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

# SAJAB BUILDING DEPARATION TO TENDER/CONTRACT DOCUMENTS

Name of Work:		 
Name of Contractor:		 
Estimated Cost of Work	Rs:	
Amount of Earnest Mone	ey Rs:	 
Deposit at Call No:		 
Treasury Chandi 110.		
_		
Time Limit:-		

OStereo 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)						
2 3	Estimated cost Time for completion	(Construction of Girls Hostel & Boys Hostel) PKR: 96.06 Million/- 11-Months.						
4	Amount of Bid Security	PKR Million (s)						
5	Issued to							
6	Pre-tender conference							
7	Dead Line for submission of Tender	24-09-2019 up to 10:00am						
8	Opening of Tender	24-09-2019 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, 2<sup>nd</sup> quarter 2018 District 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.
- 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. (a) The tenderer shall fill up the Bill of Quantities ITEM WISE RATES which he is willing to undertake each item of work. No premium will be quoted by the contractor against non-MRS/item rates, for which the rate and amount has already been filled in by the engineer-in-charge in the bid schedule.

- (b) The tenderer shall quote his own unit rate in the Bill of quantities on which he is willing to undertake each item of work.
- 9. 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.
- 10. 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.
- 11. 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.
- 12. 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.
- 13. 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.

- 14. 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.
- 15. 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.
- 16. (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.
- 17. 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.
- 18. 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.

- 19. 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 ant an outer envelope, duly marking the envelops as "ORIGINAL". The inner and outer envelops 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 envelops 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.
- 20. 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.
- 21. 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.
- 22. Any tender received by the Tender Cell after the deadline for submission offenders prescribed in the Notice Inviting Tenders will be returned unopened to the tenderer.
- 23. 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.
- 24. 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.
- 25. 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 contact, may-result in the rejection of his tender.

- 26. To assist in the examination, evaluation and comparison of tenders, the Engineer-incharge 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 AMOUNTBELOW 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 the 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 m the presence of the Engineer-in-charge.
- 31. After the successful tenderer has signed the -contract famished 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

- the contract document within fifteen (15) days following your notification of such acceptance.
- 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) (Construction of Girls Hostel & Boys Hostel) **Estimated Cost** PKR: 96.06Million/b) c) Amount of earnest money Rs. 1,921,200/to accompany the tender (to furnished by the tenderer in the shape of "deposit at call" from a scheduled Bank of Pakistan) Percentage of security deposit to be d) retained form the bills. i) On the amount of work done up to Ten (10) percent Rs.5.0 million ii) On the amount of work done Five (5) percent beyond Rs.5.0 million. e) Mobilization period Fifteen (15) calendar days f) Time allowed for completing the -----calendar months work after the expiry of mobilization period Amount of performance security in Five (05) percent of the accepted tender price in the g) the form of Bank Guarantee (see case of tenders with cost of exceeding Rs.50.00 millions and as per general condition 26(a) for all contract conditions clause 7 and General direction 26 (a) tenders. Time period of maintenance (after the One Year h) f issuance of certificate of completion)

i) No Cost Escalation in the project

#### **SUMMARY OF COST**

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

#### (Construction of Girls Hostel & Boys Hostel)

S/N	DESCRIPTION	AMOUNT (Rs)
1	GIRLS HOSTEL	
2	BOYS HOSTEL	
3	Total	
4	Add 5% PRA	
5	Grand Total:	
	IN MILLION	

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

#### **GIRLS HOSTEL**

#### **BILL OF QUANTITIES**

#### **CIVIL WORKS**

Item No.	REF. Nos CH/ITE	Description of Items	Unit	Qty	Rate (Rs.)	Rate Quoted by The Contractor	Amount (Rs.)		
MRS, 2n	MRS, 2nd BI-ANNUAL-2018 (1st July-2018 to 31st December-2018) DISTRICT OKARA								
		SCHEDULE ITEMS-A							
		Earth Work							
1	CH:3/47(a)	Jungle clearance and removing within 100 ft. (30 m).a) light	1000 Sft	15,856.00	152.35				
2	CH:3/21(b)	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	21,929.66	6,434.20				
2	GII 2/15/2	Filling, watering and ramming earth under floors:							
3	CH:3/15(i)(ii)	i) with surplus earth from foundation, etc.	1000 Cft	14,619.77	3,083.00				

In-charge Tender Cell, UAF

Contractor

		ii) with new earth excavated from outside,lead upto 5 Mile.(as per actual borrow pit lead)	1000 Cft	22,023.44	12,299.60	
		Anti-Termite				
4	CH:25/42	Spraying anti-termite liquid mixed with water in the ratio of 1:40.	100 Sft	18,330.76	224.80	
		Plain and Reinforement Concrete				
5	CH:6/5	Cement concrete brick or stone ballast 1½ " to 2" (40 mm to 50 mm) gauge, in foundation and plinth:-				
		(i) Ratio 1: 4: 8	100 Cft	1,847.22	13,002.75	
		Plain and Reinforement Concrete				
6	CH:6/5	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate)				
6.1		(i) Ratio 1: 4: 8 (Under Footing)	100 Cft	1,774.60	17,919.25	
6.2		(f) Ratio 1: 2: 4 (Under Floor)	100 Cft	407.53	22,832.05	
	CH:6/6	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.):-				

7	(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. horizental shuttering) complete in all respects:-					
		(3) Type C (Ratio1: 2: 4)(Footings)	Per/ Cft	6,489.50	266.70		
8	(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					
		Type B (Ratio 1: 1½: 3)(Column)	Per/ Cft	2,182.18	392.05		
		Type C (Ratio 1: 2: 4)(Lintel)	Per/ Cft	292.99	361.90		
		Type C (Ratio 1: 2: 4)(Beam)	Per/ Cft	3,310.09	361.90		
		Type C (Ratio 1: 2: 4)(Slab)	Per/ Cft	4,543.80	361.90		
		Type C (Ratio 1: 2: 4)(Ramp)	Per/ Cft	54.00	361.90		
		Steel Reinforcement					
9	CH:6/9	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)  (ii) Deformed bar (Grade 60)	100Kg	53,807.22	13,223.50		

10	CH:6/33(a)	Providing and laying damp proof course of cement concrete 1:2: 4(using cement, sand and shingle), including bitumen coating :- (a) with one coat of bitumen and one coat of polythene sheet ii) 2" thick (50 mm)	100 Sft	1,404.50	5,293.45	
11	CH:6/35(a)	Providing and laying vertical damp proof course with cement sand plaster and bitumen coating (a) with one coat of bitumen and one coat of polythene sheet ii) Ratio 1:3 b) 3/4 " thick (20 mm)	100 Cft	1,651.98	3,424.15	
		Brick Work				
12	CH:7/-4i	Pacca brick work in foundation and plinth in:- Cement, sand mortar:-Ratio 1:6	100 Cft	4,921.01	17,558.45	
		GROUND FLOOR				
13	CH:7/5i	Pacca brick work in ground floor:-Ratio 1:5	100 Cft	8,121.06	19,211.40	
14	CH:7/5i	Pacca brick work in ground floor :-Ratio 1:4	100 Cft	2,435.34	19,734.60	
		Flooring				
15	CH:7/30	Supplying and filling sand under floor; or plugging in wells	100 Cft	3,397.15	1,693.90	
16	CH:10/3	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	3,397.15	4,300.30	

17	CH:10/22	2"(50 mm) thick mosaic flooring, consisting of ½ "(13 mm) mosaic topping of one part of cement and marble powder in the ratio of 3:1 and two parts of marble chips, laid over ½"(40 mm) thick floor of 1:2:4 cement concrete, including rubbing and polishing complete with finishing:-				
		(a) using grey cement	100 Sft	3,347.15	10,884.74	
		(b) using white cement	100 Sft	3,347.15	11,661.84	
18	CH:10/22	Mosaic dado or skirting with one part of cement and marble powder in the ratio of 3:1 and two parts of marble chips, laid over ½"(13 mm) thick cement plaster 1:3, including rubbing and polishing, complete with finishing:- ii) ½"(13 mm) thick				
		(a) using grey cement	100 Sft	517.85	10,716.15	
		(b) using white cement	100 Sft	517.85	11,234.30	
19	CH:10/15(c)	Providing and laying topping of cement concrete 1:2:4, including surface finishing and dividing in panels:- 1½"(40 mm) thick				
		Plinth Protection	100 Sft	2,070.00	3,848.20	
20	CH:10/42(a)	Providing and fixing marble strip of any shade for dividing the mosaic flooring into panels				
		a) Siz e 2" x 3/8 " (50 x 10 mm )	Per Rft.	6,086.58	6.60	
		Surface Rendring				

21	CH:11/10(b)	Cement plaster ratio 1:3 under soffit of RCC roof slabs only , upto 20' height. 3/8" (10 mm) thick. (ceiling plaster)	100 Sft	8,330.14	2,074.05	
22	CH:11/11(b)	Cement plaster 1:5 on internal walls upto 20' (6 m) height and 1/2" (13 mm) thick.	100 Sft	14,042.84	1,747.25	
22	CH:11/11(c)	Cement plaster 1:5 on internal walls upto 20' (6 m) height and 3/4" (20 mm) thick.	100 Sft	14,042.84	2,370.10	
23	CH:11/18(b)	Cement pointing struck joints, on walls, upto 20' (6.00 m) hiehgt:- b) ratio 1:3	100 Sft	5,977.63	1,851.05	
		Wood Work				
24	CH:12/7(a)	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	153.00	1,198.10	
25	CH:12/50	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 2"x3/8" (50mm 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	1,061.00	363.10	
26	CH:12/58(b)	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	1,214.00	44.95	

27	CH:12/21	Providing and fixing, approved quality mortice lock complete in aal respect	Each	50.00	551.05	
28	CH:12/59	Providing and fixing Vin board cabinet 3/4" thick with drawers 3"deep in 'Kitchen including termite proofing and polishing with synthetic enamel as specified, with handles hinges, screws etc., complete in all respects.iv) 2' deep, with back	Per/Sft	104.50	687.25	
29	CH:12/25	Providing and fixing wooden box type wardrobe 22" (550mm) deep including ¾" (20 mm) thick boxing and shelves,hanger rods, hard board back drawers, brass fittings,locking arrangements, handles, internal bolts, shoe rods,etc. including three coats of enamel paint:- ii) Deodar wood boxing, and deodar wood shelves and leaves, etc.	Per/Sft	1,694.00	1,079.60	
		Painting and Warnishing				
30	CH:13/31	Preparing surface and painting with emulsion paint:-3 Coats New Surface	100 Sft	36,415.82	1,153.45	
31	CH:13/32A	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:- 3 Coats New Surface	100 Sft	1,270.00	2,885.85	
32	CH:13/7	French polishing new surface	100 Sft	306.00	2,726.70	
33	CH:13/5(c)	Preparing surface and painting of doors and windows any type (including edges) 3 Coats New Surface	100 Sft	2,122.00	1,562.65	
		Metal Work				

34	CH:25/44	Providing and fixing windows consisting of M.S. box 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 ½"x½" (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	1,103.75	491.90	
		Roofing & Water Proofing				
35	CH:9/45a	Providing and Laying Insulation material of Extruded Polystyrene XPS in Rigid Insulation / Foam Board on roof or walls, Density 32-38Kg/M, compressive strength 250-400 kpa, R-value 5 per inch thickness and water obsorbtion (1% by volume, cell structure clored cell) i/c cutting and placing in position complete in all respect.  a) 1" thick	100 Sft	9,675.00	5,688.00	
36	CH:9/5	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 polythene sheet 500 gauge	100 Sft	9,675.00	6520.5	
37	CH:9/15	Construction of Khuras on roof 2' x 2' x 6"	Each	10.00	497.55	

38	CH:9/16	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	10.00	836.2	
		Total "A"(Schedule items)				
		NON SCHEDULE ITEMS-B				
		Flooring				
1	N.S	Providing and laying Porcelain tiles flooring (full body) 16"x16" laid over 3/4" thick cement sand mortar (1:2) i/c filling joints in white cement and matching pigment i/c cutting charges complete in all respects as approved & Directed by the Engineer Incharge. (Master, DWV series Polished (Dark color) class SB	Per/Sft	740.25	227.00	
2	N.S	Providing and laying CERAMIC FLOOR TILES (PREMIUM) Size 12"x12" (CFT MATT) laid over 3/4" thick cement sand mortar (1:2) i/c filling joints in white cement and matching pigment i/c cutting charges complete in all respects as approved & directed by the Engineer Incharge. Flooring. STILE TILES (Shabbir Tiles)	Per/Sft	1,047.75	158	
		Skirting				
3	N.S	Providing and laying Porcelain tiles flooring (full body) 16"x4"x3/8" laid over 3/4" thick cement sand mortar (1:2) i/c filling joints in white cement and matching pigment i/c cutting charges complete in all respects as approved & Directed by the Engineer Incharge. (Master, DWV series Polished (Dark color) class SB Dado/ Skirting	Per/Sft	37.46	240.00	
		Dado				

4	N.S	Providing and laying CERAMIC WALL TILES (PREMIUM) size 12"x18" laid over 3/4" thick cement sand mortar (1:2) i/c filling joints in white cement and matching pigment i/c cutting charges complete in all respects as approved & directed by the Engineer Incharge.STILE TILES (Shabbir Tiles) Dado/ Skirting	Per/Sft	2,651.47	171.00	
		Kitchen Counter				
5	N.S	Providing and fixing 3/4" thick pre-polished Marble Slab Sunny Grey uniform texture full width area above 2 sft laid over 3/4" thick cement sand mortar (1:2) i/c filling joints in white cement & matching pigment i/c making gola on exposed edges complete in all respect as approved / directed by the Engineer Incharge.	Per/Sft	87.00	305.00	
		Entrance Steps / Podium				
6	N.S	Providing and fixing 3/4" thick pre-polished Marble Slab Granite uniform texture full width area above 2 sft laid over 3/4" thick cement sand mortar (1:2) i/c filling joints in white cement & matching pigment i/c beveling charges on exposed edges complete in all respect as approved / directed by the Engineer Incharge	Per/Sft	859.43	613.00	
		Miscellenious				
7	Approved N.S	Providing and Fixing of M.S steel chowkats full jam of 10-1/2"x 2" single rebate of M.S 16 SWG with up to 4 Nos 5" long C.P hinges screwed / welded M.S flat iron 2" x 1/8" in back of hinges welded inside i/c 3/8" dia bars 2 Nos bottom with 6 NOS 6" long hold fast angle iron 1.5"x1.5"x3/16" also back fill with P.C.C 1:2:4 i/c painting with red oxide and bitumen coating on surface touching with concrete complete in all respect.	Per/Sft	798.50	330.00	

8	Approved N.S	Providing and Fixing M.S steel chowkats full jam of 5-1/2"x 2" single rebate of M.S 16 SWG with up to 4 Nos 5" long C.P hinges screwed / welded M.S flat iron 2" x 1/8" in back of hinges welded inside i/c 3/8" dia bars 2 Nos bottom with 6 NOS 6" long hold fast angle iron 1.5"x1.5"x3/16" also back fill with P.C.C 1:2:4 i/c painting with red oxide and bitumen coating on surface touching with concrete complete in all respect.	Per/Sft	262.50	291.00	
9	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:	D.G.	150.00	250	
10	N.S	4" dia  Provide and fix uPVC plain bends with grating (as rain water inlets at roof), water tight connection leak-free:	Rft	150.00	250	
		4" dia	Each	10.00	1,400	
11	N.S	Provide and fix uPVC shoe bends (as rain water outlets), water tight connection leak-free				
		4" dia	Each	10.00	1,000	
		Total "B"(Non Schedule items)				
		Net Total (A+B)				

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

#### **GIRLS HOSTEL**

#### **BILL OF QUANTITIES**

#### PUBLIC HEALTH WORKS

Sr #	REF. Nos CH/ITEM	Description	Unit	Qty.	Unit Rate (Rs)	Rate Quoted by The Contractor	Amount (Rs)
MR	S, 2nd BI-Al	NNUAL-2018 (1st July-2018 to 31st December-2018) DISTRI	CT OKAR	$\mathbf{A}$			
		SCHEDULE ITEMS					
1	19-1-i	Providing and fitting glazed earthen ware water closet European type, excluding seat and cover:-	Each	5	2,191.50		
2	19-9-i	Providing and fixing glazed earthen ware sink, including bracket set, waste pipe and waste coupling: 60x45 cm (24"x18")	Each	2	1,740.60		
		G.I Piping					
3	23-22-iii	Providing, laying, cutting, jointing, testing and disinfecting G.I. pipeline in trenches, (Cost of sockets, tees, elbows, bends, valves, crosses, unions and plugs, etc. is included in the rates) with socket joints, using G.I pipes of B.S.S. 1387-1967 complete in all respects, with specials and valves. Heavy Duty					
		a) <sup>3</sup> / <sub>4</sub> " i/d (20 mm) 3.25mm thick	Rft	55	141.15		
		a) 1½" i/d (40 mm)	Rft	352	310.95		

Contractor

In-charge Tender Cell, UAF

		<u>SEWERAGE</u>					
4	21-1	Providing and laying RCC pipe, moulded with cement concrete 1:1.5:3, with spigot socket or collar joint, etc. including cost of reinforcemnt, confirming 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.					
		(i) 150 mm (6:) i/d	Rft	376	190.50		
		(ii) 225 mm (9:) i/d	Rft	1	343.20		
	19-19	Providing and fixing looking glass 55x40 cm (22"x16") size, and 5 mm thick, first quality.	Each	1	387.80		
5	23-27	Providing, laying, cutting, jointing, testing and disinfecting. pipes of B.S.S. with `D' 2 and valves is not included in the Class working pressure complete in all respects:-					
		a) 2" i/d (50 mm)	Rft	22	79.95		
		b) 3" i/d (75 mm)	Rft	195	169.00		
		c) 4" i/d (110 mm)	Rft	132	281.60		
6	21-17	Providing and fixing 6" thick RCC manhole cover with 3"x3"x1/4" angle iron frame, 22" i/d as per standard drawing STD/PD no. 7 of 1977, complete in all respects.	Per set	10	4,729.90		
				Total "A"(S	chedule items)		
		NON SCHEDULE ITEMS					
1	PH-0018	P/F OF WATER CLOSET ORRISA PATTERN FULL SIZE 3 star Made	Nos.	4	2,850		
2	PH-0017	P/F OF FLUSHING CISTERN. 3 Star Made	Nos.	4	3,300		
3	PH-0016	P/F OF WASH H& BASIN WITH PEDESTAL & FITTINGS. 3 Star Made	Nos.	7	5,894		

4	PH-0019	P/F OF VANITY COUNTER BASIN INCLUDING COST OF FITTINGS. 3 Star Made	Nos.	2	4,340	
6	PH-0009	P/F OF SINK MIXER (020) 1/2" DIA Master Made	Nos.	2	4,500	
7	PH-0008	P/F OF BASIN MIXER (801) 1/2" DIA Faisal Made	Nos.	9	4,750	
8	PH-0011	P/F OF WALL SHOWER (054). Mater Made	Nos.	12	9,700	
9	PH-0001	P/F OF BIB COCK 1/2" DIA. (005) Master Made	Nos.	9	1,145	
10	PH-0004	P/F OF TEE STOP COCK (1404) 1/2" DIA. Faisal Made	Nos.	27	1,232	
12	PH-0022	P/F OF SOAP Dish 2007). Master Made	Nos.	21	525	
13	PH-0022	Providing and fixing toilet paper holder heavy duty master made with fitting material.	Nos.	9	1,200	
14	PH-0021	P/F OF TOWEL RAIL WITH BRACKETS CHROMIUM PLATED (5302). Faisal Made	Nos.	10	920	
16	PH-0115	Making Sewerage Connection To Existing Manhole Of Main Sewerage Pipe Line Including Cost Of Plugging, Dewatering, De-Silting, Making Hole In Wall Repairing And Restoration Etc Complete In Working Condition	Job	1	1,200	
17	PH-0014	P/F OF MUSLIM SHOWER (1406). Faisal Made	Nos.	9	867	
18		PPR PIPE				

	PH-0025	P/F OF PPRC PIPE 25MM DIA COMPLETE WITH ALL RESPECT. Dadex Made	195	Rft	135	
	PH-0027	P/F OF PPRC PIPE 32MM DIA COMPLETE WITH ALL RESPECT. Dadex Made	195	Rft	145	
	PH-0029	P/F OF PPRC PIPE 40MM DIA COMPLETE WITH ALL RESPECT. Dadex Made	309	Rft	230	
	PH-0031	P/F OF PPRC PIPE 50MM DIA COMPLETE WITH ALL RESPECT.Dadex Made	564	Rft	340	
	PH-0033	P/F OF PPRC PIPE 63MM DIA COMPLETE WITH ALL RESPECT. Dadex Made	218	Rft	525	
19		Valves				
		Providing and installing valves of following nominal dia,				
	PH-0111	P/F OF H&LE VALVE 1". Faisal Made	1	Nos.	900	
	PH-0112	P/F OF H&LE VALVE 1-1/2" DIA. Faisal Made	5	Nos.	1,700	
	PH-0113	P/F OF GATE VALVE 2" DIA. Kitz Made	8	Nos.	6,300	
20		Vent Cowel				
	PH-0095	P/F OF NIKASI VENT COWL 110MM.DADEX MADE:				
		4" i.d	15	Nos	190	
21		Multifloor Trap				
	PH-0020	P/F OF NIKASI P-TARP 110MM. DADEX MADE	35	Nos.	1,700	

22	NS	Valves				
		Providing and installing ball valves of following nominal dia, Kitz make or approved Equaivalent, including jointing, fitting, painting, testing, complete in all respects to match with PPR and PE pipes of following diameters.				
		32 mm	2	Nos	5,106	
		63 mm	5	Nos	22,000	
23	NS	Providing and installing Gas Geyser including All types of Valves & fitting accessories, complete in all respect as per specifications and drawings.				
		55 Gallon Geyser	3	Nos.	40,000	
		35 Gallon Geyser	1	Nos.	30,000	
		6 Gallon Instant Geyser	1	Nos.	15,000	
24	NS	Clean Out				
		Providing and fixing clean out with threads ferule fixed in pipe with the help of solvent, as shown on drawing, complete in all respects as per specifications and drawings.				
		3" i.d	10	Nos.	4,450	
		4" i.d	5	Nos.	5,450	
25	NS	Gully Trap				
		Providing and making Gully trap 1'-0"x1'-0" internal size including 9" thick brick masonry (1:4), 1/2" th. Plastering (1:3) i/side, benching with PCC 1:2:4 4" th. with cement finish, including steel grating cover, chamber 6" dia RCC Pipe and connection with manhole. complete in all respect as per specifications, drawings & Engineer in charge.	10	Nos.	15,000	
26	NS	Manhole				

		Providing and constructing 2'x2' manhole with brick work including excavation, backfilling, RCC work PCC 1:2:4 cambering, plastering in 1:4 inside & outside, water proofing etc., upto 6' depth and size including ladder top slab, 18" heavy duty C.I. Manhole cover with frame "ALPINE INDUSTRIAL CON", "CME", "NPC SUPER" as shown on the drawings, complete in all respect as per specifications and drawings.	10	Nos.	25,000	
27	NS	Khurra / R.W.C.B				
		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) 2'x2'.	4	Nos.	1,500	
			Tota	ıl "B"(Non Sc	hedule items)	
					Total (A+B)	

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

#### **GIRLS HOSTEL**

#### **BILL OF QUANTITIES**

#### **ELECTRICAL WORKS**

Sr No	REF. Nos CH/ITE M	Item . No.	Description	Unit	Estimated Quantity	Rate (Rs)	Rate Quoted by The Contractor	Amount (Rs)
MRS	S, 2nd BI-Al	NNUAI	2-2018 (1st July-2018 to 31st December-2018) DISTR	ICT OKA	RA			
A) S	chedule Iter	ns						
1		1.1	Light Circuits.					
			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=36)					

[Ref: Item 10 (a- iii)/24]]		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 2.5 mm (7/0.029")	Rft	7560	15.95	
[Ref: Item 3(iii)/24]		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	2520	47.85	
	1.2	1st Light Point Controlled By One Switch				
		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, excluding cost of gang type light switches 10 amps (CK=156)				
[Ref: Item 10 (a-i)/24]		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	10260	11.7	

[Ref: Item 3(ii)/24]		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	5130	41.45	
		Supply and erection of PVC sheet box for recessed wiring, including making holes for ragulators, switches and plugs, complete in all respect as approved by the engineer incharge.				
	1.3	Point- Points Wiring				
		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. (CK=101)				
[Ref: Item 10 (a-i)/24]		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	7575	11.7	
[Ref: Item 3(ii)/24]		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	3787.5	41.45	

	1.4	1- 13 Amps Switch Socket				
		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				
[Ref: Item 10 (a-iv)/24]		circuit. (CK=15)  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 mm2 (7/0.036")	Rft	2700	22.95	
[Ref: Item 10 (a-iii)/24]		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) ii) Cost of 1x2.5 mm2 (7/0.029")	Rft	1350	15.95	
[Ref: Item 3(ii)/24]		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	1350	47.85	
	1.5	Loop-Loop- 13 Amps Switch Socket				

		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.				
[Ref: Item 10 (a-iv)/24]		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 mm2 (7/0.036")	Rft	5170	22.95	
[Ref: Item 10 (a-iii)/24]		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) ii) Cost of 1x2.5 mm2 (7/0.029")	Rft	2585	15.95	
[Ref: Item 3(ii)/24]		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	2585	47.85	
	1.6	1 x 3 Pin 20 Amps Switch Socket				

	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=5)				
[Ref: Item 10 (a-iv)/24]	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 mm2 (7/0.036")	Rft	1080	22.95	
[Ref: Item 10 (a-iii)/24]	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	540	15.95	

[Ref: Item 3(ii)/24]		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	540	47.85	
	1.8	Fan Points 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=88)				
[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	38	39.45	
[Ref : Item 14(ii)/24]	ii	Back Box (7"x4")	Each	38	221.90	
[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	3610	11.7	
[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	1805	41.45	

		1.9	Exhaust Fans Points 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=9)				
	[Ref: Item 10 (a-i)/24]		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	855	11.7	
	[Ref: Item 3(ii)/24]		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	428	41.45	
2			L.T. Power Cables				
			Supply at site, installation, testing and commissioning of PVC insulated non 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 prelaid 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	4 Core Cable PVC/PVC		_	_	_	
	13-d- (iii)/24		a) 4 core 50mm sq.	Rft	150	1014.95		
	13-c- (vii)/24		a) 4 core 25mm sq. (equivalent 19/0.064")	Rft	400	504.55		
		2.2	Circuit Protective Conductor (CPC)					
	12-(i)/24		a) 1 core 16mm sq.	Rft	400	77.90		
	12-(ii)/25		b) 1 core 25mm sq.	Rft	150	129.55		
3			PVC Conduit					
		3.1	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.					
	3(vi)/24		e) 2" Did PVC Conduit	Rft	350	84.25		
		3.2	PVC PIPE FOR TELEPHONE SYSTEM					
			Supply and erection of PVC pipe for wiring recessed in walls, including inspection boxes, pull boxes, hooks, cutting harries, and repairing surface, etc., complete with all specials.					
	3-(iii)/24	a	25 mm i/d	Rft	550	47.85		
		3.3	PVC PIPE FOR CABLE TV SYSTEM					
			Supply and erection of PVC pipe for wiring recessed in walls, including inspection boxes, pull boxes, hooks, cutting harries, and repairing surface, etc., complete with all specials.					
	3-(iii)/24	a	25 mm i/d	Rft	500	47.85		

					Total A-(Scl	hedule Items)=	
B) N	lon-Schedul	e Items	•				
1			Switch & Sockets.				
	Approve d NS	1.1	i) Providing and Installation of PVC Sheet Back Box 7.5 cm x 7.5 cm (6"x3") (Non Metalic) China Made	Each	84	78.00	
	Approve d NS	1.2	i) Providing and Installation of PVC Sheet Back Box 7.5 cm x 7.5 cm (3"x3") (Non Metalic) China Made	Each	97	120.00	
	E-1053	1.3	Supply & fitting of 10A, 1 Gang 1 Way Switch Clipsal Made Bush / Orange made, As per approval of Engineer Incharge.	Each	4	248.00	
	E-1048	1.4	Supply & fitting of 10A, 2 Gang 1 Way Switch Clipsal Made Bush / Orange made, As per approval of Engineer Incharge.	Each	4	366.00	
	E-1050	1.5	Supply & fitting of 10A, 4 Gang 1 Way Switch Clipsal Made Bush / Orange made, As per approval of Engineer Incharge.	Each	12	669.00	
	E-1051	1.6	Supply & fitting of 10A, 5 Gang 1 Way Switch Clipsal Made Bush / Orange made, As per approval of Engineer Incharge.	Each	8	777.00	
	E-1052	1.7	Supply & fitting of 10A, 6 Gang 1 Way Switch Clipsal Made Bush / Orange made, As per approval of Engineer Incharge.	Each	51	989.00	
	E-1057	1.10	Supply & fitting of 13A switch socket Clipsal Made	Each	62	561.00	
	E-1059	1.14	Supply & fitting of 15A switch socket Clipsal Made	Each	6	610.00	
2			Light Fittings And Fixtures				
		2.1	<u>LIGHTS</u>				

		2.3	Ceiling Fans				
	E-1018	i	Supply & fitting of LED Down Light 18 Watts Surface mounted DN027C LED CW 6500K Philips Made	Each	209	2,703	
	E-1009	i	Supply & fitting of LED flood light 50 watts IP65 BVP 135 Philips Made	Each	8	7,665	
	E-1054	2.2	Supply & fitting of Fan speed controller switched Clipsal Made	Each	38	1,242	
	E-1045		Supply & fitting of ceiling Fan 56"copper (Energy Efficient Pak Fan Deluxe Model as approved by PEECA)	Each	38	4,498	
	Approve d NS		Providing and Installation of PVC Fan Box Including Rod Popular Made.	Each	38	150	
		2.4	Exhaust Fans				
			Supply & fitting of Exhaust Fan 12" copper plastic body (Energy Efficient Model) G.F.C or Equivalent Made NEECA/PEECA Approved				
	E-1021	i	12" dia (Plastic Body).	Each	9	3,118	
3			L.T. Switchgear				
			<b>Distribution Board Concealed</b>				

		Supply, installation, connection of wires cables, and commissioning of distribution boards concealed type or to be installed on wall, made of 16 SWG M.S. sheet with hinged door, handle, catcher, earthing bar and neutral link with necessary holes, nuts, bolts, washers, earthing of DB door with braided copper internal wiring, PVC cable glands for incoming and out going wires/cables, 2 earthing terminals designation label engraved on plastic sheet of appropriate size to be pasted on the front side of DB, 3 phase indication lamps of colour red, yellow, blue, make Hager, Legrand (France) SV122 SV128 SV126 moulded case circuit breaker with overload and short circuit protection (MCCB) to be installed on the incoming side, Icu not less than 10 KA, and for miniature circuit breakers Icu 6 KA make G.E (Europe & USA), M.G., Legrand (France), ABB (Italy) Terasaki (Japan) having overload and short circuit protection, including cost of all necessary fixing accessories complete in all respects make				
		Tariq Electric, Billal Engineering, PEL, Techno Engineering.				
Appendix 'c'  Page No-1	3.1	DBLPF-1,DBLPF-2,DBLPG-1,DBLPG-2  01 No. Incoming 75 Amp MCCB TP, RC=10 kA 27 No. Outgoing 10/16/20 Amp MCB SP, RC=6 kA a) Volt Selector Switch b) 1 No Digital voltmeter c) 3 No indication lights 220 Volt d) 3 Ph N & Earth copper busboars e) Internal wiring & Line-up terminal,Cable Numbering Sleeves etc f) Panel steel grid painted along with locking arrangement	Each	2	60,520	

	Appendix 'c'  Page No-2	1.4	MPB (Main Panel Board- WAPDA)  01 No. Incoming 150 Amp MCCB TP, RC=35 kA  03 No. Outgoing 75 Amp MCCB TP, RC=16 kA  a) 3 No Digital ammeter  b) 3 No Digital voltmeter  c) 3 No indication lights 220 Volt  d) 3 Nos. Current Transformer 300/5A  e) 300 Amp. 3 Ph N & Earth copper busboars  f) Internal Power wiring & Line-up terminal, Cable  Numbering Sleeves etc  g) Panel steel grid painted along with locking  arrangement  h) Cost Includes Brass Cable glands, Thimbles, Nut  bolts, Installation, Termination and Commissioning	Each	1	211573	
4		4.1	Earthing System  Supply installation commissioning and testing of				
	Appendix ' c' Page No-3		Supply, installation, commissioning and testing of the earthing system including cost of the following 3 meter long of 5/8"dia tinned copper electrodes. up-to water level including cost of boring and lowering complete with clamp and 2 X 25mm2 stranded copper conductor from copper rod to ground surface in 1-1/2" <b>uPVC Pipe class D</b> with watering cap manhole with cover as per detail complete in all respects. and the resistance should up to 1-3 Ohms. the installation / test should be conducted in presence of engineer inchage.	Job	2	44138	
		4.2	Earth Connecting Point				
	Appendix ' c' Page No-4	4.3	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.  Manhole	Nos.	2	3278	

	Appendix ' c' Page No-5		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	7238	
5			<u>Telephone System</u>				
		5.2	<u>Telephone Outlet</u>				
	Approve d N.S		Supply / Erection of Bush made data single socket (RJ-11) including 16 SWG back box of 3"x3" size complete in all respect.	Each	3	778.48	
		5.3	<u>Telephone Cables</u>				
			Providing & laying multi pairs (Twisted) PVC insulated / underground cable of best quality (siemens, Germany, or Best imported as per approved sample) in pre-laid PVC recessed conduit or fixed cable duct/ Tray as per satisfaction of the Electrical Engineer.				
	Approve d N.S	a	4-5 Pair Cable CAT-6/UG/PVC (0.6 mm sq) (From DP to each Room)	Rft	450	22	
6			TV Cable System				
		6.2	TV Socket				
			Supply & erection of Bush/Clipsal series. TV Socket 9.5mm Direct				
	Appendix 'c' Page No-6		TV Socket 9.5mm Direct	Each	5	964	
		6.3	TV Cables				
			Providing and laying coaxial PVC insulated TV Antina cable 50 ohms of best quality (impored) in pre-laid PVC recessed conduit or fixed cable duct as per satisfaction of the Electrical Engineer.				

Appendix 'c' Page No-7	a	Coaxial Cable RG-6 (From JB to each room)	Rft	900	62	
	6.4	TV Junction Box				
E-1079		P/F of MS Sheet Box 16 SWG including cutting, molding, welding, painting with powder coated paint (3-Coats) with lock and key arrangement complete in all respects	Each	1	2100	
			To	otal B(Non-Sch	edule Items)=	
					Total (A+B)=	

#### **BOUNDARY WALL**

## **BILL OF QUANTITIES**

#### **CIVIL WORKS**

Item No.	MRS ITEMS NO	Description of Items	Unit	Qty	Rate (Rs.)	Rate Quoted by The Contractor	Amount (Rs.)
MRS,	2nd BI-ANNU	JAL-2018 (1st July-2018 to 31st December-2018) DIS	STRICT OK	ARA			
		SCHEDULE ITEMS-A					
		Earth Work					
1	CH:3/21(b)	Excavation in foundation of building and other structures, 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	6,320.00	6,434.20		
		Plain and Reinforcement Concrete					
2	CH:6/5	Cement concrete brick or stone ballast 1½ " to 2" (40 mm to 50 mm) gauge, in foundation and plinth:-					
		(i) Ratio 1: 4: 8	100 Cft	1,580.00	13,002.75		
3	CH:6/5	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate)					
		(i) Ratio 1: 2: 4 (2" Coping)	100 Cft	102.59	22,832.05		

Contractor

	CH:6/6	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.):-				
4	(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. horizental shuttering) complete in all respects:-				
		Type C (Ratio 1: 2: 4)(Footing For Gate Pillars)	Per/ Cft	8.00	266.70	
5	(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;-				
		Type C (Ratio 1: 2: 4)(Gate Pillars)	Per/ Cft	12.38	361.90	
		Steel Reinforcement				
6	CH:6/9	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) (ii) Deformed bar (Grade 60)	100Kg	62.40	13,223.50	
7	CH:6/33(a)	Providing and laying damp proof course of cement concrete 1:2: 4(using cement, sand and shingle), including bitumen coating :- (a) with one coat of bitumen and one coat of polythene sheet ii) 2" thick (50 mm)	100 Sft	1,185.00	5,293.45	
		Brick Work				

8	CH:7/-4i	Pacca brick work in foundation and plinth in:- Cement, sand mortar:-Ratio 1:6	100 Cft	5,776.88	17,558.45	
9	CH:7/5i	Pacca brick work other than building upto 10ft. (3 m) height i) cement, sand mortar:-Ratio 1:5	100 Cft	3,861.40	18,818.25	
		Surface Rendring				
10	CH:11/11(c)	Cement plaster 1:5 upto 20' (6 m) height and 3/4" (20 mm) thick.	100 Sft	11,604.71	2,370.10	
11	CH:11/18(b)	Cement pointing struck joints, on walls, upto 20' (6.00 m) hiehgt:- b) ratio 1:3	100 Sft	10,024.71	1,851.05	
12	CH:13/5(c)	Preparing surface and painting of doors and windows any type (including edges) 3 Coats New Surface	100 Sft	168.00	1,562.65	
		Metal Work				
13	CH:25/31	Making and fixing steel grated door with 1/16" thick (1.5mm) sheeting, including angle iron frame 2"x2"x3/8" (50x50x10 mm) and 3/4" (20 mm) square bars 4" (100 mm) centre to centre, with locking arrangement.	Per/Sft	84.00	1,004.95	
		Total "A"(Schedule items)				

## **BOYS HOSTEL**

## **BILL OF QUANTITIES**

## **CIVIL WORKS**

Item No.	MRS ITEMS NO	Description of Items	Unit	Qty	Rate (Rs.)	Rate Quoted by The Contractor	Amount (Rs.)
MRS,	2nd BI-ANNU	AL-2018 (1st July-2018 to 31st December-2018) DI	STRICT OF	KARA			
		SCHEDULE ITEMS-A					
		Earth Work					
1	CH:3/47(a)	Jungle clearance and removing within 100 ft. (30 m).a) light	1000 Sft	18,400.51	152.35		
2	CH:3/21(b)	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	44,242.04	6,434.20		
3	CH:3/15(i)(ii)	Filling, watering and ramming earth under floors:					
		i) with surplus earth from foundation, etc.	1000 Cft	29,494.69	3,083.00		

Contractor

**In-charge Tender Cell, UAF** 

		ii) with new earth excavated from outside,lead upto 5 Mile.(as per actual borrow pit lead)	1000 Cft	21,761.33	12,299.60	
		Anti-Termite				
4	CH:25/42	Spraying anti-termite liquid mixed with water in the ratio of 1:40.	100 Sft	30,466.79	224.80	
		Plain and Reinforement Concrete				
5	CH:6/5	Cement concrete brick or stone ballast 1½ " to 2" (40 mm to 50 mm) gauge, in foundation and plinth:-				
		(i) Ratio 1: 4: 8	100 Cft	2,457.00	13,002.75	
6	CH:6/5	Cement concrete plain including placing, compacting, finishing and curing complete (including screening and washing of stone aggregate)				
6.1		(i) Ratio 1: 4: 8 (Under Footing)	100 Cft	2,008.69	17,919.25	
6.2		(f) Ratio 1: 2: 4 (Under Floor)	100 Cft	547.73	22,832.05	
	CH:6/6	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.):-				
7	(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. horizental shuttering) complete in all				

		respects:-				
		(3) Type C (Ratio1: 2: 4)(Footings)	Per/ Cft	7,598.26	266.70	
8	(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				
		Type B (Ratio 1: 1½: 3)(Column)	Per/ Cft	2,579.65	392.05	
		Type C (Ratio 1: 2: 4)(Lintel)	Per/ Cft	478.56	361.90	
		Type C (Ratio 1: 2: 4)(Beam)	Per/ Cft	4,679.67	361.90	
		Type C (Ratio 1: 2: 4)(Slab)	Per/ Cft	5,383.70	361.90	
		Type C (Ratio 1: 2: 4)(Stair)	Per/ Cft	241.88	361.90	
		FIRST FLOOR				
		Type B (Ratio 1: 1½: 3)(Column)	Per/ Cft	1,562.00	414.90	
		Type C (Ratio 1: 2: 4)(Lintel)	Per/ Cft	470.63	384.75	
		Type C (Ratio 1: 2: 4)(Beam)	Per/ Cft	2,305.38	384.75	
		Type C (Ratio 1: 2: 4)(Slab)	Per/ Cft	5,383.70	384.75	
		Type C (Ratio 1: 2: 4)(Stair)	Per/ Cft	134.96	384.75	
		MUMTY FLOOR				
		Type B (Ratio 1: 1½: 3)(Column)	Per/ Cft	84.38	437.75	

				İ		I	
		Type C (Ratio 1: 2: 4)(Lintel)	Per/ Cft	23.25	406.79		
		Type C (Ratio 1: 2: 4)(Beam)	Per/ Cft	132.00	406.79		
		Type C (Ratio 1: 2: 4)(Slab)	Per/ Cft	198.00	406.79		
		Steel Reinforcement					
9	CH:6/9	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)  (ii) Deformed bar (Grade 60)	100Kg	101,852.34	13,223.50		
10	CH:6/25	Providing and fixing 1/8" (3 mm) thick 3" (75 mm) wide aluminium strip on horizontal and vertical expansion joints in walls, columns, ceilings and floors etc., including cost of clips/screws etc., complete in all respects:-					
	a	a) On interior surface (without mastic strip)	Per/Rft	889.40	91.35		
	b	b) On exterior surface (with mastic strip)	Per/Rft	553.40	94.95		
11	CH:6/32	Providing and fixing theremopore (foamed polythene) sheet in horizontal and vertical expansion joints:					
	b	b) 1½" (40 mm) thick thermopore sheet	Per/Sft	332.70	15.90		

12	CH:6/33(a)	Providing and laying damp proof course of cement concrete 1:2: 4(using cement, sand and shingle), including bitumen coating :- (a) with one coat of bitumen and one coat of polythene sheet ii) 2" thick (50 mm)	100 Sft	1,659.94	5,293.45	
13	CH:6/35(a)	Providing and laying vertical damp proof course with cement sand plaster and bitumen coating (a) with one coat of bitumen and one coat of polythene sheet ii) Ratio 1:3 b) 3/4 " thick (20 mm)	100 Cft	2,328.75	3,424.15	
		Brick Work				
14	CH:7/-4i	Pacca brick work in foundation and plinth in:- Cement, sand mortar:-Ratio 1:6	100 Cft	6,461.13	17,558.45	
		GROUND FLOOR				
15	CH:7/5i	Pacca brick work in ground floor:-Ratio 1:5	100 Cft	11,038.38	19,211.40	
16	CH:7/5i	Pacca brick work in ground floor :-Ratio 1:4	100 Cft	1,443.31	19,734.60	
		FIRST FLOOR				
17	CH:7/5i	Pacca brick work in first floor:-Ratio 1:5	100 Cft	10,785.38	19,993.65	
18	CH:7/5i	Pacca brick work in first floor :-Ratio 1:4	100 Cft	1,874.16	20,516.85	
		MUMTY FLOOR				
19	CH:7/5i	Pacca brick work in Mumty floor:-Ratio 1:5	100 Cft	2,211.98	20,948.80	
		Flooring				

20	CH:7/30	Supplying and filling sand under floor; or plugging in wells	100 Cft	4,517.68	1,693.90	
21	CH:10/3	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	6,542.74	4,300.30	
22	CH:10/22	2"(50 mm) thick mosaic flooring, consisting of ½ "(13 mm) mosaic topping of one part of cement and marble powder in the ratio of 3:1 and two parts of marble chips, laid over ½"(40 mm) thick floor of 1:2:4 cement concrete, including rubbing and polishing complete with finishing:-				
		(a) using grey cement	100 Sft	8,448.38	10,884.74	
		(b) using white cement	100 Sft	8,448.38	11,661.84	
23	CH:10/22	Mosaic dado or skirting with one part of cement and marble powder in the ratio of 3:1 and two parts of marble chips, laid over ½"(13 mm) thick cement plaster 1:3, including rubbing and polishing, complete with finishing: ii) ½"(13 mm) thick				
		(a) using grey cement	100 Sft	1,265.38	10,716.15	
		(b) using white cement	100 Sft	1,265.38	11,234.30	
24	CH:10/15(c)	Providing and laying topping of cement concrete 1:2:4, including surface finishing and dividing in panels:- 1½"(40 mm) thick				
		Plinth Protection	100 Sft	2,664.00	3,848.20	
25	CH:10/42(a)	Providing and fixing marble strip of any shade for dividing the mosaic flooring into panels				

		a) Siz e 1½" x 3/8 " (40 x 10 mm )	Per Rft.	12,802.05	6.60	
		Surface Rendring				
26	CH:11/10(b)	Cement plaster ratio 1:3 under soffit of RCC roof slabs only , upto 20' height. 3/8" (10 mm) thick. (ceiling plaster)	100 Sft	21,218.66	2,074.05	
27	CH:11/9(b)	Cement plaster 1:5 on internal walls upto 20' (6 m) height and 1/2" (13 mm) thick.	100 Sft	36,711.75	1,747.25	
21	CH:11/9(c)	Cement plaster 1:5 on internal walls upto 20' (6 m) height and 3/4" (20 mm) thick.	100 Sft	36,711.75	2,370.10	
28	CH:11/10(b)	Extra for lime, mud or cement plaster and pointing from 20' (6.00 m) and above for each additional 10' (3.00 m) height or part thereof.	100 Sft	1,536.00	235.35	
29	CH:11/18(b)	Cement pointing struck joints, on walls, upto 20' (6.00 m) hiehgt:- b) ratio 1:3	100 Sft	22,165.47	1,851.05	
		Wood Work				
30	CH:12/7(a)	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	80.00	1,198.10	

31	CH:12/50	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 2"x3/8" (50mm 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	2,592.00	363.10	
32	CH:12/51	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	414.00	
33	CH:12/58(b)	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	2,672.00	44.95	
34	CH:12/21	Providing and fixing, approved quality mortice lock complete in aal respect	Each	114.00	551.05	
35	CH:12/59	Providing and fixing Vin board cabinet 3/4" thick with drawers 3"deep in 'Kitchen including termite proofing and polishing with synthetic enamel as specified, with handles hinges, screws etc., complete in all respects.iv) 2' deep, with back	Per/Sft	190.00	687.25	

36	CH:12/25	Providing and fixing wooden box type wardrobe 22" (550mm) deep including <sup>3</sup> / <sub>4</sub> " (20 mm) thick boxing and shelves,hanger rods, hard board back drawers, brass fittings,locking arrangements, handles, internal bolts, shoe rods,etc. including three coats of enamel paint:- ii) Deodar wood boxing, and deodar wood shelves and leaves, etc.	Per/Sft	885.50	1,079.60	
		Painting and Warnishing				
37	CH:13/31	Preparing surface and painting with emulsion paint:-3 Coats New Surface	100 Sft	94,642.16	1,153.45	
38	CH:13/32A	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:-  3 Coats New Surface	100 Sft	1,592.88	2,885.85	
39	CH:13/7	French polishing new surface	100 Sft	140.00	2,726.70	
40	CH:13/5(c)	Preparing surface and painting of doors and windows any type (including edges) 3 Coats New Surface	100 Sft	5,184.00	1,562.65	
		Metal Work				
41	CH:25/39	Providing and fixing terrace railing of 2" (50 mm) i/d conduit pipe 16 SWG, welded with 5/8"x5/8" (16x16 mm) square bar 2.75 ft. (838 mm) high fixed at 5" (125 mm) centre to centre, in reinforced cement concrete slab with suitable arrangement, complete in all respects, as per design and drawing.	Per Rft.	415.00	678.90	

42	CH:25/39	Providing and fixing stair railing of 2½" (63 mm) i/d G.I. pipe, welded with 5/8"x5/8" (16x16 mm) square M.S. bars 2'-9" (838 mm) high, fixed in each step, complete in all respects, including painting, polishing three coats.	Per Rft.	120.00	806.70	
43	CH:25/44	Providing and fixing windows consisting of M.S. box 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 ½"x½" (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	2,562.98	491.90	
		Roofing & Water Proofing				
44	CH:9/45a	Providing and Laying Insulation material of Extruded Polystyrene XPS in Rigid Insulation / Foam Board on roof or walls, Density 32-38Kg/M, compressive strength 250-400 kpa, R-value 5 per inch thickness and water obsorbtion (1% by volume, cell structure clored cell) i/c cutting and placing in position complete in all respect.  a) 1" thick	100 Sft	12,414.88	5,688.00	

45	CH:9/5	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 polythene sheet 500 gauge	100 Sft	12,414.88	6520.5	
46	CH:9/15	Construction of Khuras on roof 2' x 2' x 6"	Each	26.00	497.55	
47	CH:9/16	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	26.00	836.2	
		Total "A"(Schedule items)				
		NON SCHEDULE ITEMS-B				
		Flooring				
1	N.S	Providing and laying Porcelain tiles flooring (full body) 16"x16" laid over 3/4" thick cement sand mortar (1:2) i/c filling joints in white cement and matching pigment i/c cutting charges complete in all respects as approved & Directed by the Engineer Incharge. (Master, DWV series Polished (Dark color) class SB	Per/Sft	1,063.00	227.00	
2	N.S	Providing and laying CERAMIC FLOOR TILES (PREMIUM) Size 12"x12" (CFT MATT) laid over 3/4" thick cement sand mortar (1:2) i/c filling joints in white cement and matching pigment i/c cutting charges complete in all respects as approved & directed by the Engineer Incharge. Flooring. STILE TILES (Shabbir Tiles)	Per/Sft	1,717.13	158	
		Skirting				

3	N.S	Providing and laying Porcelain tiles flooring (full body) 16"x4" laid over 3/4" thick cement sand mortar (1:2) i/c filling joints in white cement and matching pigment i/c cutting charges complete in all respects as approved & Directed by the Engineer Incharge. (Master, DWV series Polished (Dark color) class SB Dado/ Skirting  Dado	Per/Sft	58.44	240.00	
4	N.S	Providing and laying CERAMIC WALL TILES (PREMIUM) size 12"x18"x3/8" laid over 3/4" thick cement sand mortar (1:2) i/c filling joints in white cement and matching pigment i/c cutting charges complete in all respects as approved & directed by the Engineer Incharge.STILE TILES (Shabbir Tiles) Dado/ Skirting	Per/Sft	4,227.14	171.00	
		Entrance Steps / Podium				
5	N.S	Providing and fixing 3/4" thick pre-polished Marble Slab Granite uniform texture full width area above 2 sft laid over 3/4" thick cement sand mortar (1:2) i/c filling joints in white cement & matching pigment i/c beveling charges on exposed edges complete in all respect as approved / directed by the Engineer Incharge	Per/Sft	847.99	613.00	
		Kitchen Counter				
6	N.S	Providing and fixing 3/4" thick pre-polished Marble Slab Sunny Grey uniform texture full width area above 2 sft laid over 3/4" thick cement sand mortar (1:2) i/c filling joints in white cement & matching pigment i/c making gola on exposed edges complete in all respect as approved / directed by the Engineer Incharge.	Per/Sft	60.00	305.00	
		Stair Steps				

7	N.S	Providing and fixing 3/4" thick pre-polished Marble Slab Sunny Grey uniform texture full width area above 2 sft laid over 3/4" thick cement sand mortar (1:2) i/c filling joints in white cement & matching pigment i/c beveling charges on exposed edges complete in all respect as approved / directed by the Engineer Incharge  Miscellenious	Per/Sft	335.25	323.00	
8	Approved N.S	Providing and Fixing of M.S steel chowkats full jam of 10-1/2"x 2" single rebate of M.S 16 SWG with up to 4 Nos 5" long C.P hinges screwed / welded M.S flat iron 2" x 1/8" in back of hinges welded inside i/c 3/8" dia bars 2 Nos bottom with 6 NOS 6" long hold fast angle iron 1.5"x1.5"x3/16" also back fill with P.C.C 1:2:4 i/c painting with red oxide and bitumen coating on surface touching	Per/Sft	1,979.50	330.00	
9	Approved N.S	with concrete complete in all respect.  Providing and Fixing M.S steel chowkats full jam of 5-1/2"x 2" single rebate of M.S 16 SWG with up to 4 Nos 5" long C.P hinges screwed / welded M.S flat iron 2" x 1/8" in back of hinges welded inside i/c 3/8" dia bars 2 Nos bottom with 6 NOS 6" long hold fast angle iron 1.5"x1.5"x3/16" also back fill with P.C.C 1:2:4 i/c painting with red oxide and bitumen coating on surface touching with concrete complete in all respect.	Per/Sft	612.50	291.00	
10	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	772.00	250	

		Net Total (A+B)				
		Total "B"(Non Schedule items)				
13	N.S	Providing and laying structural pad of granular fill material mixture of 50% sand and 50% gravel compacted to 95% maximum modified "AASHO" dry density i/c carriage of all materials at site complete in all respect as approved by the Engineer Incharge.	Per/Cft	11,201.18	78.80	
		4" dia	Each	26.00	1,000	
12	N.S	Provide and fix uPVC shoe bends (as rain water outlets), water tight connection leak-free				
		4" dia	Each	26.00	1,400	
11	N.S	Provide and fix uPVC plain bends with grating (as rain water inlets at roof), water tight connection leak-free:				

#### **BOYS HOSTEL**

## **BILL OF QUANTITIES**

## PUBLIC HEALTH WORKS

Sr #	REF. Nos CH/ITEM	Description		Qty.	Unit Rate (Rs)	Rate Quoted by The Contractor	Amount (Rs)
MR	S, 2nd BI-A	NNUAL-2018 (1st July-2018 to 31st December-2018) DIS	TRICT OK	ARA			
		SCHEDULE ITEMS					
1	19-1-i	Providing and fitting glazed earthen ware water closet European type, excluding seat and cover:-	Each	8	2,191.50		
2	19-9-i	Providing and fixing glazed earthen ware sink, including bracket set, waste pipe and waste coupling: 60x45 cm (24"x18")					
			Each	1	1,740.60		
		-					
		-					
		G.I Piping					
3	23-22-iii	Providing, laying, cutting, jointing, testing and disinfecting G.I. pipeline in trenches, (Cost of sockets, tees, elbows, bends, valves, crosses, unions and plugs, etc. is included in the rates) with socket joints, using G.I pipes of B.S.S. 1387-1967 complete in all respects, with specials and valves. Heavy Duty					

Contractor

**In-charge Tender Cell, UAF** 

19- 5 23-	9-19	a) 1½" i/d (40 mm)  SEWERAGE  Providing and laying RCC pipe, moulded with cement concrete 1:1.5:3, with spigot socket or collar joint, etc. including cost of reinforcemnt, confirming 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.  (i) 150 mm (6:) i/d  (ii) 225 mm (9:) i/d  Providing and fixing looking glass 55x40 cm (22"x16") size, and 5 mm thick, first quality.	Rft Rft Rft Each	240 293 149	310.95 190.50 343.20 387.80	
19- 5 23-		Providing and laying RCC pipe, moulded with cement concrete 1:1.5:3, with spigot socket or collar joint, etc. including cost of reinforcemnt, confirming 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.  (i) 150 mm (6:) i/d  (ii) 225 mm (9:) i/d  Providing and fixing looking glass 55x40 cm (22"x16") size,	Rft	149	343.20	
19- 5 23-		concrete 1:1.5:3, with spigot socket or collar joint, etc. including cost of reinforcemnt, confirming 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.  (i) 150 mm (6:) i/d  (ii) 225 mm (9:) i/d  Providing and fixing looking glass 55x40 cm (22"x16") size,	Rft	149	343.20	
19- 5 23-		factory to site of work, lowering in trenches to correct alignment and grade, jointing, cutting pipes where necessary, finishing and testing, etc. complete.  (i) 150 mm (6:) i/d  (ii) 225 mm (9:) i/d  Providing and fixing looking glass 55x40 cm (22"x16") size,	Rft	149	343.20	
5 23-	9-19	(ii) 225 mm (9:) i/d Providing and fixing looking glass 55x40 cm (22"x16") size,	Rft	149	343.20	
5 23-	9-19	Providing and fixing looking glass 55x40 cm (22"x16") size,				
5 23-	9-19	size,	Each	17	297.90	
6		and 5 mm thek, mst quanty.	Lacii		1 3X / XII	
6				17	307.00	
-	23-27	Providing, laying, cutting, jointing, testing and disinfecting, pipes of B.S.S. with `D' 2 and valves is not included in the Class working pressure complete in all respects:-				
-		a) 2" i/d (50 mm)	Rft	110	79.95	
-		b) 3" i/d (75 mm)	Rft	990	169.00	
-		c) 4" i/d (110 mm)	Rft	330	281.60	
	21-17	Providing and fixing 6" thick RCC manhole cover with 3"x3"x1/4" angle iron frame, 22" i/d as per standard drawing STD/PD no. 7 of 1977, complete in all respects.	Per set	10	4,729.90	
			ļ	Total "A"(So	chedule items)	
_	_	NON SCHEDULE ITEMS				
1 PH-0		P/F OF WATER CLOSET ORRISA PATTERN FULL SIZE 3 star Made	Nos.	13	2,850	
2 PH-0	H-0018	P/F OF FLUSHING CISTERN. 3 Star Made				
	H-0018	177 Of Thestimod Clarkov, 3 State Made	Nos.	13	3,300	

3		P/F OF WASH H& BASIN WITH PEDESTAL &				
	PH-0016	FITTINGS. 3 Star			<b>~</b> 00.4	
4		Made	Nos.	4	5,894	
4	DVV 0040	P/F OF VANITY COUNTER BASIN INCLUDING COST OF				
	PH-0019	FITTINGS. 3 Star Made	NI	12	4 2 4 0	
6		P/F OF SINK MIXER (020) 1/2" DIA Master Made	Nos.	13	4,340	
	PH-0009	171 OF SHAK WHAER (020) 172 DIA Waster Water	Nos.	1	4,500	
7	PH-0008	P/F OF BASIN MIXER (801) 1/2" DIA Faisal Made				
			Nos.	17	4,750	
8	PH-0011	P/F OF WALL SHOWER (054). Mater Made	Nos.	20	9,700	
9	PH-0001	P/F OF BIB COCK 1/2" DIA. (005) Master Made				
	F11-0001		Nos.	21	1,145	
10	DII 0004	P/F OF TEE STOP COCK (1404) 1/2" DIA. Faisal Made				
	PH-0004		Nos.	55	1,232	
12	PH-0022	P/F OF SOAP Dish 2007). Master Made				
	PH-0022		Nos.	37	525	
13	PH-0022	Providing and fixing toilet paper holder heavy duty				
	PH-0022	master made with fitting material.	Nos.	21	1,200	
14		P/F OF TOWEL RAIL WITH BRACKETS				
	PH-0021	CHROMIUM PLATED				
	111 0021	(5302). Faisal Made	NT	10	020	
16		Making Sewerage Connection To Existing Manhole Of	Nos.	10	920	
10		Main Sewerage Pipe Line Including Cost Of Plugging,				
	PH-0115	Dewatering, De-Silting, Making Hole In Wall Repairing				
		And Restoration Etc Complete In Working				
		Condition	Job	1	1,200	
17	PH-0014	P/F OF MUSLIM SHOWER (1406). Faisal Made			_	
10	111 0011	DDD DVDE	Nos.	21	867	
18		PPR PIPE				

19	PH-0025	P/F OF PPRC PIPE 25MM DIA COMPLETE WITH ALL RESPECT. Dadex Made				
			436	Rft	135	
20	PH-0027	P/F OF PPRC PIPE 32MM DIA COMPLETE WITH ALL RESPECT. Dadex Made				
		Dadex Made	334	Rft	145	
21		P/F OF PPRC PIPE 40MM DIA COMPLETE WITH				
	PH-0029	ALL RESPECT.				
		Dadex Made	471	Rft	230	
22		P/F OF PPRC PIPE 50MM DIA COMPLETE WITH				
	PH-0031	ALL RESPECT.Dadex Made	96	DG	240	
23		P/F OF PPRC PIPE 63MM DIA COMPLETE WITH	86	Rft	340	
	PH-0033	ALL RESPECT.				
	111 0000	Dadex Made	600	Rft	525	
24	NS	Valves				
		Providing and installing valves of following nominal dia,				
		P/F OF H&LE VALVE 1".				
		Faisal Made	1	Nos.	900	
		P/F OF H&LE VALVE 1-1/2" DIA.				
		Faisal Made	1	Nos.	1,700	
		P/F OF GATE VALVE 2" DIA.	0		6 200	
25		Kitz Made Vent Cowel	8	Nos.	6,300	
23		P/F OF NIKASI VENT COWL 110MM.DADEX				
		MADE:				
		4" i.d	15	Nos	190	
26		Multifloor Trap				
		P/F OF NIKASI P-TARP 110MM. DADEX MADE	70	Nos.	1,700	

27	NS	Providing, fixing, jointing and testing Polypropylene Random (PPR) pipes, DADEX or approved equivalent, 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.				
		75mm	225	RFT	1,200	
28	NS	Valves				
		Providing and installing ball valves of following nominal dia, Kitz make or approved Equaivalent, including jointing, fitting, painting, testing, complete in all respects to match with PPR and PE pipes of following diameters.				
		32 mm	2	Nos	5,106	
		63 mm	2	Nos	22,000	
		75 mm	2	Nos	28,000	
29	NS	Providing and installing Gas Geyser including All types of Valves & fitting accessories, complete in all respect as per specifications and drawings.				
		55 Gallon Geyser	2	Nos.	40,000	
		35 Gallon Geyser	1	Nos.	30,000	
		6 Gallon Instant Geyser	1	Nos.	15,000	
30	NS	Clean Out				
		Providing and fixing clean out with threads ferule fixed in pipe with the help of solvent, as shown on drawing, complete in all respects as per specifications and drawings.  3" i.d	15	Nos.	4,450	

		4" i.d	12	Nos.	5,450	
31	NS	Gully Trap				
		Providing and making Gully trap 1'-0"x1'-0" internal size				
		including 9" thick brick masonry (1:4), 1/2" th. Plastering				
		(1:3) i/side, benching with PCC 1:2:4 4" th. with cement				
		finish, including steel grating cover,chamber 6" dia RCC				
		Pipe and connection with manhole. complete in all				
		respect as per specifications,drawings & Engineer in				
		charge.	10	Nos.	15,000	
32	NS	Manhole				
		Providing and constructing 2'x2' manhole with brick				
		work including excavation, backfilling, RCC work PCC				
		1:2:4 cambering, plastering in 1:4 inside & outside, water				
		proofing etc., upto 6' depth and size including ladder top				
		slab, 18" heavy duty C.I. Manhole cover with frame				
		"ALPINE INDUSTRIAL CON", "CME", "NPC SUPER"				
		as shown on the drawings, complete in all respect as per	10	N	25,000	
20	NIC	specifications and drawings.	10	Nos.	25,000	
33	NS	Khurra / R.W.C.B				
		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.	0	NT	1.700	
		i) 2'x2'.	8	Nos.	1,500	
			Tota	1 ''B''(Non So	chedule items)	
					Total (A+B)	

## **BOYS HOSTEL**

## **BILL OF QUANTITIES**

#### **ELECTRICAL WORKS**

Sr No.	REF. Nos CH/ITEM	Item. No.	Description	Unit	Estimated Quantity	Rate (Rs)	Rate Quoted by The Contractor	Amount (Rs)
MRS	MRS, 2nd BI-ANNUAL-2018 (1st July-2018 to 31st December-2018) DISTR			RICT OK	ARA			
A) S	) Schedule Items							
1		1.1	Light Circuits.					
			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=52)					

[Ref: Item 10 (a- iii)/24]]		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 2.5 mm (7/0.029")	Rft	10920	15.95	
[Ref: Item 3(iii)/24]		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	3640	47.85	
	1.2	1st Light Point Controlled By One Switch				
		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, excluding cost of gang type light switches 10 amps (CK=156).				
[Ref: Item 10 (a-i)/24]		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)	Rft	14820	11.7	

		i) Cost of 1 No. 1x 1.5 mm (3/0.029")				
[Ref: Item 3(ii)/24]		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	7410	41.45	
		Supply and erection of PVC sheet box for recessed wiring, including making holes for ragulators, switches and plugs, complete in all respect as approved by the engineer incharge.				
	1.3	Point- Points Wiring				
		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. (CK=308)				
[Ref: Item 10 (a- i)/24]		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	23100	11.7	

[Ref: Item 3(ii)/24]		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	11550	41.45	
	1.4	1- 13 Amps Switch Socket				
		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=39)				
[Ref: Item 10 (a- iv)/24]		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 mm2 (7/0.036")	Rft	7020	22.95	
[Ref: Item 10 (a-iii)/24]		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)	Rft	3510	15.95	

		ii) Cost of 1x2.5 mm2 (7/0.029")				
[Ref: Item 3(ii)/24]		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	3510	47.85	
	1.5	Loop-Loop- 13 Amps Switch Socket				
		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.				
[Ref: Item 10 (a- iv)/24]		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 mm2 (7/0.036")	Rft	11220	22.95	

[Ref: Item 10 (a-iii)/24]		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) ii) Cost of 1x2.5 mm2 (7/0.029")	Rft	5610	15.95	
[Ref: Item 3(ii)/24]		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	5610	47.85	
	1.6	1 x 3 Pin 20 Amps Switch Socket				
		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: Ite 10 (a-iv)/24]	m	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 mm2 (7/0.036")	Rft	1440	22.95	
[Ref: Ite 10 (a- iii)/24]	em	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	720	15.95	
[Ref: Ite 3(ii)/24]	m	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	720	47.85	
	1.8	Fan Points 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=88)				
[Ref : Ite 49/24]	em i	Supply and erection of 3/8" (10 mm) dia M.S. bar fan hook placed at the time of casting of slab.	Each	73	39.45	
[Ref : Ite 14(ii)/24	11	Back Box (7"x4")	Each	73	221.90	

	[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	6935	11.7	
	[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	3467.5	41.45	
		1.9	Exhaust Fans Points 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=31)				
	[Ref: Item 10 (a- i)/24]		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	2945	11.7	
	[Ref: Item 3(ii)/24]		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	1473	41.45	
2			L.T. Power Cables				
			Supply at site, installation, testing and commissioning of PVC insulated non 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 prelaid 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	4 Core Cable PVC/PVC	-	-	_	-	
	13-d- (v)/24		a) 4 core 95mm sq.	Rft	150	1931.35		
	13-c- (vii)/24		a) 4 core 25mm sq. (equivalent 19/0.064")	Rft	400	504.55		
		2.2	Circuit Protective Conductor (CPC)					
	12-(i)/24		a) 1 core 16mm sq.	Rft	400	77.90		
	12-(iii)/25		b) 1 core 35mm sq.	Rft	150	174.45		
3			PVC Conduit					
		3.1	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.					

	3(vi)/24		e) 2" Did PVC Conduit	Rft	350	84.25	
		3.2	PVC PIPE FOR TELEPHONE SYSTEM				
			Supply and erection of PVC pipe for wiring recessed in walls, including inspection boxes, pull boxes, hooks, cutting harries, and repairing surface, etc., complete with all specials.				
	3-(iii)/24	a	25 mm i/d	Rft	550	47.85	
		3.3	PVC PIPE FOR CABLE TV SYSTEM				
			Supply and erection of PVC pipe for wiring recessed in walls, including inspection boxes, pull boxes, hooks, cutting harries, and repairing surface, etc., complete with all specials.				
	3-(iii)/24	a	25 mm i/d	Rft	500	47.85	
					Total A-(Sch	edule Items)=	
B) N	on-Schedule	Items.					
1			Switch & Sockets.				
	Approved NS	1.1	i) Providing and Installation of PVC Sheet Back Box 7.5 cm x 7.5 cm (6"x3") (Non Metalic) China Made	Each	96	78.00	
	Approved NS	1.2	i) Providing and Installation of PVC Sheet Back Box 7.5 cm x 7.5 cm (3"x3") (Non Metalic) China Made	Each	172	120.00	
	E-1053	1.3	Supply & fitting of 10A, 1 Gang 1 Way Switch Clipsal Made Bush / Orange made, As per approval of Engineer Incharge.	Each	4	248.00	
	E-1048	1.4	Supply & fitting of 10A, 2 Gang 1 Way Switch Clipsal Made Bush / Orange made, As per approval of Engineer Incharge.	Each	6	366.00	
	E-1050	1.5	Supply & fitting of 10A, 4 Gang 1 Way Switch Clipsal Made Bush / Orange made, As per approval of Engineer Incharge.	Each	12	669.00	

	E-1051	1.6	Supply & fitting of 10A, 5 Gang 1 Way Switch Clipsal Made Bush / Orange made, As per approval of Engineer Incharge.	Each	8	777.00	
	E-1052	1.7	Supply & fitting of 10A, 6 Gang 1 Way Switch Clipsal Made Bush / Orange made, As per approval of Engineer Incharge.	Each	54	989.00	
	E-1057	1.10	Supply & fitting of 13A switch socket Clipsal Made	Each	141	561.00	
	E-1059	1.14	Supply & fitting of 15A switch socket Clipsal Made	Each	8	610.00	
2			<u>Light Fittings And Fixtures</u>				
		2.1	<u>LIGHTS</u>				
	E-1018	i	Supply & fitting of LED Down Light 18 Watts Surface mounted DN027C LED CW 6500K Philips Made	Each	464	2,703	
	E-1009	i	Supply & fitting of LED flood light 50 watts IP65 BVP 135 Philips Made	Each	8	7,665	
	E-1054	2.2	Supply & fitting of Fan speed controller switched Clipsal Made	Each	73	1,242	
		2.3	Ceiling Fans				
	E-1045		Supply & fitting of ceiling Fan 56"copper (Energy Efficient Pak Fan Deluxe Model as approved by PEECA)	Each	73	4498	
	Approved NS		Providing and Installation of PVC Fan Box Including Rod Popular Made.	Each	73	150	
		2.4	Exhaust Fans				
			Supply & fitting of Exhaust Fan 12" copper plastic body (Energy Efficient Model) G.F.C or Equivalent Made NEECA/PEECA Approved				

	E-1021	i	12" dia (Plastic Body).	Each	31	3118	
3			L.T. Switchgear				
			Distribution Board Concealed				
			Supply, installation, connection of wires cables, and commissioning of distribution boards concealed type or to be installed on wall, made of 16 SWG M.S. sheet with hinged door, handle, catcher, earthing bar and neutral link with necessary holes, nuts, bolts, washers, earthing of DB door with braided copper internal wiring, PVC cable glands for incoming and out going wires/cables, 2 earthing terminals designation label engraved on plastic sheet of appropriate size to be pasted on the front side of DB, 3 phase indication lamps of colour red, yellow, blue, make Hager, Legrand (France) SV122 SV128 SV126 moulded case circuit breaker with overload and short circuit protection (MCCB) to be installed on the incoming side, Icu not less than 10 KA, and for miniature circuit breakers Icu 6 KA make G.E (Europe & USA), M.G., Legrand (France), ABB (Italy) Terasaki (Japan) having overload and short circuit protection, including cost of all necessary fixing accessories complete in all respects make Tariq Electric, Billal Engineering, PEL, Techno Engineering.				

	Appendix ' c' Page No-1	3.1	DBLPF-1,DBLPF-2,DBLPG-1,DBLPG-2  01 No. Incoming 75 Amp MCCB TP, RC=10 kA 27 No. Outgoing 10/16/20 Amp MCB SP, RC=6 kA  a) Volt Selector Switch b) 1 No Digital voltmeter c) 3 No indication lights 220 Volt d) 3 Ph N & Earth copper busboars e) Internal wiring & Line-up terminal,Cable Numbering Sleeves etc f) Panel steel grid painted along with locking arrangement	Each	4	60520	
	Appendix ' c' Page No-8	1.4	MPB (Main Panel Board- WAPDA) 01 No. Incoming 300 Amp MCCB TP, RC=35 kA 05 No. Outgoing 75 Amp MCCB TP, RC=16 kAa) 3 No Digital ammeter b) 3 No Digital voltmeterc) 3 No indication lights 220 Voltd) 3 Nos. Current Transformer 300/5A e) 300 Amp. 3 Ph N & Earth copper busboarsf) Internal power wiring & Line-up terminal, Cable Numbering Sleeves etcg) Panel steel grid painted along with locking arrangementh) Cost Includes Brass Cable glands, Thimbles, Nut bolts, Installation, Termination and Commissioning	Each	1	395628	
4		4.1	Earthing System				
	Appendix ' c' Page No-9		Supply, installation, commissioning and testing of the earthing system including cost of the following 3 meter long of 5/8"dia tinned copper electrodes. up-to water level including cost of boring and lowering complete with clamp and 2 X 35mm2 stranded copper conductor from copper rod to ground surface in 1-1/2" <b>uPVC Pipe class D</b> with watering cap manhole with cover as per detail complete in all respects. and the resistance should up to 1-3 Ohms. the installation / test should be conducted in presence	Job	2	56738	

			of engineer inchage.				
		4.2	Earth Connecting Point				
	Appendix ' c' Page No-4		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	3278	
		4.3	Manhole				
	Appendix 'c' Page No-5		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	7238	
5			<u>Telephone System</u>				
		5.2	<b>Telephone Outlet</b>				
	Approved N.S		Supply / Erection of Bush made data single socket (RJ-11) including 16 SWG back box of 3"x3" size complete in all respect.	Each	5	778.48	
		5.3	Telephone Cables				
			Providing & laying multi pairs (Twisted) PVC insulated / underground cable of best quality (siemens, Germany, or Best imported as per approved sample) in pre-laid PVC recessed conduit or fixed cable duct/ Tray as per satisfaction of the Electrical Engineer.				
	Approved N.S	a	4-5 Pair Cable CAT-6/UG/PVC (0.6 mm sq) (From DP to each Room)	Rft	900	22	
6			TV Cable System				
		6.2	TV Socket				
			Supply & erection of Bush/Clipsal series. TV Socket 9.5mm Direct				

Appendix ' c' Page No-6		TV Socket 9.5mm Direct	Each	5	964	
	6.3	TV Cables				
		Providing and laying coaxial PVC insulated TV Antina cable 50 ohms of best quality (impored) in pre-laid PVC recessed conduit or fixed cable duct as per satisfaction of the Electrical Engineer.				
Appendix ' c' Page No-7	a	Coaxial Cable RG-6 (From JB to each room)	Rft	900	62	
	6.4	TV Junction Box				
E-1079		P/F of MS Sheet Box 16 SWG including cutting, molding, welding, painting with powder coated paint (3-Coats) with lock and key arrangement complete in all respects	Each	1	2100	
_				-	Total (A+B)=	