , Popular recessed in walls, floor, above false ceiling or as required as per site conditions, all PVC conduit make Beta, Shavyl or Premium accessories, pull boxes, steel pull wires, M.S. box shall be made of 16 SWG sheet steel with earth terminal having 2 coats of antirust paint , M.S. box shall be of the same size as that of 1-20Amps switch socket, including cost of 15 Amps 3 pin combined switch socket make BUSH Pakistan. Wiring shall be done directly from the MCB installed in the respective DB					

			without any claim of circuit.(CK=2)					
	[Ref: Item 10 (a-iv)/24]	i	Supply and erection of single core PVC insulated copper conductor cables in prelaid PVC pipe/M.S conduit G.I pipe\wooden strip batten/wooden casing and capping/G.I wire/trenches (rate for cables only) i) Cost of 1x4 mm ² (7/0.036")	Rft	120	25.6		
	[Ref: Item 10 (a-iii)/24]	ii	Supply and erection of single core PVC insulated copper conductor cables in prelaid PVC pipe/M.S conduit G.I pipe\wooden strip batten/wooden casing and capping/G.I wire/trenches (rate for cables only) i) Cost of 1x2.5 mm (7/0.029")	Rft	60	18.35		
	[Ref: Item 3(ii)/24]	iii	Supply and erection of PVC pipe for wiring recessed in wall including inspection boxes pull boxes, hooks, cutting jharries, and repairing surface, etc, complete with all specials ii) Cost of 25 mm	Rft	60	70.5		
		1.7	<u>Fan Points</u> Conforming to same specifications as mentioned above for Item No. 1.2. but wiring of ceiling fan points, including cost of MS hook box circular type having MS hook 16 mm (5/8") dia make Unique, Beta to be casted in RCC slab, MS switch board of appropriate size to accommodate dimmer, complete in all respects, including dimmer provided by the Fan manufacturer.(CK=13)					

	[Ref : Item 49/24]	i	Supply and erection of 3/8" (10 mm) dia M.S. bar fan hook placed at the time of casting of slab.	Each	1	49.45		
	[Ref : Item 14(ii)/24]	ii	Back Box (7"x4")	Each	1	272.00		
	[Ref: Item 10 (a- i)/24]	iii	Supply and erection of single core PVC insulated copper conductor cables in prelaid PVC pipe/M.S conduit G.I pipe\wooden strip batten/wooden casing and capping/G.I wire/trenches (rate for cables only) i) Cost of 1x 1.5 mm (3/0.029")	Rft	80	14.05		
	[Ref: Item 3(ii)/24]	iv	Supply and erection of PVC pipe for wiring recessed in wall including inspection boxes pull boxes, hooks, cutting jharries, and repairing surface, etc, complete with all specials ii) Cost of 20mm	Rft	30	61		
		1.8	<u>Exhaust Fans Points</u> Conforming to same specifications as mentioned above in Item No. 1.2 but wiring of exhaust fan point excluding cost of hook box but including cost of 10 A switch make Clipsal M.S box 16 SWG with earth terminal, 2 coats of antirust point, all fixing accessories, 1-5 Amps ceiling rose and including one switch of 10 amps switch. (CK=4)					
	[Ref: Item 10 (a- i)/24]	i	Supply and erection of single core PVC insulated copper conductor cables in prelaid PVC pipe/M.S conduit G.I pipe\wooden strip batten/wooden casing and capping/G.I	Rft	80	14.05		

			wire/trenches (rate for cables only) i) Cost of 1x 1.5 mm (3/0.029")					
	[Ref: Item 3(ii)/24]	ii	Supply and erection of PVC pipe for wiring recessed in wall including inspection boxes pull boxes, hooks, cutting jharries, and repairing surface, etc, complete with all specials ii) Cost of 20mm	Rft	30	61		
2			<u>L.T. Power Cables</u>					
			Supply at site, installation, testing and commissioning of PVC insulated armoured copper conductor cable 600 / 1000 Volt grade manufactured by any one of the manufacturers M/s. Pakistan Cables Ltd, Pioneer Cables, Newage Cables in prelaidd conduits / trenches to be installed as per routes shown on drawings including cost of all necessary materials, connections, identification tags, cables lugs properly crimped at both ends for the following sizes complete in all respects. Actual length of cables to be installed shall be practically measured at site by the Contractor, duly authenticated by the employers electrical engineer before placing the order with the manufacturer, however, approximate length of cables are shown herewith. Payments shall be made as per actual length installed.					
		2.1	<u>4 Core Cable PVC/PVC</u>					

	13-d-(iv)/24		a) 4 core 70mm sq.	Rft	164	1425.45		
	13-d-(iii)/24		b) 4 core 50mm sq.	Rft	30	1020.90		
		2.2	<u>Circuit Protective Conductor (CPC)</u>					
	12-(ii)/24		a) 1 core 25mm sq.	Rft	194	133.50		
3			<u>Light Fittings And Fixtures</u>					
	43-(i)/24	3.1	Supply and erection of tube light, including rod, choke, starter with frame, flexible wire, including connection from ceiling rose, etc., complete. Double rod (80 watts) with two chokes and 2 starters.	No	2	1391.30		
4			<u>Lightning Conductor Copper Rod</u>					
	74/24	i	Supply and erection of 25 mm (1") dia and one metre long lightning conductor copper rod with 5 spikes on ball and base, etc. complete.	Job	6	3073.05		
	73i/24	ii	Supply and erection of copper tape, including copper staple copper nails, cement, sand, etc tape 40x3 mm (1½"x1/8")	Rrt	380	281.15		
4			<u>PVC Conduit</u>					
			Supply at site of PVC conduit heavy duty make Beta, Shavyl or Premium to be concealed in RCC slabs, walls, floor, columns above false ceiling or as required as per site conditions including cost of all PVC conduit accessories, steel pull wires, complete in all respects.					
	6(ii)/24	a	80 mm i/d	Rft	100	170.15		

	6(i)/24	a	50 mm i/d	Rft	30	136.60		
	3-(v)/24	c	40 mm i/d	Rft	30	108.05		
			Total "A"(Schedule items) C/o to Summary of Cost:					
B) Non-Schedule Items.								
1			Switch & Sockets.					
	N.S	1.1	Providing and fixing of 6 gang switch kit E-31/1/2A 10 Amp Bush / Clipsal Australia made, or Eqv.including PVC Sheet Back Box As per approval of Engineer Incharge.	Each	1	1020.87		
	N.S	1.2	Providing and Fixing of Universal Switched Socket E-15U 10 Amp Bush / Clipsal Australia made, or Eqv. .including PVC Sheet Back Box as per approval of Engineer Incharge.	Each	2	436.00		
	N.S	1.3	Providing and Fixing of Power Switched Socket E-15/15 15 Amp Bush // Clipsal Australia made, or Eqv. .including PVC Sheet Back Box As per approval of Engineer Incharge.	Each	2	666.87		
2			<u>Ceiling Fans</u>					
	N.S	1.4	Providing and installtion of ceiling fan 56" Size including dimmer & hanging Rod G.F.C/PAK Made. (Energy Efficient Fan as approved by PEECA)complete in all respect and as approved by the Engineer Incharge.	Each	1	5430		
3			<u>Exhaust Fans</u>					
			Supply, installation and commissioning of Exhaust Fans of following sizes plastic body, louvers, all necessary fixing accessories, make					

			Asia, Climax, PAK National complete in all respects. (Energy Efficient as approved by PEECA)					
	N.S	i	12" dia (Plastic Body).	Each	1	3497		
		5.2	<u>Earth Connecting Point</u>					
	N.S		Supply, installation of earth connecting points consisting of copper plate 12" long, 2" wide and 1/2" thick to be installed as and where shown on drawings on the wall of the trenches, complete with fixing arrangement, brass nuts bolts complete in all respects to facilitate connections of Incoming copper strips and Outgoing CPC.	Nos.	2	4478		
		5.3	<u>Manhole</u>					
	N.S		Constructing of 2'x 2'x 2.5' (internal size) including earth work 4" thick PCC 1:4:8 9" thick first class burnt brick work in 1:5 mortar, plastered inside in 1:5 cement sand and 4" thick RCC cover with grade 40 reinforcement.	Nos.	2	10478		
			Total "B"(Schedule items) C/o to Summary of Cost:					
			Net Total (A+B):					

**ESTABLISHMENT OF SUB-CAMPUS OF UNIVERSITY OF AGRICULTURE FAISALABAD, AT DEPALPUR – OKARA
(HEC FUNDED)**

CONSTRUCTION OF MONUMENT

ENGINEER'S COST ESTIMATE

CIVIL WORKS

Item No.	REF. Nos CH/ITEM	Description of Items	Unit	Qty	Rate (Rs.)	Rate Quoted by the Contractor	Amount (Rs.)
MRS, 2ND BI-ANNUAL-2021 (1st JANUARY-2021 to 30th JUNE -2021) DISTRICT OKARA							
		SCHEDULE ITEMS-A					
		Earth Work					
1	CH:3 item 47(a) P-33	Jungle clearance and removing within 100 ft. (30 m).a) light	1000 Sft	401.00	191.40		
2	CH:3 item 21(b) P-30	Excavation in foundation of building and other sructures, including debelling,dressing,refilling around structure with excavated eart,watering and ramming lead upto one chain 100ft and lift upto 5 ft.in ordinary soil.	1000 Cft	229.95	8,078.40		
3	CH:3 item 15 P-29	Filling, watering and ramming earth under floors:					
3.1	CH:3 item 15(i) P-29	i) with surplus earth from foundation, etc.	1000 Cft	153.30	3,867.60		
3.2	CH:3 item 15 (ii) + 17 (a, b & c) P-29	ii) with new earth excavated from outside,lead upto 5 mile (8 Km). (as per actual borrow pit lead)	1000 Cft	681.14	15,021.80		

		Anti-Termite					
4	CH:25 item 42 P-177	Spraying anti-termite liquid mixed with water in the ratio of 1:40.	100 Sft	1,664.25	263.75		
		Plain and Reinforcement Concrete					
5	CH:6 item 5 P-42	Cement concrete plain including placing, compacting , finishing and curing complete (including screening and washing of stone aggregate):-					
5.1	(i)	Ratio 1: 4: 8	100 Cft	76.57	19,686.00		
5.2	(f)	Ratio 1: 2: 4	100 Cft	69.89	25,014.00		
		Brick Work					
6	CH:7 item 4 (i) P-53	Pacca brick work in foundation and plinth in:- Cement, sand mortar:-Ratio 1:6	100 Cft	287.44	21,799.60		
		Flooring					
7	Ch-7 item 30 P-58	Supplying and filling sand under floor; or plugging in wells	100 Cft	140.21	1,999.00		
8	Ch-10 item 3 P-68	Providing, laying, watering and ramming brick ballast 1½ to 2"(40 mm to 50 mm) gauge mixed with 25 % sand, for floor foundation, complete in all respects	100 Cft	140.21	5,465.70		
		Total "A"(Schedule items) C/o to Summary of Cost:					
		NON SCHEDULE ITEMS-B					
		Entrance Steps / Podium					

1	N.S	Providing and fixing 3/4" thick pre-polished Granite Marble Slab uniform texture full width laid over 3/4" thick cement sand mortar (1:3) including setting the tiles with Bond (Stile, or approved equivalent) i/c filling joints with Grout (Stile, or approved equivalent) of matching color i/c cutting, leveling, washing, curing and beveling charges on exposed edges complete in all respect as per Specifications, and as per sample approved by The Engineer.	Per/Sft	689.33	784.00		
		Miscellenious					
2	NS	Providing and fixing S.S logo (UAF) 22 SWG of 5'-6" Height and proportionally wide with all hardware and any type of labour i/c cost of foundation, complete in all respect as per Specifications, as approved by The Engineer.	Job	1.00	35000.00		
		Total "B"(Non-Schedule items) C/o to Summary of Cost:					
		Net Total (A+B):					

**ESTABLISHMENT OF SUB-CAMPUS OF UNIVERSITY OF AGRICULTURE FAISALABAD, AT DEPALPUR - OKARA
(HEC FUNDED)**

CONSTRUCTION OF WASTE COLLECTION PIT

ENGINEER'S COST ESTIMATE

CIVIL WORKS

Item No.	REF. Nos CH/ITEM	Description of Items	Unit	Qty	Rate (Rs.)	Rate Quoted by the Contractor	Amount (Rs.)
MRS, 2ND BI-ANNUAL-2021 (1st JULY-2021 to 31st DECEMBER -2021) DISTRICT OKARA							
		SCHEDULE ITEMS-A					
		Earth Work					
1	CH:3 item 47(a) P-33	Jungle clearance and removing within 100 ft. (30 m).a) light	1000 Sft	101.25	191.40		
2	CH:3 item 21(b) P-30	Excavation in foundation of building and other sructures, including debelling,dressing,refilling around structure with excavated eart,watering and ramming lead upto one chain 100ft and lift upto 5 ft.in ordinary soil.	1000 Cft	198.45	8,078.40		
3	CH:3 item 15 P-29	Filling, watering and ramming earth under floors:					
3.1	CH:3 item 15(i) P-29	i) with surplus earth from foundation, etc.	1000 Cft	132.30	3,867.60		
3.2	CH:3 item 15 (ii) + 17 (a, b & c) P-29	ii) with new earth excavated from outside,lead upto 5 mile (8 Km). (as per actual borrow pit lead)	1000 Cft	73.71	15,021.8		

		Anti-Termite					
4	CH:25 item 42 P-177	Spraying anti-termite liquid mixed with water in the ratio of 1:40.	100 Sft	296.10	263.75		
		Plain and Reinforement Concrete					
5	CH:6 item 5 P-42	Cement concrete plain including placing, compacting , finishing and curing complete (including screening and washing of stone aggregate):-					
5.1	(i)	Ratio 1: 4: 8	100 Cft	22.05	19,686.0		
5.2	(f)	Ratio 1: 2: 4	100 Cft	5.49	25,014.0		
		Brick Work					
6	CH:7 item 4 (i) P-53	Pacca brick work in foundation and plinth in:- Cement, sand mortar:-Ratio 1:6	100 Cft	111.63	21,799.6		
		GROUND FLOOR					
7	CH:7 item 7 (i) P-54	Pacca brick work other than building upto 10ft. (3 m) height.i) cement, sand mortar:- Ratio 1:6	100 Cft	99.23	22,616.15		
		Flooring					
8	Ch-7 item 30 P-58	Supplying and filling sand under floor; or plugging in wells	100 Cft	35.40	1,999.00		
9	Ch-10 item 3 P-68	Providing, laying, watering and ramming brick ballast 1½ to 2"(40 mm to 50 mm) gauge mixed with 25 % sand, for floor foundation, complete in all respects	100 Cft	35.40	5,465.70		

10	Ch-10 item 15 c) P-69	Providing and laying topping of cement concrete 1:2:4, including surface finishing and dividing in panels:- 1½"(40 mm) thick	100 Sft	106.31	4,678.85		
11	Ch-10 item 42 (a) P-70	Providing and fixing marble strip of any shade for dividing the mosaic flooring into panels a) Size 1½" x 3/8" (40 x 10 mm)	Per Rft	66.98	9.25		
		Surface Rendring					
12	Ch-11 item 9 (b) P-74	Cement plaster 1:4 on walls upto 20' (6 m) height. 1/2" (13 mm)	100 Sft	396.90	2,302.10		
	Total "A"(Schedule items) C/o to Summary of Cost:						

**ESTABLISHMENT OF SUB-CAMPUS OF UNIVERSITY OF AGRICULTURE FAISALABAD, AT DEPALPUR - OKARA
(HEC FUNDED)**

CONSTRUCTION OF RAW WATER STABLING POND

ENGINEER'S COST ESTIMATE

CIVIL WORKS

Item No.	REF. Nos CH/ITEM	Description of Items	Unit	Qty	Rate (Rs.)	Rate Quoted by the Contractor	Amount (Rs.)
MRS, 2ND BI-ANNUAL-2021 (1st JULY-2021 to 31st DECEMBER -2021) DISTRICT OKARA							
		SCHEDULE ITEMS-A					
		Earth Work					
1	CH:3 item 47(a) P-33	Jungle clearance and removing within 100 ft. (30 m).a) light	1000 Sft	664.00	191.40		
2	CH:3 item 21(b) P-30	Excavation in foundation of building and other sructures, including debelling,dressing,refilling around structure with excavated eart,watering and ramming lead upto one chain 100ft and lift upto 5 ft.in ordinary soil.	1000 Cft	1,200.00	8,078.40		
3	CH:3 item 15 P-29	Filling, watering and ramming earth under floors:					
3.1	CH:3 item 15(i) P-29	i) with surplus earth from foundation, etc.	1000 Cft	700.00	3,867.60		
		Anti-Termite					
4	CH:25 item 42 P-177	Spraying anti-termite liquid mixed with water in the ratio of 1:40.	100 Sft	2,200.00	263.70		

		Plain and Reinforcement Concrete					
5	CH:6 item 5 P-42	Cement concrete plain including placing, compacting , finishing and curing complete (including screening and washing of stone aggregate):-					
5.1	(i)	Ratio 1: 4: 8	100 Cft	350.00	19,686.00		
5.2	(f)	Ratio 1: 2: 4	100 Cft	55.00	25,014.00		
		Brick Work					
6	CH:7 item 4 (i) P-53	Pacca brick work in foundation and plinth in:- Cement, sand mortar:-Ratio 1:6	100 Cft	850.00	21,799.60		
		Flooring					
7	Ch-7 item 30 P-58	Supplying and filling sand under floor; or plugging in wells (Course Sand)	100 Cft	500.00	1,999.00		
		Surface Rendering					
8	Ch-11 item 9 (b) P-74	Cement plaster 1:4 on internal walls upto 20' (6 m) height, 1/2" (13 mm) thick.	100 Sft	756.00	2,302.10		
		Water Proofing					
9	Ch-26 item 37(ii) P-176	Supplying and laying polythene sheet over D.P.C. under floors and on roofs, etc.ii) 500 gauge (.005" thick)	Per Sft.	1,670.00	5.35		
1	Ch-13 item 9(i) P-89	Bitumen coating to plastered or cement concrete surface:-i) 20 lbs. per 100 Sft. (9.07 Kg per Sq.m)	100 Sft.	525.00	1403.4		
		Total "A"(Schedule items) C/o to Summary of Cost:					
		NON SCHEDULE ITEMS-B					

1	Ch 23, Item 18	Providing and placing Aggregate / Stone Crushed 40mm to 80mm graded, i/c all type of labour, carriage at site, complete in all respect and as approved and directed by The Engineer.	Per/Cft	3,718.00	97.55		
2	N.S (Input Rates)	Providing and placing activated carbon, i/c all type of labour, carriage at site, complete in all respect and as approved and directed by The Engineer.	Per/kg	11,000.00	35.00		
3	N.S	Providing and Fixing Chicken Wire Mesh 12 gauge with nails and screws i/c all cost of labour and material complete in all respects, as approved by The Engineer.	Per/Sft	51.00	24.00		
4	N.S	Providing, fixing, cutting, jointing and testing uPVC sewerage, Drainage & vent piping conforming to ISO 3633:1991 including PVC Drainage fittings with solvent cement jointing include cost of clamping to walls and ceiling, hangers, supports, cutting through walls and providing sleeves through concrete slabs for pipelines and pipe fittings of the following diameter complete in all respect.					
		2" dia	Rft	67.00	215.00		
		Total "B"(Non-Schedule items) C/o to Summary of Cost:					
		Net Total (A+B):					

**ESTABLISHMENT OF SUB-CAMPUS OF UNIVERSITY OF AGRICULTURE FAISALABAD, AT DEPALPUR – OKARA
(HEC FUNDED)**

ENGINEER'S COST ESTIMATE

CONSTRUCTION OF GREEN HOUSE (22' x 54' x 15') BxLxH

Item No.	REF. Nos CH/ITEM	Description of Items	Unit	Qty	Rate (Rs.)	Rate Quoted by the Contractor	Amount (Rs.)
MRS, 2ND BI-ANNUAL-2021 (1st JULY-2021 to 31st DECEMBER -2021) DISTRICT OKARA							
		SCHEDULE ITEMS-A					
		Earth Work					
1	CH:3 item 47(a) P-33	Jungle clearance and removing within 100 ft. (30 m).a) light	1000 Sft	1,400.00	191.40		
2	CH:3 item 21 (b) P-30	Excavation in foundation of building, bridges and other structures, including dagbelling, dressing, refilling around structure with excavated earth, watering and ramming lead upto one chain (30 m) and lift upto 5 ft. (1.5 m) b) in ordinary soil.	1000 Cft	2,610.00	8,078.40		
		Filling, watering and ramming earth under floors:-					
3.1	CH:3 item 15 (i) P-29	i) with surplus earth from foundation, etc.	1000 Cft	1,500.00	3,867.60		
3.2	CH:3 item 15 (ii) + 17 (a, b & c) P-29	ii) with new earth excavated from outside,lead upto 5 mile (8 Km). (as per actual borrow pit lead)	1000 Cft	8,000.00	15,021.80		

4	CH:3 item 25 (i) P-30,31	Compaction of earthwork with power road roller, including ploughing, mixing, moistening earth to optimum moisture) content in layers, etc. complete: i) 95% to 100% maximum modified AASHO dry density.	1000 Cft	8,000.00	810.50		
		Plain and Reinforement Concrete					
5	CH:6 item 3 (b)(ii) P41	Cement concrete brick or stone ballast 1½ " to 2" (40 mm to 50 mm) gauge, in foundation and plinth:- (b) Ratio 1: 4: 8	100 Cft	845.00	15,212.70		
		Brick Work					
6	CH:7 item 4 (i) P53	Pacca brick work in foundation and plinth in:- i) Cement, sand mortar:-Ratio 1:5	100 Cft	2,400.00	22,219.85		
		Flooring & Plaster					
7	Ch 6, Item 5f	Plain Cement Concrete including placing, compacting, finishing, curing etc. complete in all respects. Ratio 1:2:4	100 Cft	556.00	25,014.00		
8	Ch 11, Item 11c P-74	Cement Plaster Ratio 1:5 upto 20ft height. 3/4" thick	100 Cft	2,380.00	2,979.00		
9	Ch 24, Item 13 d ii	Supply and installation copper conductor cable for service PVC insulated 4 Core 19/.064	rft	480.00	756.00		
		Total "A"(Schedule items) C/o to Summary of Cost:					
		NON SCHEDULE ITEMS-B					
		Miscellaneous					
1	N.S	P/F glass house Base channel MS base channel size 75'32'4mm with higes for grouting with one coat of red oxide primer and two coat of enamel paint, complete in all respect.	Per/Rft	165.00	425.00		

2	N.S	P/F glass house main structure with cabin consisting of M S hollow section size 48'48'2 mm with one coat of red oxide primer and two coat of enamel paint, complete in all respect.	Per/Rft	2,650.00	485.00		
3	N.S	P/F G I canopy Sheet 0.7mm size, 60'x6"x6" For top Complete in all respect.	per/sft	65.00	250.00		
4	N.S	P/F 9'9 mm (approx) aluminum solid bar horizontal and vertical members with hollow section with cabin, complete in all respect.	Per/Rft	5,000.00	85.00		
5	N.S	P/F truss for structure, consisting of M.S hollow section size 38'38'1.5mm with one coat of red oxide primer and two coat of enamel paint, complete in all respect.	Per/Rft	490.00	310.00		
6	N.S	P/F support for truss(King Post & Ladder& Top roof bracket) consisting of M.S hollow section size 32'32'1.5mm with one coat red oxide primer and two coat of enamel paint, complete in all respect.	Per/Rft	950.00	230.00		
7	N.S	P/F clear glass 8 mm thick for roof & cabin top with all fitting silicon sealing, complete in all respect.	per/sft	1,300.00	340.00		
8	N.S	P/F 5 mm clear glass front back & side walls & cabin walls in double layer having space between two layers with all fitting silicon sealing or rubber, complete in all respect.	per/sft	1,800.00	265.00		
9	N.S	P/F ventilators system on both sides of glass house size 600'600mm operated manually and chain grary system with GI wire mesh frame. Ventilator adjusted out ward with common operation eleven ventilators on each side with one coat of red oxide primer and two coats of enamel paint, complete in all respect.	each	16.00	14,500.00		

10	N.S	P/F green net local (Shading Capacity 70%) size green net 50'x20' with pulley chain system in side the glass house. Double side M.S hollow shaft for green net rolling system. G .I wire No.10 for holding of green net. G.I sling wire 3mm for rolling of green net with adjustable G.I hock with one coat of red oxide primer and two coat of enamel paint, complete in all respect.	job	1.00	85,000.00		
11	N.S	P/F Propellers (Exhaust fans) China Made Size: Diameter 930 mm, Body size: 1050x1050x400 mm material galvanized steel. Six blades, motor, III phase, 1450 RPM. Belt drive, complete with shutter and mesh guard with cable 7/29 with PVC pipe, Fan shutters tightly closed when the fan is not working with GI nut bolts and spacer, complete in all respect.	each	3.00	48,000.00		
12	N.S	P/F cooling pad (China Made) size cooling pads, size 54'x3'-3''' thick 6'', complete in all respect.	per/sft	176.00	650.00		
13	N.S	P/F G.I structure for holding cooling pads, size 54'-6''-4'x8'' G.I sheet 0.7 mm prime quality, complete in all respect.	job	1.00	85,000.00		
14	N.S	P/F sliding door (Front & Back) Size, 1980x1370mm Material frame hollow section 60x30x1.5mm, with lock system, railing, bearing with one coat of red oxide primer and two coat of enamel paint, complete in all respect.	each	2.00	21,000.00		
15	N.S	P/F Best quality fiber glass double ply water tank 300 gallon for cooling pad and mist system with foot valve complete in all respect.	each	2.00	28,000.00		
16	N.S	P/F water pump with motor 1 or 2 HP III phase, 2800 Rpm for mist system and cooling pad , heavy duty with pipe with check valve with M.S frame with cover with 7/36 cable with PVC pipe fitting with one coat of red oxide primer and enamel paint, complete in all respect.	each	2.00	38,000.00		

17	N.S	P/F Mist system inside the glasshouse, main supply line and branch lines PVC pipe with mist nozzle with elbow, socket, union, tee, barrel nipple and clamp, complete in all respect.	job	1.00	95,000.00		
18	N.S	P/F double door for cabin size 1980x1675mm, material M S hollow section 60'30'1.5mm with 9mm solid bar with 5mm glass with U rubber with door closer with one coat of red oxide primer and two coats of enamel paint, complete in all respect.	each	1.00	22,000.00		
19	N.S	P/F exhaust Fan (Pak made)500 mm dia 2 fans on front 2 fans on back side, steel body with louver system with 7/29 cable with PVC pipe fitting complete in all respect.	each	5.00	13,000.00		
20	N.S	P/F Main Electric Panel 750mmx600mmx200mm (16 SWG) manual control system with thermocouple, temperature gauge with ampere meter, volt meter, indication lights with all circuit breakers imported & main breaker 100/ampere and 4 No circuit breaker 20 ampere and 12 No breaker 10 or 13 Amp with Timer complete in all respects	each	1.00	130,000.00		
21	N.S	P/F LED Light 50w (China Made) inside the glass house with PVC pipe with wiring 3/29 cable, complete in all respect.	each	6.00	9,000.00		
22		P/F Table for nursery plants overall size, length-2130 mm Width-915mm height-760 mm, table top frame material M.S angle iron size, \pm 50x50x4 mm with 2 No horizontal support material MS angle iron size, 38x38x4mm . Frame top galvanized mesh thickness \pm 2 mm, (khana size approx 25 mm) with MS flat strip size, 20x2mm for mesh holding with stand material MS angle iron size, 50x50x4mm & 38x38x4 mm with one coat red oxide & two coat enamel paint complete in all respect.	each	14.00	23,000.00		

23	N.S	P/F 32 mm PPR water pipes ,of approved quality & make including all fittings, fixtures etc. excavation upto 3' depth, back filling, compaction and making connections with existing lines or where ever required complete in all respect.	per/rft	175.00	266.00		
		P/F earthing with 2'x2'x1/8" copper earth plate buried in charcoal and lime mixture in pit 10' below ground level and connected with main board through 8 SWG copper wire. Complete in all respect.	job	1.00	45,000.00		
		Total "B"(Schedule items) C/o to Summary of Cost:					
		Net Total (A+B)					