

**BID DOCUMENT
FOR
Electrical Copper Wiring in House no. 206, Punjab
Engineering College, Sector-12, Chandigarh.**

Last Date of Submission:	25.02.2021 upto 2.00 PM
Opening of Tender:	25.02.2021 at 3.00 PM
Estimated Cost:	1,45,704/-
EMD:	2,914/
Time	30 Days

Punjab Engineering College

(Deemed to be University)

Sector-12- Chandigarh

E-TENDER NOTICE

The University Engineer, Punjab Engineering College, Chandigarh invites on behalf of the Director, Punjab Engineering College E-Tenders on percentage basis from listed eligible contractors of appropriate class and category enlisted with Chandigarh Administration, shall be uploaded and received on [http:// etenders.chd.nic.in](http://etenders.chd.nic.in) upto 14.00 hours on 25.02.2021 which shall be opened at 15.00 Hrs. on 25.02.2021 for the work.

Sr No .	NI T No .	Name of work & location	Estimated cost put to tender	Earnest money	Period of Completion	Last date & time of submission of tender on website	Time & date of opening of tender
1	2	3	4	5		8	9
1.		Electrical Copper Wiring in House no. 206, Punjab Engineering College, Sector-12, Chandigarh.	1,45,704/-	2,914/	01 month	25.02.2021 upto 2.00 PM	25.02.2021 at 3.00 PM

1. Bid document can be downloaded from the website of Punjab Engineering College (www.pec.ac.in) or <http://tenders.chd.nic.in/>.
2. All other terms and conditions, instructions to bidder regarding e-tendering process etc. may kindly be seen from the detailed Notice inviting Tender (NIT) available/downloadable on the above noted websites.

Eligibility Criteria:-

1. The agencies can submit application alongwith certificate(s) from appropriate authority showing experience of having successfully completed similar relevant works during last seven years ending last day of the month previous to the one in which applications are invited. The work complete upto previous day of last day of submission of tender shall also consider.
2. The bidder should have average financial turnover 50% of estimated cost of the above work during the last three financial years ending 31st March 2020.

University Engineer
Punjab Engineering College
Sector-12, Chandigarh

Phone No. 0172-2753059

Endst. No:

A Copy forwarded to the following for information and n/action.

1. Dean Infrastructure, Planning & Estate
2. Registrar
3. AC (F&A)
4. Webmaster (For uploading the tender notice on institute and e-tendering website)
5. Notice Board.

Dated:

University Engineer
Punjab Engineering College
Sector-12, Chandigarh

Phone No. 0172-2753059

Conditions:-

The Earnest Money Shall be deposited through Demand Draft/ FDR in favour of Director, Punjab Engineering College, Chandigarh and to be submitted in the office of University Engineer on or before the due date and time. The receipt for the same should be uploaded alongwith the technical bid.

1.	The intending bidder has to upload the receipt of EMD submitted.
2	ELIGIBILITY CRITERIA for the Post Qualification of the intending contractors/firms shall be as follows and the scanned copies of the same shall have to be uploaded under folder B of E-Tender :-
a	<p>AVERAGE ANNUAL FINANCIAL TURNOVER during the last 3 years ending 31st March, 2020 should be at least 50% of the estimated cost. <i>(scanned copy of certificate from Chartered Accountant should be uploaded and there is no need to upload entire voluminous Balance sheets)</i></p> <p>Experience of having successfully completed similar and relevant works as per CPWD Manual Works during last 7 years ending last day of the previous month in which the tender is invited should be either of the following: - (The work completed upto previous day of last day of submission of tender shall be considered)</p>
c	The intending bidder/contractor along with the bid should furnish an AFFIDAVIT duly attested by Notary Public/ First class Magistrate ON STAMP PAPER in Folder "B" as per specimen given below:-
d	<p style="text-align: center;"><u>AFFIDAVIT</u></p> <p>To become eligible for e-tendering, the tenderer shall have to furnish an affidavit as under:-</p> <p>a) That I/We hereby declare that I/we have not been black listed/ debarred/suspended by any Govt./ Semi Govt./ Board/ Corporation/ Private firms as on last date of receipt of tender.</p> <p>b) That I/we undertake and confirm that eligible similar work (s) has/ have not been executed through another contractor on back to back basis. Further it is undertaken that if such a violation comes to the notice of Punjab Engineering College, Chandigarh, then I/we shall be debarred from tendering in Punjab Engineering College, Chandigarh in future forever. Also, if such a violation comes to the notice of institute, the Engineer-in-charge shall be free to forfeit the entire amount of Earnest Money/Performance Guarantee deposited by me/us.</p> <p>c) That the deponent further undertake that he/she/ director(s)/partner(s) of the proprietor/ firm/company/agency have never been convicted of any criminal offence.</p> <p>d) That I/we also undertake that the particulars given by me are true and correct to the best of my knowledge and belief and nothing has been concealed thereof. I am aware that in case of any discrepancy/ false statement found, it will lead to rejection of my bid/tender and the institute will debar/blacklist the proprietor/ firm/agency as per policy of blacklisting issued by Chandigarh Administration vide notification dated 27.02.2009.</p> <p style="text-align: center;">Dated: _____ Signature of the firm/agency _____</p>
	<p>NOTE: Affidavit should be of latest date. The Affidavit of date prior to three months from the date of publishing the tender shall not be considered for qualification of Technical Bid</p>
3.	Information and Instructions for bidders posted on website shall form part of bid document i.e. the Corrigendum/Addendum issued if any, before the receipt of online bid will be uploaded /made available on the website. It will be the responsibility of the Contractors/ prospective bidders to make amendments in their bid accordingly.
4.	Those contractors not registered on the website mentioned above, are required to get registered. If needed they can be imparted training on online tendering process as per details available on the website. The intending bidder must have valid digital signature to submit the bid.
5.	The Earnest Money Shall be deposited through Demand Draft/ FDR in favour of Director, Punjab Engineering College, Chandigarh and to be submitted in the office of University Engineer on or before the due date and time. The receipt for the same should be uploaded alongwith the technical bid
6.	The copy of the other documents as specified above in the Notice shall be scanned and uploaded to the e-tendering website within the period of Bid submission.
7.	The Bidders shall have to submit their Bids online in Electronic Format with Digital Signatures. For participation in the e-tendering process the Bidders need to register themselves on http://etenders.chd.nic.in . Bid document can be downloaded from the website of Punjab Engineering College (www.pec.ac.in) or http://etenders.chd.nic.in .

8.	The contractor/agency will ensure that no children are engaged at the site of work.	
9.	The contractor will ensure the enrollment of children of labourers working at their site of works in nearby school as per instructions of CEUT Chandigarh UO No.W1/2014/4045-46 dt.11.03.2014.	
10	The purchase tax, turnover or any other tax applicable in respect of this contract shall be payable by the contractor and Government will not entertain any claim whatsoever / in respect of the same.	
11	Instructions to Bidders regarding e-tendering process:-	
	i	Tenders without digital signatures will not be accepted by the Electronic Tendering System. No tender will be accepted in physical form and in case it has been submitted in the physical form it shall be rejected summarily.
	ii	Before submission of on-line Bids, Bidders must ensure that scanned copies of all the necessary documents have been uploaded with the Bid.
	iii	It will be mandatory for all the Bidders to upload all the documents.
	iv	The Deptt. will not be responsible for any delay in on-line submission of the Bids due to any reason whatsoever.
	v	The details of EMD specified in the Tender documents should be the same as submitted on-line (scanned copies) otherwise tender will be rejected summarily.
	vi	Corrigendum issued if any before the receipt of online bid will be available on the website. It will be the responsibility of the contractor to make amendments in his bid accordingly.
12.	THE LIST OF DOCUMENTS TO BE SCANNED AND UPLOADED WITHIN THE PERIOD OF BID SUBMISSION IS AS UNDER :-	
	i.	The bid documents of only those bidders shall be opened whose EMD is received in the office of University Engineer on or before the due date and other documents scanned and uploaded are found in order.
	ii.	Performance Certificate as per CPWD Manual.
	iii.	Certificate of Financial Turnover for last three financial years from Chartered Accountant.
	iv.	Affidavit as per format attached.
13	Before submission of online Bids, Bidders must ensure that scanned copies of all the necessary documents have been uploaded with the Bid. The technical bids will be examined based only on the uploaded documents. NO CORRESPONDENCE OR PHYSICAL SUBMISSION OF ANY ADDITIONAL DOCUMENT THEREAFTER WILL BE ENTERTAINED BY THE DEPARTMENT. <i>However in case any scanned and uploaded documents is not clearly readable due to dim contents, then the Department may ask the bidder to submit the clear copy of the same but no additional document other than uploaded shall be accepted.</i>	
14	The Agency has to produce the original documents as and when asked for by Engineer in Charge. The failure of the Agency to furnish the said original documents will entail summarily rejection of its tender.	
16	No Tender will be accepted in physical form and in case it has been submitted in the physical form it shall be rejected summarily.	
17	THE CONDITIONAL TENDERS SHALL BE REJECTED STRAIGHT AWAY.	
18	Engineer in charge reserves the right to verify the particulars furnished by the applicant/ firm/ contractor independently. If any information furnished by the applicant is found incorrect at a later stage, the firm/ contractor shall liable to be debarred for future tendering in Punjab Engineering College .	
19.	Canvassing whether directly or indirectly, in connection with bidders is strictly prohibited and the bids submitted by the contractor(s) who resort to canvassing will be liable for rejection.	
20.	The tender for the works shall remain open for acceptance for a period of 75 (days) from the opening of technical bid. If any tenderer withdraws his tender or makes any modifications in the terms & conditions of the tender which is not acceptable to the department within 7 days after opening of tender (excluding date of opening of tender) then the Government shall without prejudice to any other right or remedy, be at liberty to forfeit 50% of the earnest money absolutely. After 7 days of opening of tender the Government shall without prejudice to any other right or remedy, be at liberty to forfeit 100% of the earnest money absolutely. The bidders shall not be allowed to participate in the rebidding process of the work.	
21.	The recovery of water charges shall be made as per Notification issued by the Secretary Local Govt. Chandigarh Administration vide notification No. 6/1/195-FII(8)2011/4088, dated 24.05.2011 and amended from time to time.	

**For and on behalf of
Director, Punjab Engineering College**

University Engineer,
Punjab Engineering College
Sector-12, Chandigarh.

INDEX

DNIT

Name of Work: - Electrical Copper Wiring in House no. 206, Punjab Engineering College, Sector-12, Chandigarh

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CHECK LIST FOR CONTRACTORS FOR SUBMISSION OF TENDERS

1. TENDER TO BE WITNESSED AT **SHEET NO II- 2** OF TENDER DOCUMENTS
2. THE TENDER / TENDERS CONTAINING CONDITIONS CONTRARY TO THOSE SPECIFIED IN THIS DOCUMENT SHALL BE SUMMARILY REJECTED.
3. IN SCHEDULE OF QUANTITIES APPENDED TO THE TENDER DOCUMENTS, AT SECTION VI & VII WORKS, THE RATES MUST BE FILLED BOTH IN WORDS AND FIGURES. THE AMOUNT SHOULD BE WORKED OUT FOR INDIVIDUAL ITEMS AND TOTALLING DONE.
4. THE CONTRACTOR(S) SHALL QUOTE THE RATES KEEPING IN MIND, GENERAL CONDITIONS OF CONTRACT OF CPWD WORKS-2019 AS CORRECTED & AMENDED UPTO DATE, SPECIAL CONDITIONS AND PARTICULAR SPECIFICATIONS ETC.
5. CRITERIA FOR ENGAGEMENT OF SPECIALIZED AGENCIES HAVE BEEN LAID AT SHEET **III (ii)**, WHICH MAY BE NOTED.
6. THE CONTRACTOR/ AGENCY SHALL QUOTE THE RATE KEEPING IN VIEW THAT THEY HAVE TO GIVE AN UNDERTAKING BEFORE AWARD OF WORK THAT **“THEY WILL INSTALL/ ARRANGE FIELD TESTING INSTRUMENTS, ESSENTIAL T&P AS PER SHEET NO. V”**.
7. THE CONTRACTOR(S) SHALL QUOTE THE RATE OF TMT REINFORCEMENT BARS Fe 500D KEEPING IN MIND RATES OF PRIMARY PRODUCERS ONLY AND CLAUSE 10CA WILL BE APPLICABLE ACCORDINGLY.
8. IT WILL BE MANDATORY TO CONSTITUTE DISPUTE RESRESSAL COMMITTEE (DRC) & CONTACTOR OR EPARTMENT CAN ONLY SEEK ARBITRATION IF NOT SATISFIED WITH THE DECISION OF DRC. DRC SHALL BE HEADED BY CHIEF ENGINEER WHEN TOTAL CLAIMS ARE LESS THAN 25.00 LACS. THIS SHOULD BE READ ALONGWITH PROVISION OF CLAUSE 25 OF GCC 2014 DULY AMENDED & MODIGIED UPTO DATE.
9. **STE TEST REGISTERS & MAS REGISTERS TO BE MAINTAINED BY CONTRACTOR:-**
10. FOR ALL THE NEW CONTRACTS TO BE DRAWN IN FUTURE ABOVE THE TENDERING LIMIT OF CLASS-V CONTRACTORS, ALL TEST REGISTERS AND MATERIAL AT SITE REGISTERS SHALL BE MAINTAINED BY THE CONTRACTOR WHICH WILL BE REVIEWED BY THE OFFICERS OF CPWD AT REGULAR INTERVALS.
11. THE CONTRACTOR SHALL REGER SHEET NO. III FOR TESTING OF MATERIALS/ MAINTAINING OF TEST REGISTERS DURING EXECUTION OF THE WORK.

SECTION-I

Check list, CPWD-6
Project Summary

Punjab Engineering College

Deemed to be University

Sector-12, Chandigarh

NOTICE INVITING TENDER

The University Engineer, Punjab Engineering College, Chandigarh invites on behalf of the Director, Punjab Engineering College E-Tenders on percentage basis from listed eligible contractors of appropriate class and category enlisted with Chandigarh Administration, shall be uploaded and received on [http:// etenders.chd.nic.in](http://etenders.chd.nic.in) upto 14.00 hours on 25.02.2021 which shall be opened at 15.00 Hrs. on 25.02.2021 for the work.

Name of Work: - Electrical Copper Wiring in House no. 206, Punjab Engineering College, Sector-12, Chandigarh.

1.1 The work is estimated to cost **Rs. 1,45,704/-** This estimate, however, is given merely as a rough guide.

1.2 **Eligibility Criteria:-**

(i) The agencies can submit application alongwith certificate(s) from appropriate authority showing experience of having successfully completed similar relevant works during last seven years ending last day of the month previous to the one in which applications are invited. The work complete upto previous day of last day of submission of tender shall also consider.

(ii) The bidder should have average financial turnover 50% of estimated cost of the above work during the last three financial years ending 31st March 2020.

The value of executed works shall be brought to current costing level by enhancing the actual value of work at simple rate of 7% per annum; calculated from the date of completion to last date of receipt of applications for tenders.

1.3 To become eligible for e-tendering, the tenderer shall have to furnish an affidavit as under:-

That I/We hereby declare that I/we have not been black listed/ debarred/suspended by any Govt./ Semi Govt./ Board/ Corporation/ Private firms as on last date of receipt of tender. That I/we undertake and confirm that eligible similar work (s) has/ have not been executed through another contractor on back to back basis. Further it is undertaken that if such a violation comes to the notice of Punjab Engineering College, Chandigarh, then I/we shall be debarred from tendering in Punjab Engineering College, Chandigarh in future forever. Also, if such a violation comes to the notice of institute, the Engineer-in-charge shall be free to forfeit the entire amount of Earnest Money/Performance Guarantee deposited by me/us.

2. Agreement shall be drawn with the successful tenderer on prescribed CPWD Form No.7 as per "General conditions of the contract of CPWD works-2019" (which is available as a Govt. of India Publication) and the Amendment/changes in clauses of the General Conditions of the contract for CPWD works-2019. Tenderer shall quote his rates as per various terms and conditions of the said form, which will form part of the agreement.

3. The time allowed for carrying out the work will be **01 Month** from the **date of start as defined in Schedule 'F'** or from the first day of handing over of the site, whichever is later, in accordance with the phasing, if any, indicated in the tender documents.

4. The site for the work is available. Yes

5. (a) Last date of receipt of Application shall be 25.02.2021.

(b) Last Date of sale of Tender Documents shall be _____.

(c) Tender Cost. Free of cost

(d) Tender documents consisting of plans, specifications, the schedule of quantities of the various classes of work to be done and the set of terms and conditions of contract to be completed with be the contractor whose tender may be accepted and other necessary documents can be seen in the office of the **University Engineer, Punjab Engineering College, Chandigarh** between hours of 11.00 A.M. & 04.00 PM every day except on Saturday, Sunday and Public Holidays.

6. (a) The Earnest Money Shall be deposited through Demand Draft/ FDR in favour of Director, Punjab Engineering College, Chandigarh and to be submitted in the office of University Engineer on or before the due date and time. The receipt for the same should be uploaded alongwith the technical bid

(b). Copy of Enlistment Order and certificate of work experience and other documents as specified in the press notice shall be scanned and uploaded to the e-Tendering website within the period of bid submission. **However, certified copy of all the scanned and uploaded documents as specified in press notice shall have to be submitted by the lowest bidder only.**

The bid submitted shall be opened at 3.00 PM, 25.02.2021

7. The bid submitted shall become invalid if;
- (i) The bidder is found ineligible.
 - (ii) The bidder does not upload all the documents including GST registration as stipulated in the bid document and **photocopy of EMD depositing slip**.
 - (iii) If any discrepancy is noticed between the documents as uploaded at the time of submission of bid and hard copies as submitted **physically by the lowest tenderer** in the office of tender opening authority.

8. **List of Documents to be scanned and uploaded within the period of bid submission:**

- 1. The intending bidder has to upload photocopy of EMD depositing slip.
 - II. Certificate of Work Experience. i.e. Completion Certificate.
 - III. Certificate of Financial Turnover for last 3 years from CA.
 - IV. Any other Document as specified in the press notice.
 - V. Affidavit as per provisions of clause 1.2.3 of CPWD-6.
 - VI. Certificate of Registration for GST and acknowledgement of up to date filed return if required.
9. The contractor whose tender is accepted will be required to deposit furnish performance guarantee of an amount equal to 5.00% (Five point Zero Percent) of the tendered amount with in the period specified in schedule F. This guarantee shall be in the form of Demand Draft/ Deposit at call receipt/ Bankers Cheque/ Pay Order/ FDR of any scheduled bank in accordance with the prescribed form.
10. The description of the work is as follows: -

Name of work: - Electrical Copper Wiring in House no. 206, Punjab Engineering College, Sector-12, Chandigarh

Copies of other drawings and documents pertaining to the work will be open for inspection by the tenderers at the office of the **University Engineer, Punjab Engineering College, Chandigarh**.

Tenderers are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their tenders as to the nature of the ground and sub-soil (so far as is practicable), the form and nature of the site, the means of access to the site, the accommodation they may require and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their tender. A tenderer shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charges consequent on any misunderstanding or otherwise shall be allowed. The tenderer shall be responsible for arranging and maintaining at his/her own cost all materials, tools and plants, water, electricity access, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents. Submission of a tender by a tenderer implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and of conditions and rates at which stores, tools and plant, etc. will be issued to him by the Government and local condition and other factors having a bearing on the execution of the work.

11. The competent authority on behalf of Director, PEC does not bind himself to accept the lowest or any other tender, and reserves to himself the authority to reject any or all of the tenders received without the assignment of any reason. All tenders, in which any of the prescribed conditions are not fulfilled or any condition including that of conditional rebate is put forth by the tenderer, shall be summarily rejected.
12. Canvassing whether directly or indirectly, in connection with tenders is strictly prohibited and the tenders submitted by the contractors who resort to canvassing will be liable to rejection.
13. The competent authority on behalf of Director, PEC reserves to himself the right of accepting the whole or any part of the tender and the tenderer shall be bound to perform the same at the rate quoted.
14. The tender for the works shall remain open for acceptance for a period of Seventy Five **(75) DAYS** /from the opening of technical bid (strike out as the case may be). If any tenderer withdraws his tender before the said period or issue of letter of acceptance, whichever is earlier or makes any modifications in the terms and conditions of the tender which are not acceptable to the

department, then the institute shall, without prejudice to any other right or remedy, be at liberty to forfeit 50% of the said Earnest Money as aforesaid and to forfeit the whole of the Earnest Money if the tenderer fails to submit the Performance Guarantee in the prescribed time after issue of letter of acceptance. Further, the tenderer shall not be allowed to participate in the re-tendering process of the work.

In the event the tenderer whose tender is accepted and the award letter issued after the receipt of Performance Guarantee MOU signed with electrical associates in the prescribed form and time, fails to commence the work "along with change in scope, if any" in the prescribed time or abandons work before its completion, the institute shall without prejudice to any other right or remedy be at liberty to forfeit the whole of the Earnest Money and Performance Guarantee shall stand forfeited in full and shall be absolutely at the disposal of the Director, PEC.

15. This Notice Inviting Tender shall form a part of the contract document. The successful tenderer/contractor, on acceptance of his tender by the accepting authority, shall, within 15 days from the stipulated date of start of the work sign the different component part of the contract
16. The notice inviting tender, all the documents including additional conditions, specifications and drawings, if any, forming the tender as issued at the time of invitation of tender and acceptance thereof together with any correspondence leading thereto.
17. Standard C.P.W.D. Form 7 as per "General conditions of contract for CPWD works-2019 and all the conditions of the contract will be as per the General Conditions of contract for CPWD works 2019.

**For and on behalf of
Director, Punjab Engineering College**

University Engineer,
Punjab Engineering College
Sector-12, Chandigarh.

SECTION-II

CPWD Form 7, Schedule 'A' to 'F'

FORM NO. 7

Punjab Engineering College, Chandigarh

PERCENTAGE RATE TENDER & CONTRACT FOR WORKS

Name of Work: Electrical Copper Wiring in House no. 206, Punjab Engineering College, Sector-12, Chandigarh

Tender for the above work to be submitted by **2.00 p.m.** on 25.02.2021 to University Engineer, Punjab Engineering College, **Chandigarh** to be opened in presence of tenderers who may be present at **3.00p.m.** on **25.02.2021** in the office of University Engineer, PEC.

i) Issued to: -

Signature of officer issuing the documents.....

ii) Designation: - University Engineer, PEC

iii) Date of issue: -

TENDER

I/We have read and examined the Notice Inviting Tender, Schedule A, B, C, D, E & F, Specifications applicable, Drawings & Designs, General Rules and Directions, Conditions of Contract, Clauses of Contract, Special Conditions, Schedule of Rate and other documents and Rules referred to in the conditions of contract and all other contents in the tender document for the work.

I/We hereby tender for the execution of the work specified for the Director, PEC within the time specified in Schedule 'F', viz. Schedule of Quantities and in accordance in all respects with the Specifications, Designs, Drawings and instructions in writing referred to in Rule-1 of General Rules and Directions and in Clause 11 of the Conditions of Contract and with such materials as are provided for, by and in respects in accordance with, such conditions so far as applicable.

We agree to keep the tender open for (75) Seventy Five days from date of opening of technical bid and not to make any modifications in its terms and conditions.

A sum of **Rs. 2,914/** is hereby deposited as EMD in the form of demand draft in the office of University Engineer, PEC Chandigarh. If I/we fail to furnish the prescribed Performance Guarantee within prescribed period, I/we agree that the said Director, PEC or his successor in office shall without prejudice to any other right or remedy be at liberty to forfeit the said Earnest Money absolutely. Further, if I/we fail to commence the work as specified. I/we agree that Director, PEC or his successors in office shall, without prejudice to any other right or remedy available in law, be at liberty to forfeit the said earnest money and the Performance Guarantee absolutely, otherwise the said earnest money shall be retained by him towards security deposit to execute all the works referred to in the tender documents upon the terms and conditions contained or referred to therein and to carry out such deviations as may be ordered, up to maximum of the percentage mentioned in Schedule 'F' and those in excess of that limit at the rates to be determined in accordance with the provision contained in Clause 12.2, 12.3 and 12.5 of the tender form. **Further, I/We agree that in case of forfeiture of earnest money or both Earnest Money & Performance guarantee as aforesaid, I/We shall be debarred for participation in the re-tendering process of the work.**

Further, I/We agree that in case of forfeiture of earnest money or both Earnest Money & Performance guarantee as aforesaid, I/We shall be debarred for participation in the re-tendering process of the work.

I/We hereby declare that I/we shall treat the tender documents, drawings and other records connected with the work as Secret / Confidential documents and shall not communicate information / derived there from to any person other than a person to whom I/we am/are may authorized to communicate the same or use the information in any manner prejudicial to the safety of the State.

Dated
Witness: -
Address: -
Occupation: -

Signature of Contractor
Postal Address: -

Telephone No.
Fax:-
E-Mail:-

ACCEPTANCE

The above tender (as modified by you as provided in the letters mentioned hereunder) is accepted by me for and on behalf of the Director, PEC for a sum of Rs..... (Rupees.....)

The letters referred to below shall form part of this contract agreement.

For & on behalf of the Director, PEC.

Signature

- i)
- ii)
- iii)
- iv)

Dated: -

**University Engineer,
Punjab Engineering College
Chandigarh**

SCHEDULES

SCHEDULE 'A'

Schedule of quantities

- As per **Section – VII**

In case of composite tender

Description of item	Quantity			
	Civil Work	P.H. Work	Electrical work	Total
a) DSR Items		NA		
b) N.S. Items				

SCHEDULE 'B'

Schedule of materials to be issued to the contractor.

S.No.	Description of item.	Quantity.	Rate in figures & words at which the material will be charged to the contractor	Excluding 3% store charges	Place of issue
1.	Cement		Rs. 6400/-		
2.	Tor Steel (All Size		Rs. 38500/-		
(1)	(2)	(3)	(4)	(5)	

SCHEDULE 'C'

Tools and plants to be hired to the contractor

S.NO.	DESCRIPTION.	HIRE CHARGES PER DAY	PLACE OF ISSUE
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SCHEDULE 'D'

Extra schedule for specific requirements/ documents for the work, if any.

1.	Amendments/ Changes in Clauses of the General Conditions of Contract to CPWD Works - 2019	-	Section – III
2.	Special Conditions	-	Section – IV
3.	Particular Specifications.	-	Section – V
4.	Annexure	-	Section – VI

SCHEDULE 'E'

Schedule of component of other materials, Labour, POL etc. for price escalation:-

CLAUSE 10 CC:

Component of civil (Except materials covered under clause 10CA)/	'Xm' Nil %
Electrical construction materials expressed as percent of total value of work.	Nil %
Component of labour expressed as percent of total value of work.	'Y' Nil %
Component of P.O.L. expressed as percent of total value of work.	'Z' Nil %

SCHEDULE 'F':-

Reference to General Conditions of Contract. _____

Name of Work: Electrical Copper Wiring in House no. 206, Punjab Engineering College, Sector-12, Chandigarh

1.2	Estimated Cost of work: -	Rs. <u>1,45,704/-</u>
1.3	Earnest Money: -	Rs. 2,914/
1.4	Performance Guarantee	5.00% of tendered value
1.5	Security Deposit	5% of Work Done
1.6	Time Allowed	01 Month
1.7	The following expressions shall unless the context otherwise require have the meanings hereby specifically assigned to them.	
1.7.1	University Engineer, PEC Or Successor thereof	
1.7.2	Dean Infrastructure, Planning & Estate Or Successor thereof	
1.7.3	Director, PEC Or Successor thereof	
1.8	Delhi Schedule of Rates (DSR)	DSR-2018 with correction/amendments
1.8.1	CPWD Specifications	CPWD Specifications 2014.

General Rules & Directions:-

Officer Inviting Tender: - University Engineer

Maximum percentage for quantity of items of work to be executed beyond which rates are to be determined in accordance with Clauses 12.2, 12.3 & 12.5 As per clause 12 (Detail given below)

Definitions:-

2(v)	Engineer-In-Charge	University Engineer
2(viii)	Accepting Authority	Director
2(x)	Percentage on cost of materials and labour to cover all overheads and profits	15%
2(xi)	Standard Schedule of Rates	Delhi Schedule of Rates 2018
8.1	The order of preference: -	In the case of discrepancy between the Schedule of Quantities, the Specifications and/ or the Drawings, the following order of preference shall be observed:- (i) Nomenclature of item as per Schedule of Quantities (ii) Special Conditions. (iii) Particular Specifications. (iv) CPWD Specifications. (v) Architectural Drawings.

(vi) Indian Standard Specifications of B.I.S.

9(ii) Standard CPWD Contract Form CPWD Form 7 with latest amendments as per **Section-III.**

Clause-1:-

(i) Time allowed for submission of performance guarantee after date of issue of letter of acceptance **15 days**

Maximum allowable extension with late fee @0.1% per day of Performance Guarantee amount beyond the period. Provided in (i). **1 to 15 days**

Clause-2:- I. Authority for fixing compensation under clause-2. **University Engineer**

II. Whether clause-2A shall be applicable. **NA**

Clause-5:- Time allowed for execution of work. **Refer Para 1.6 Sheet No.II-4**

Authority to give fair and **Appropriate clause of CPWD Work Manual 2018.**

reasonable extension of time for completion of work. **Refer Para (A) Table of Milestones**
Mile Stone

Clause-6, 6A:-

Clause applicable- (6 or 6A):- **Clause 6 applicable**

Clause-7:- Gross work to be done together with net payment / adjustment of advances for material collected, if any, since the last such payment for being eligible to interim payment **Refer Para (B) Table of Milestones**

Clause-10A:-

List of testing equipment to be provided by the contractor at site lab.

Clause-10-B (i).

Whether clause 10-B (i) shall be Applicable **Yes**

Clause-10-B (ii).

Whether clause 10-B (ii) shall be applicable **NA**

Clause-10C:-

Component of labour expressed as percent of total value of work. **NA**

Clause :- 10CA

Materials covered under this clause	Nearest material (other than cement , reinforcement bars and structural steel) for which all India whole sale price index to be followed	Base price of the materials covered under 10CA	
		Base Price	Correspondence Period
1.Cement i)OPC II)PPC	N/A	Rs. 7000/- Rs. 6400/-	July 2020 Rates taken are ex-stockyard prices excluding GST.
2. Reinforcement bars (TMT-			

500D)			
(a) Primary manufacturers		Rs. 40931/-	
3. Structural steel		Rs. 38500/-	

Clause-10-CC:- Clause 10CC to be applicable in contracts with stipulated period of completion exceeding the period.

_____ Nil.

Clause-11:- Specifications to be followed for execution of work

C.P.W.D. Specifications

Clause-12:- Type of Work
Clause-12(a) Accord sanction of substituted items.

Original
Appropriate clause of CPWD Works Manual 2014.

Clause 12(b) Accord sanction of extra items.
12.2 & 12.3 Deviation limit beyond which clause 12.2 & 12.3 shall apply be for building work super structure.

-do-

Any quantity increased/decreased shall be carried out by the contractual agency at contractual rate.

12.5 Deviation limit beyond which clause 12.2 & 12.3 shall apply for foundation works

Any quantity increased/decreased shall be carried out by the contractual agency at contractual rate

Clause-16:- Competent Authority for deciding reduced rates.

As per appropriate clause of CPWD Works Manual 2018 with latest modification upto Date

Clause 18 :-

List of mandatory machinery tools & Plants to be deployed by the Contractor at site.

N.A

Type of Work

Original Works

Clause-36

S.no	Minimum qualification of technical representative	Discipline	Designation(Principal Technical/Technical Representative	Minimum Experience	Number	Rate at which recovery shall be made from contractor in the event of non deployment	
						Figures	Words
1.							
2.							

Clause-42:-

(e) a) Schedule/Statement for determining theoretical quantity of cement & bitumen
(f) Variations permissible on theoretical quantities.

Delhi Schedule of Rates 2018

- a) i) Cement for works with estimated cost Put to tender for more than Rs.5 Lacs.
ii) -do- Less than 5 lacs
b) Steel Reinforcement and structure steel Steel sections for each diameter, section And category
c) All other materials

2% plus/minus.
3% plus/minus
2% plus/minus
Nil

d) Bitumen for all works

+ 0.3% Plus minus only

RECOVERY RATES FOR QUANTITIES BEYOND PERMISSIBLE VARIATION

S.No.	Description of items	Rates in figures and words at which recovery shall be made from the contractor	
		Excess beyond permissible	Less use from the permissible variation
1.	Cement	As per CPWD Manual	
2.	Steel	-do-	xxxxxx

XXX to be filled in by Executive Engineer

Correction-Nil Deletion-Nil Insertion-Nil Overwriting-Nil Sheet No.II-6

TABLE OF MILE STONE (S)

Name of Work:- Electrical Copper Wiring in House no. 206, Punjab Engineering College, Sector-12, Chandigarh

Para (A) In Physical / Financial Terms: -

Milestone Programme			
Sl. No.	Gross Work Done Of Total Work Allotted	Time Allotted (From date of start)	Amount to be withheld in case of non-achievement of milestone
1.	20 %	05 days	1.25% of Tendered Amount
2.	50 %	15 days	1.25% of Tendered Amount
3.	80 %	25 days	1.25% of Tendered Amount
4.	Completion of work i/c testing etc. complete	30 days	1.25% of Tendered Amount

Para (B): -

Gross work to be done together with net payment/ adjustment of advances for material collected if any, since the last such payment for being eligible to interim payment.

SECTION –III

Special Conditions

SPECIAL CONDITIONS

1.0 General

- 1.1 Except for the items, for which Particular Specifications are given or where it is specifically mentioned otherwise in the description of the items in the schedule of quantities, the work shall generally be carried out in accordance with the "CPWD Specifications" (Refer Para 1.7.5 of Schedule F at **Sheet No. II - 4** and as per instructions of Engineer-in-Charge. Wherever CPWD Specifications are silent, the latest IS Codes / Specifications shall be followed and the rates should be all inclusive.
- 1.2 Any reference made to any Indian Standard Specifications, shall imply to the latest version of that standard, including such revisions / amendments as issued by the Bureau of Indian Standards upto last date of receipt of tenders. **The Contractor shall keep at his own cost all such publications including relevant Indian Standard applicable to the work at site.**
- 1.3 The work shall be executed and measured as per metric dimensions given in the Schedule of Quantities, drawings etc. (FPS units wherever indicated are for guidelines only).
- 1.4 The work should be planned in a systematic manner so that chase cuttings in the walls, ceilings and floors is minimized. Wherever absolutely essential, the chase shall be cut using chase cutting machines. Chases will not be allowed to be cut using hammer / chisel. The electrical boxes should be fixed in walls simultaneously while raising the brick work. The contractor shall ensure proper co-ordination of various disciplines viz. sanitary & water supply, horticulture & electrical etc.
- 1.5 All the hidden items such as water supply lines, drainage pipes, conduits, sewers etc. are to be properly tested before covering.
- 1.6 Samples including brand / quality of materials and fittings to be used in the work shall be got approved from the Engineer-in-Charge, well in advance of actual execution and shall be preserved till the completion of the work.
- 1.7 Equipment like concrete pump excavators/Transit mixer etc. shall be allowed to be moved away from the site when, in written opinion of Engineer-in-Charge, the same are no longer required at site of work.
- 1.8 The contractor, his agents / representative, workman etc. shall strictly observe orders pertaining to fire precautions prevailing in the area.
- 1.9 Contractor(s) shall study the soil investigation report for the site, available in the office of the Engineer-in-Charge and satisfy himself about complete characteristics of soil and other parameters at site. However, no claim on the alleged inadequacy or incorrectness of the soil data supplied by the department shall be entertained.
- 1.10 The tenderer shall see the approaches to the site. In case any approach from main road is required at site or existing approach is to be improved and maintained for cartage of materials by the contractor, the same shall be provided, improved and maintained by the contractor at his own cost.
- 1.11 Contractor shall take all precautionary measures to avoid any damage to adjoining property. All necessary arrangement shall be made at his own cost.
- 1.12 The contractor shall take all precautions to avoid accidents by exhibiting necessary caution boards day and night, speed limit boards, red flags, red lights and providing barriers. He shall be responsible for all damages and accidents caused to work due to negligence on his part. No hindrances shall be caused to traffic, during the execution of the work.
- 1.13 The contractor shall take instructions from the Engineer-in-Charge regarding collection and stacking of materials at any place. No excavated earth or building rubbish shall be stacked on areas where other buildings, roads, compound wall, services etc are to be constructed.
- 1.14 The contractor shall provide at his own cost suitable weighing, surveying and leveling and measuring arrangements as may be necessary at site for checking. All such equipments shall be got calibrated in advance from laboratory, approved by the Engineer-in-Charge. Nothing extra shall be payable on this account.
- 1.15 Contractor shall provide permanent bench marks, flag tops and other reference points for the proper execution of work and these shall be preserved till the end of work. All such reference points shall be in relation to the levels and locations, given in the Architectural and plumbing drawings.
- 1.16 Water tanks, taps, sanitary, water supply and drainage pipes, fittings and accessories should conform to byelaws and municipal body / corporation where CPWD Specifications are not applicable. The contractor should get the materials (fixtures/fittings) tested by the Municipal Body / Corporation authorities wherever required at his own cost.
- 1.17 The work shall be carried out in accordance with the Architectural drawings and Structural drawings, to be issued from time to time, by the Engineer-in-Charge. Before commencement of any item of work, the contractor shall correlate all the relevant architectural and structural drawings issued for the work,

nomenclature of items, specifications etc. and satisfy himself that the information available there from is complete and unambiguous. The figures & the written dimensions of the drawing shall supersede the measurement by scale. The discrepancy, if any, shall be brought to the notice of the Engineer-in-Charge for immediate decision before execution of the work. The contractor alone shall be responsible for any loss or damage occurring by the commencement of work on the basis of any erroneous and/ or incomplete information and no claim, whatsoever shall be entertained on this account.

- 1.18 The Architectural drawings other than those indicated in nomenclature of items are only indicative of the nature of the work and materials/fittings involved unless and otherwise specifically mentioned.
- 1.19 The contractor should submit the shop drawing of staging and shuttering for approval of Engineer-in-Charge before actually commencing the execution of work under the item. Nothing extra shall be payable on this account.
- 1.20 Other agencies may also simultaneously execute and install the works and the contractor shall afford necessary facilities for the same. The contractor shall leave such recesses, holes, openings, trenches etc. as may be required for such related works (for which inserts, sleeves, brackets, conduits, base plates, clamps etc. shall be available as specified elsewhere in the contract) and the contractor shall fix the same at the time of casting of concrete, stone work and brick work, if required, and nothing extra shall be payable on this account.
- 1.21 The contractor shall conduct his work, so as not to interfere with or hinder the progress or completion of the work being performed by other contractor(s) or by the Engineer-in-Charge and shall as far as possible arrange his work and shall place and dispose off the materials being used or removed so as not to interfere with the operations of other contractor or he shall arrange his work with that of the others in an acceptable and coordinated manner and shall perform it in proper sequence to the complete satisfaction of others.
- 1.22 All material shall only be brought at site as per program finalized with the Engineer-in-Charge. Any pre-delivery of the material not required for immediate consumption shall not be accepted and thus not paid for.
- 1.23 The contractor shall procure the required materials in advance so that there is sufficient time for testing of the materials and approval of the same before use in the work.
- 1.24 Existing drains, pipes, cables, over-head wires, sewer lines, water lines and similar services encountered in the course of the execution of work shall be protected against the damage by the contractor at his own expense. The contractor shall not store materials or otherwise occupy any part of the site in a manner likely to hinder the operation of such services. In case temporary supporting/shifting of such services is required to facilitate the work, the same shall be done by the contractor at no extra cost.

In case the existing services are to be shifted permanently, then before dismantling the existing services, alternate/diversion of service lines has to be laid by the contractor so that there is no interruption in use of existing services. The contractor has to plan the alternate suitable route for diversion/shifting of service lines and get the same approved from the Engineer-in-Charge before starting shifting of services. Nothing extra shall be paid except the payment of dismantling and laying of new service lines as per conditions of contract.
- 1.25 The contractor shall be responsible for the watch and ward / guard of the buildings, safety of all fittings and fixtures including sanitary and water supply fittings and fixtures provided by him against pilferage and breakage during the period of installations and thereafter till the building is physically handed over to the department. No extra payment shall be made on this account.
- 1.26 The contractor shall be fully responsible for the safe custody of materials brought by him/ issued to him even though the materials may be under double lock key system.
- 1.27 For construction works which are likely to generate malba / rubbish to the tune of more than a tempo / truck load, contractor shall dispose of malba, rubbish & other unserviceable materials and wastes at his own cost to the notified specified dumping ground and under no circumstances these shall be stacked / dumped even temporarily, outside the construction premises.
- 1.28 The excavated surplus earth shall be disposed off by the contractor as per directions of Engineer-in-Charge.
- 1.29 **All disputes concerning with this work/tender are subject to the Chandigarh jurisdiction.**
- 2.0 Unless otherwise specified in the schedule of quantities, the rates for respective items shall be all inclusive and apply to the following: -
 - (i) All lifts & all heights, floors including terrace, leads and depths.
 - (ii) All labour, material, tools and plants and other inputs involved in the execution of the item.
 - (iii) Any of the conditions and specifications mentioned in the tender documents.
 - (iv) Pumping / bailing out surface water / rain water / sub soil water, if necessary for any reason.
 - (v) Providing sunk flooring in bath-rooms, kitchen, etc.
 - (vi) Any legal or financial implications resulting out of disposal of earth, if any.

- (vii) Payment of Royalty at the prevailing rates, if any, on the boulders, metal, shingle, sand and bajri etc. or any other material collected by him for the work direct to revenue authorities.
- (viii) Performance test of the entire installation(s) before the work is finally accepted.
- (ix) Any cement slurry added over base surface (or) for continuation of concreting for better bond is deemed to have been built in the items .
- (x) All incidental charges for cartage, storage and safe custody of materials brought to site.

3.0. **TESTING OF MATERIAL: -**

- 3.1 Samples of materials required for testing shall be provided free of charge by the contractor. The cost of tests shall be borne by the contractor / department in the manner indicated below: -
 - a) By the contractor, if the results show that the material does not conform to relevant specifications.
 - b) By the department, if the results show that the material conforms to relevant specifications.

All other expenditure required to be incurred for taking samples; conveyance, packing etc. shall be borne by the contractor himself.

- 3.2 However, if any ultrasonic pulse velocity / load testing or special testing is to be done for concrete whose strength is doubtful, the cost of the same shall be borne by the contractor.
- 3.3.1 In case there is any discrepancy in frequency of testing as given in list of mandatory tests and that in individual sub-heads of work as per CPWD Specifications higher of the two frequencies of testing shall be followed and nothing extra shall be payable on this account.

4.0 **SECRECY**

- 4.1 The contractor shall take all steps necessary that all persons employed on any work in connection with the contract have notice that the Indian Official Secrets Act 1923 applies to them & will continue so to apply even after the execution of such works under the contract.
- 4.2 The contract is confidential and must be strictly confined to the contractor's own use (except so far as confidential disclosure to sub-contractors or suppliers as necessary) and to the purpose of the contract.
- 4.3 All documents, copies thereof & extracts there from furnished to the contractor shall be returned to the Engineer-in-Charge on the completion of the work / works or the earlier determination of the contract.

5.0 **LABOUR AND SECURITY**

- 5.1 Contractor should provide his plan for labour huts as per his requirement and get it approved from the Engineer-in-Charge. The contractor will be provided space for labour huts etc. inside the campus but the space requirement and location, as assessed by Engineer-in-Charge shall be final and binding.
- 5.2 Contractor has to follow the security requirement of the campus and obtain necessary entry passes for the labour and vehicles and follow security checks at entry / exit gates, restriction on movement of vehicle, restricted timings of working etc. The Department however shall assist the contractor in obtaining such passes for movement of vehicles and labour. No claim whatsoever shall be entertained on account of delay in entry of vehicles and labour including restrictions in working hours, if there is any.
- 5.3 The contractor shall employ only Indian Nationals after verifying their antecedents and loyalty. The contractor shall, on demand submit list of his agents, employees and work people concerned & shall satisfy as to the bonafides of such people.
- 5.4 The contractor & his work people shall observe all relevant rules regarding security promulgated in which work is to be carried out by the Controlling Administrative Authority of the campus/area (hereinafter referred to as "Administrator").
- 5.5 The contractor, his representative, workman shall be allowed to enter through specified gates & timing as laid down by the controlling authority. They shall be issued an identity card or an individual pass in accordance with the standing rules & regulations & they should possess the same while working. The contractor shall be responsible for the conduct & actions of his workman, agents / representatives.
- 5.6 Normally contractor shall be allowed to carryout work between 7 AM to 6 PM. However, he may also be allowed to carryout the work beyond 6 PM & upto 7 AM if the site conditions / circumstances so demand with prior written permission from the "Administrator". However, if the work is carried out in more than one shift or at night, no claim on this account shall be entertained.
- 5.7 Normally contractor's material / vehicles etc shall be allowed to move in / go-out between 7 AM to 7 PM only & no movement of material / vehicles out of site of work shall be allowed during night hours unless specific permission is obtained from the "Administrator".

- 5.8 In case if a separate entry has been allowed, the contractor has to make all arrangement for making a separate entry gate and barricading of the working area to segregate/separate the same from other areas. All these have to be done by the contractor at his own cost including safeguarding any untoward incident in the restricted area due to separate entry gate and barricading arranged by the contractor. No extra amount on this account shall be payable by the department.

6.0 TRANSPORTATION AND OFFICE INFRASTRUCTURE:

- 6.1 In order to complete the work within the scheduled time if the contractor shall be required to do the work in more than one shift and accepted by the department the contractor will provide vehicular facilities to the CPWD site staff to reach the site and their residence at his own cost for their services required beyond the normal office hours. In case the contractor fails to provide the facilities Engineer-in-Charge shall be at liberty to make the arrangement themselves and deduct the respective cost from the contractor's bills.

- 6.2 For Quality Control Measures, Preparation of Bills and Monitoring the Quality, the contractor shall provide (min. one number) Computer having MS-Windows XP, A-3 Coloured Inkjet & A-4 Laserjet Printers, Scanners, UPS etc. with required number of data entry operator in the site office of Engineer-in-Charge.

7.0 PROGRAM CHART: -

- 7.1 The Contractor shall prepare an integrated program chart for the execution of work, showing clearly all activities from the start of work to completion, with details of manpower, equipment and machinery required for the fulfillment of the program within the stipulated period or earlier and submit the same for approval of the Engineer-in-Charge within **15 days** of the issue of letter of acceptance for the contract.

- 7.2 The work has to be completed in stages as indicated in the **Milestones under Schedule 'F'** and the program should be prepared in such a manner to achieve these Milestones as indicated therein or earlier.

- 7.3 The program chart should include the following: -

- a) Descriptive note explaining sequence of various activities.
- b) Network (PERT / CPM / BAR CHART) which will indicate resources in financial terms, manpower and specialized equipment for every important stage.
- c) Program for procurement of materials by the contractor.
- d) Program of procurement of machinery / equipments having adequate capacity, commensurate with the quantum of work to be done within the stipulated period, by the contractor.

- 7.4 If at any time, it appears to the Engineer-in-Charge that the actual progress of work does not conform to the approved program referred above, the contractor shall produce a revised program showing the modifications to the approved program by additional inputs to ensure completion of the work within the stipulated time.

- 7.5 The submission of revised program or approval by the Engineer-in-Charge of such program or the furnishing of such particulars shall not relieve the contractor of any of his duties or responsibilities under the contract. This is without prejudice to the right of Engineer-in-Charge to take action against the contractor as per terms and conditions of the agreement.

Notwithstanding the fact that the contractor will have to pay to the labourers and other staff engaged directly or indirectly on the work according to the provisions of the labour regulations and the agreement entered upon and/or extra amounts for any other reason.

8.0 PROGRESS AND MONITORING OF WORK:

Contractor shall give the Engineer-in-Charge on the 10th day of each month, progress report of the work done during the previous month. Such progress report will include the project progress summary, work progress (planned v/s. actual), PERT chart, milestone status, financial progress status, manpower deployment status, important materials consumed, materials at site at the beginning of the month, materials consumed during the month and the balance quantities at the end of month and progress of the work stating the reasons for shortfall, if any including the steps and measures to be taken for making good the shortfall in the succeeding period. Non submission of aforesaid progress report shall make contractor liable for action under breach of contract conditions.

9.0 SAMPLE OF MATERIALS:-

- 9.1 All materials and fittings brought by the contractor to the site for use shall conform to the samples approved by the Engineer-in-Charge which shall be preserved till the completion of the work. If a particular brand of material is specified in the item of work in Schedule of Quantity, the same shall be used after getting the same approved from Engineer-in-Charge. Wherever brand / quality of material is not specified in the item of work, the contractor shall submit the samples as per **List of Preferred Makes as at Sheet No. VI-12 & 13** for approval of Engineer-in-Charge. For all other items, ISI Marked materials and fittings shall be used with the approval of Engineer-in-Charge. Wherever ISI Marked material / fittings are not available, the contractor shall submit samples of materials / fittings manufactured by firms of repute conforming to relevant Specifications or IS codes for the approval of Engineer-in-Charge.

- 9.2 To avoid delay, contractor should submit samples as stated above well in advance so as to give timely orders for procurement. If any material, even though approved by Engineer-in-Charge is found defective or not conforming to specifications shall be replaced / removed by the contractor at his own risk & cost.
- 9.3. BIS marked materials except otherwise specified shall also be subjected to quality test besides testing of other materials as per the specifications described for the item/material. Wherever BIS marked materials are brought to the site of work, the contractor shall, furnish manufacturer's test certificate or test certificate from approved testing laboratory to establish that the material procured by the contractor for incorporation in the work satisfies the provisions of specifications relevant to the material and / or the work done.

BIS marked items (except cement & steel for which separate provisions have been made in para 10.0) required on the work shall be got tested, for only important tests, which govern the quality of the product, as decided by the Engineer-in-Charge. The frequency of such tests (except the mandatory test) shall be 5% of the frequency as specified in BIS. For mandatory test, frequency shall be as specified in the CPWD Specifications

- 9.4 For certain items, if frequency of tests is neither mentioned in the CPWD Specifications & BIS, then tests shall be carried out as per decision of Engineer-in-Charge.

10.0 CEMENT & STEEL REINFORCEMENT (IF NOT STIPULATED TO BE SUPPLIED BY THE DEPARTMENT).

- 10.1 Contractor has to produce manufacturers test certificate for each lot of Cement & Steel Reinforcement procured at site.

10.2 CEMENT:-

- 10.2.1 The contractor shall procure 43 Grade Ordinary Portland Cement and/or Portland Pozzolona Cement (Fly Ash based), required in the work from reputed manufacturers of cement as per the approved make in 50 kg. bags bearing manufacturer's name and ISI marking, along with manufacturers test certificate for each lot. Portland Pozzolona Cement is however not to be used for RCC works.

- 10.2.2 Samples of cement arranged by the contractor shall be taken by the Engineer-in-Charge and got tested in accordance with provisions of relevant BIS Codes. The cement for such testing purpose shall be supplied by the contractor free of charge. In case test results indicate that the cement arranged by the contractor does not conform to the relevant BIS Codes, the same shall stand rejected and shall be removed from the site by the contractor at his own cost within a week's time of written order from the Engineer-in-Charge to do so. The cost of tests shall be borne by the contractor/department in the manner indicated below:

- i) By the contractor, if the results show that the cement does not conform to relevant BIS Codes.
- ii) By the department, if the results show that the cement conforms to relevant BIS Codes.

- 10.2.3 OPC/ PPC shall be brought at site in bulk supply of approximately 30 tonnes or as decided by the Engineer-in-Charge.

- 10.2.4 OPC/ PPC bags shall be stored in separate godowns. Separate godowns for tested cement and fresh cement (under testing) to be constructed by the contractor at his own cost as per sketches given in C.P.W.D Specifications having weather-proof roofs and walls. The size of the cement godown is indicated in the sketches for guidance. The actual size of godown shall be as per site requirements and nothing extra shall be paid for the same. Each godown shall be provided with a single door with two locks. The keys of one lock shall remain with Engineer-in-Charge of the work and that of other lock with the authorized agent of the contractor at the site of work so that the cement is issued from godown according to the daily requirement with the knowledge of both parties. The account of daily receipt and issue of cement shall be maintained in a register in the prescribed proforma and signed daily by the contractor or his authorized agent and Engineer-in-Charge or his authorized representative in token of its correctness. The day to day receipt and issue accounts of different grade/brand of cement shall be maintained separately in the standard proforma by the contractor or his authorized representative which shall be duly signed by the authorized representative of the Engineer-in-Charge before issue to the work on day to day basis. The capacity of each cement go-down shall be 1000 bags of cement or more as decided by the Engineer-in-Charge and shall be constructed by the contractor at site of work and at the site of batching plant for which no extra payment shall be made. The contractor shall be responsible for the watch and ward and safety of the cement go-downs. The contractor shall facilitate the inspection of the cement go-downs by the Engineer-in-Charge at any time.

- 10.2.5 The actual issue and consumption of cement on work shall be regulated and proper accounts maintained as provided in the contract. The theoretical consumption of cement shall be worked out as per procedure prescribed in Clause-42 of the contract and shall be governed by the conditions laid therein.

- 10.2.6 If the quantity of cement actually used in the work is found to be more than the theoretical quantity of cement including authorized variation, nothing extra shall be payable to the contractor on this account. In the event of it being discovered that after the completion of the work, the quantity of cement used is less than the quantity ascertained as herein before provided (allowing variation on the minus side as stipulated in Clause - 42), the cost of quantity of cement not so used shall be recovered from the contractor as specified in schedule. Decision of the Engineer-in-Charge in regard to theoretical quantity of cement which should have been actually used as per the schedule and recovered at the rate specified, shall be final and binding on the contractor.

For non-scheduled items, the decision of the Superintending Engineer regarding theoretical quantity of the cement, which should have been actually used, shall be final and binding on the contractor.

10.2.7 Cement brought to site and cement remaining unused after completion of work shall not be removed from site without written permission of the Engineer-in-Charge.

10.2.8 In case the contractor brings surplus quantity of cement the same shall be removed from the site after completion of work by the contractor at his own cost after approval of the Engineer-in-Charge.

10.2.9 Cement, which is not used within 90 days from its date of manufacture, shall be retested at approved laboratory. Until the results of such tests are found satisfactory, it shall not be used on the work.

13.0 Defect liability:

13.1 The contractor's liability during the defect liability period from the final date of completion as per clause 17 shall be limited to rectification of defects including replacement as follows which in the opinion of Engineer-in-Charge are not man made.

Sl. No.	Description	Defect Liability
(i)	Anti termite treatment.	(a) Termites found if any till guarantee period to be rectified through post ATT.
(ii)	Concrete	(a) Rectification of structural / superficial / non-structural cracks. (b) Rectification of dampness / seepage in roof slab / junctions & sunken portion. (c) Rectification of cracks in beam, shade, column.
(iii)	Brick work	(a) Rectification of cracks in panel wall / portion. (b) Cracks / settlement of dwarf walls. (c) Rectification of efflorescence.
(iv)	Joinery	(a) Replacement of warped joinery. (b) Cracks in panels, rails / styles etc.
(v)	Builders Hardware	(a) Repairs / Replacement of loosened / pre-mature failure of fittings. (b) Tightening / Replacement of sag in mosquito proofing.
(vi)	Steel & Iron work	(a) Rectification / Replacement of defective part of rolling shutter. (b) Redoing of defective portion in fabrication / welding including painting. (c) Steel windows, grills, gates etc. – defects to be rectified.
(vii)	Roof treatment	(a) Rectification of leakage / seepage of roof slab including covering at junction till guarantee period.
(viii)	Plastering	(a) Rectification of structural / superficial cracks if any. (b) Rectification of protruding / peeling off plaster if any. (c) Rectification of efflorescence
(ix)	Flooring	(a) Rectification of sinking portion of plinth protection including saucer drain. (b) Settlement of foundation & floors.
(x)	Plumbing / Sanitary fittings	(a) Making good of leakage through soil / waste pipe joints. (b) Replacement of looking mirror if found wavy. (c) Rectification of leakage of over head tanks. (d) Leakage / seepage of sunken floor, blockage of taps / pipes, non-functioning of cistern.
(xi)	Finishes	(a) Making good of defective / dissimilar patches of painting to match with remaining surfaces.
(xii)	Internal Water Supply	(a) Repairs / Replacement of defective taps / fittings. (b) Repair to leakage of GI water pipe lines including joints. (c) Removal of blockage of GI pipe lines.
(xiii)	Roads	(a) Repair of sinking portion of road & potholes, if any
(xiv)	Sewage	(a) Rectification of slope / system if found defective during use. (b) Rectification of major blockage in Sewer lines. (c) Cracks & settlement of sewage lines.
(xv)	Drains	(a) Repair to Drains. (b) Settlement of Drains
(xvi)	External Water Supply	(a) Repairs to installations & fittings.
(xvii)	General	(a) All manufacturing defects of structures / fixtures / fittings / equipments other than listed above.

16. Supplementary special condition :

16.1 The stone aggregate for R.C.C. / C.C. items shall be double screened and washed and shall comply with the grading requirement as specified in IS-383 (latest edition) for stone aggregate besides meeting

other requirement as specified there in. If the contractor / agency to use crushed aggregate nothing extra shall be paid on this account.

- 16.2 The contractor agency shall make his own arrangement of water for construction purposes. In case, the contractual agency takes temporary water connection from M.C., Chandigarh, the recovery of water charges @ 1.5% shall be made as per Notification issued by the Secretary Local Govt. Chandigarh Administration vide notification No. 6/1/195- FII(8)2011/4088, dated 24.05.2011 conveyed vide E.E. M.C. P.H. Division No. 2 vide memo no. 1533-62, dated 02.06.2011.
- 16.3 Labour Cess shall be deducted from the C.C. running & final bills and that amount will be deposited to the Chandigarh Building and Other Constructions Workers Welfare Funds.
- 16.4 The contractor shall have to obtain labour license from the Assistant Labour Commissioner, Chandigarh after getting his established registered under the Building and other Construction Act 1996 notified vide Chandigarh Administration No. 353-383 dt. 15.1.2010 issued by the Registering Officer, under the Building and other construction workers Act and Assistant Labour Commissioner, U.T. Chandigarh U.T.
- 16.5 The bidder shall have to give undertaking regarding constitution of the firm /business i.e. whether proprietorship firm/Partnership firm/ Limited Company/Public Limited Company at the time of submission of tender and any change in the same at any stage shall be immediately intimated in writing to the Engineer-in-charge. In case of partnership/Limited/Public Limited companies, the Article of Memorandum of Association shall be submitted by the bidder.
- 16.6 GST or any other tax applicable in respect of this contract shall be payable by the Contractor and Government will not entertain any claim whatsoever in respect of the same.
- 16.7 The department will assist in arranging electric and water connection at the site of work. However the Security / Consumption / installation charger shall be borne by the contractor.
- 16.8 In case of failure or default in the performance or responsibilities or breach of terms and conditions of DNIT or agreement, action as per **“Policy on blacklisting, 2009”** issued vide Finance Department Chandigarh Administration Notification No. 1927-F&PO(3)-2009/1170 dt. 27.2.2009 shall be taken.
- 16.13 All deviation beyond permissible limit shall be paid with financial approval of the competent authority at the already approved contractual rates for the respective items.

SECTION – IV

Annexure

FORM OF PERFORMANCE SECURITY

BANK GUARANTEE BOND

In consideration of the Director, PEC (hereinafter called "The Government") having offered to accept the terms and conditions of the proposed agreement between _____ and _____ (hereinafter called "the said contractor(s)") for the work _____ (hereinafter called "The said agreement") having agreed to production of an irrevocable Bank Guarantee for Rs. _____ (Rupees _____ only) as security/guarantee from the contractor(s) for compliance of his obligations in accordance with the terms and conditions in the said agreement.

1. We _____ (hereinafter referred to as "the Bank) hereby undertake to
(indicate the name of the bank)
pay to the Government an amount not exceeding Rs. _____ (Rupees _____ only) on demand by the Government.
2. We _____ do hereby undertake to pay the amounts due and payable
(indicate the name of the bank)
under this Guarantee without any demure, merely on a demand from the Government stating that the amount claimed is required to meet the recoveries due or likely to be due from the said contractor(s). Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the bank under this Guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs. _____ (Rupees _____ only).
3. We, the said bank further undertake to pay to the Government any money so demanded notwithstanding any dispute or disputes raised by the contractor(s) in any suit or proceeding pending before any court or Tribunal relating thereto, our liability under this present being absolute and unequivocal.

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

4. We _____ further agree that the guarantee herein contained shall
(indicate the name of the Bank)
remain in full force and effect during the period that would be taken for the performance of the said agreement and that it shall continue to be enforceable till all the dues of the Government under or by virtue of the said agreement have been fully paid and its claims satisfied or discharged or till Engineer-in-Charge on behalf of the Government certified that the terms and conditions of the said agreement have been fully and properly carried out by the said contractor (s) and accordingly discharges this guarantee.
5. We _____ further agree with the Government that the government
(indicate name of the bank)
shall have the fullest liberty without our consent and without effecting in any manner our obligations hereunder to vary any of the terms and conditions of the said agreement or to extend time of performance by the said contractor(s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the Government against the said contractor(s) and to forbear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said contractor(s) or for any forbearance, act of omission on the part of the Government or any indulgence by the Government to the said contractor(s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.
6. This guarantee will not be discharged due to the change in the constitution of the Bank or the contractor(s).
7. We _____ lastly undertake not to revoke this guarantee except (indicate the name of Bank)

with the previous consent of the Government in writing.
8. This guarantee shall be valid upto _____ unless extended on demand by Government. Notwithstanding anything mentioned above, our liability against this guarantee is restricted to Rs. _____ (Rupees _____ only) and unless a claim in writing is lodged with us within six months of the date of expiry or the extended date of expiry of this guarantee all our liabilities under this guarantee shall stand discharged.

Dated the _____ day of _____ for _____.

**GUARANTEE BOND TO BE EXECUTED BY THE CONTRACTOR
FOR REMOVAL OF DEFECTS AFTER COMPLETION IN RESPECT OF
RENOVATION OF ENTRANCE OF LIBRARY (CIVIL & ELECTRICAL WORK)**

The agreement made this..... day of (Two Thousand only) betweenS/o(hereinafter called the GUARANTOR of the one part) and the Director PEC (hereinafter called the Government of the other part)

WHEREAS THIS agreement is supplementary to a contract (Hereinafter called the Contract) dated and made between the GUARANTOR OF THE ONE PART AND the Government of the other part, whereby the contractor inter alia, undertook to render the work in the said contract recited structurally stable, leak proof and sound material, workmanship, sealing, finishing etc as specified in bill of quantities .

AND WHEREAS THE GUARANTOR agreed to give a guarantee to the affect that the said work will remain structurally stable, leak proof and guaranteed against faulty material and workmanship, and finishing for two years from the date of completion of work.

NOW THE GUARANTOR hereby guarantee that work executed by him will be free from any leakage, seepage, cracks in pipes and guaranteed against faulty material and workmanship, defective galvanizing for two years to be reckoned from the date after the expiry of maintenance period prescribed in the contract.

The decision of the Engineer-In-Charge with regard to nature and cause of defect shall be final.

During this period of guarantee, the guarantor shall make good all defects and in case of any defect to satisfaction of Engineer-in-charge at his cost and shall commence the work for such rectification within seven days from the date of issue of the notice from the Engineer-in-charge calling upon him to rectify the defects failing which the work shall be got done by the Department by some other contractor at the guarantor's cost and risk. The decision of the Engineer-in-Charge as to the cost payable by the Guarantor shall be final and binding.

That if the guarantor fails to make good all defects or commits breach thereunder, then the guarantor will indemnify the principal and his successor against all loss, damage, cost expense or otherwise which may be incurred by him by reason of any default on the part of the GUARANTOR in performance and observance of this supplementary agreement. As to the amount of loss and/or damage and or cost incurred by the Government, the decision of the Engineer-in-charge will be final and binding on both the parties.

IN WITNESS WHEREOF these presents have been executed by the obligator and by for and on behalf of the Director PEC on the day, month and year first above written.

SIGNED, sealed and delivered by OBLIGATOR in the presence of :-

1. 2.

SIGNED FOR AND ON BEHALF OF THE Director PEC BY..... in the presence of :-

1. 2.

EMD RECEIPT

Name of work: **Electrical Copper Wiring in House no. 206, Punjab Engineering College, Sector-12, Chandigarh Sector-12, Chandigarh.**

Tender No:- _____

Amount of EMD:- _____ D.D./FDR No _____ Dated _____

Name of Firm:- _____

SECTION – V

Schedule of Quantities

DNIT

Name of work:- Electrical Copper Wiring in House no. 206, Punajb Engineering College, Sector-12, Chnadigarh.

Time Period- 1 month

Earnest money-Rs.2,914/-

SLNo	DSR No.	Description	Qty	Unit	Rate	Amount
1	1	WIRING				
1.1	1.1	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required				✓
1.1.1	1.10.1	Group A	47	Point	571.00	26837.00
1.2	1.12	Wiring for light/ power plug with 2X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed medium class PVC conduit alongwith 1 No. 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required.	50	Metre	174.00	8700.00 ✓
1.3	1.14	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required.				
1.3.1	1.14.1	2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire	10	Metre	119.00	1190.00 ✓
1.3.2	1.14.2	2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire	70	Metre	140.00	9800.00 ✓
1.3.3	1.14.10	4 X 10 sq. mm + 2 X 6 sq. mm earth wire	1	Metre	514.00	514.00 ✓
1.4	1.17	Supplying and drawing following sizes of FRLS PVC insulated copper conductor, single core cable in the existing surface/ recessed steel/ PVC conduit as required.				
1.4.1	1.17.3	3 x 1.5 sq. mm	70	Metre	49.00	3430.00 ✓
1.5	1.18	Supplying and drawing following pair 0.5 mm dia FRLS PVC insulated annealed copper conductor, unarmored telephone cable in the existing surface/ recessed steel/ PVC conduit as required.				
1.5.1	1.18.2	2 Pair	30	Metre	15.00	450.00 ✓
1.6	1.19	Supplying and drawing co-axial TV cable RG-6 grade, 0.7 mm solid copper conductor PE insulated, shielded with fine tinned copper braid and protected with PVC sheath in the existing surface/ recessed steel/ PVC conduit as required.				
1.7	1.21	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.	35	Metre	28.00	980.00 ✓

1.7.1	1.21.1	20 mm	35	Metre	64.00	✓	2240.00
1.7.2	1.21.2	25 mm	135	Metre	71.00	✓	9585.00
1.7.3	1.21.4	40 mm	18	Metre	108.00	✓	1944.00
1.8	1.24	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.					
1.8.1	1.24.1	5/6 A switch	18	Each	70.00	✓	1260.00
1.8.2	1.24.4	3 pin 5/6 A socket outlet	2	Each	101.00	✓	202.00
1.8.3	1.24.6	Telephone socket outlet	3	Each	104.00	✓	312.00
1.8.4	1.24.7	TV antenna socket outlet	1	Each	104.00	✓	104.00
1.8.5	1.24.8	Bell push	8	Each	111.00	✓	888.00
1.9	1.25	Supplying and fixing two module stepped type electronic fan regulator on the existing modular plate switch box including connections but excluding modular plate etc. as required.	15	Each	324.00	✓	4860.00
1.1	1.26	Supplying and fixing modular blanking plate on the existing modular plate & switch box excluding modular plate as required.	10	Each	27.00	✓	270.00
1.11	1.27	Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc. as required.					
1.11.1	1.27.1	1 or 2 Module (75mmX75mm)	18	Each	196.00	✓	3528.00
1.11.2	1.27.2	3 Module (100mmX75mm)	16	Each	221.00	✓	3536.00
1.12	1.31	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 3 pin 5/6 A modular socket outlet and 5/6 A modular switch, connections etc. as required.	7	Each	349.00	✓	2443.00
1.13	1.32	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 5/6 & 15/16 A modular socket outlet and 15/16 A modular switch, connections etc. as required.	10	Each	444.00	✓	4440.00
1.14	1.38	Supplying and fixing call bell/ buzzer suitable for single phase, 230 V, complete as required.	1	Each	82.00	✓	82.00
1.15	1.45	Installation, testing and commissioning of ceiling fan, including wiring the down rods of standard length (upto 30 cm) with 1.5 sq. mm FRLS PVC insulated, copper conductor, single core cable, including providing and fixing phenolic laminated sheet cover on the fan box etc. as required.	2	Each	151.00	✓	302.00
1.16	1.51	Extra for fixing the louvers/ shutters complete with frame for a exhaust fan of all sizes.	3	Each	115.00	✓	345.00
1.17	1.53	Supplying and drawing of UTP 4 pair CAT 6 LAN Cable in the existing surface/ recessed Steel/ PVC conduit as required.					
1.17.1	1.53.1	1 run of cable	35	Metre	44.00	✓	1540.00

1.18	1.57	Supplying & fixing suitable size GI box with modular plate and cover in front on surface or in recess including providing and fixing 25 A modular socket outlet and 25 A modular SP MCB, "C" curve including connections, painting etc. as required.	4	Each	591.00	✓	2364.00
1.19	1.58	Supplying and fixing PVC batten/ angle holder including connections etc. as required.	23	Each	69.00	✓	1587.00
2	2	MCCB, MCB & DB'S					
2.1	2.4	Supplying and fixing following way, horizontal type three pole and neutral, sheet steel, MCB distribution board, 415 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator)					
2.1.1	2.4.2	6 way (4 + 18), Double door	1	Each	3611.00	✓	3611.00
2.2	2.1	Supplying and fixing 5 A to 32 A rating, 240/415 V, 10 kA, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.					
2.2.1	2.10.1	Single pole	18	Each	180.00	✓	3240.00
2.3	2.13	Supplying and fixing following rating, four pole, 415 V, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required.					
2.3.1	2.13.2	63 A	1	Each	804.00	✓	804.00
3	5	EARTHING					
3.1	5.2	Earthing with G.I. earth pipe 4.5 metre long, 40 mm dia including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. with charcoal/ coke and salt as required.	1	Each	4798.00	✓	4798.00
3.2	5.2	Providing and fixing earth bus of 50 mm X 5 mm copper strip on surface for connections etc. as required.	6	Metre	1819.00	✓	10914.00
4	NS	Supply and erection of 1*18/20 watt 4' long LED box type fittings made of CRCA sheet with the help of rawl plug and screws etc. The tube rod should be of Philips/ Wipro/ Bajaj/Havells make of polycarbonate material only. The batten for housing the tube rod should be of Philips/ Wipro/ Bajaj/Havells make only. The job includes carriage, erection, making connections with 3x1.5 sq.mm copper wire from adjacent light point, testing and commissioning of the fittings etc. as required to complete the same to the entire satisfaction of engineer in charge.	8	Each	700.00		5600.00

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Specifications of LED fittings					
A	Wattage of LED fittings - as per following parameter				
B	Total lumens of the LED fittings- Minimum 1800 lumen				
C	Diffuser- extruded aluminium heat sink with polycarbonate diffuser				
D	Operating voltage - 140 V to 270 V, AC supply or better				
E	Input frequency-50 Hz +-1 Hz				
F	Power factor- minimum 0.95				
G	Luminaire efficacy- Minimum 100 lm/w				
H	Color rendering index- CRI shall be greater than 80				
I	working /operating temperature - 0° To + 45° c or better				
J	color temperature- 6000° k to 65000° K				
K	Electronic Driver				
i	Drive current (LED)- as per OEM				
ii	Operating Voltage-140 V to 270 V AC supply or better				
iii	Type of driver- constant current output driver				
iv	THD- less than 10%				
v	Surge protection-5 KV minimum				
vi	Efficiency driver- >85%				
vii	Protection- shall have under voltage and over voltage protection				
L	Guarantee of LED fittings including LED driver- 1 year against manufacturing defect.				
M	Fixture- should comply with LM 79 test from NABL/UL lab.				
N	LED Type/Make/Model- Power CREE/ OSRAM/ NICHIA/ Philips LUMILED with life more than 30,000 burning hours @70% lumen maintenance complying with LM 80 test report from the manufacturer				
O	Life of LED- 30000 burning hours at 70% lumen maintenance				

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5	NS	Supply and erection of AC ceiling fans with copper winding but without regulator complete with MS blades, plastic canopies 2 nos double ball bearing, MS hanging rods (As per site requirement), condenser, reels, clamps etc. The body of fan and blades should be white in colour. The job includes the cost of making necessary connections from the adjacent light point with 1.5mm ² single core copper conductor cable and 3mm thick white BL sheet cover for fan box of suitable size. The sample of fans shall be got approved from the SDE in charge of work before installation at site. The job also includes the cost of carriage, erection, testing, commissioning of fan, all labour and petty material required to complete the job to the entire satisfaction of the Engineer in charge. Make GEC, ORIENT, CROMPTON, HAVELLS				
				Each		
	i	Size 56" (1400mm)	3	Each	2450.00	7350.00
6	NS	Supply, Installation, Testing and Commissioning of 1200 mm sweep, BEE 5 star rated, ceiling fan with Brush Less Direct Current (BLDC) Motor, class of insulation: B, 3 nos. blades, 30 cm long down rod, 2 nos. canopies, shackle kit, safety rope, copper winding, Power Factor not less than 0.9, Service Value (CMM/W) minimum 6.85, Air delivery minimum 215 CMM, 350 RPM (tolerance as per IS : 374-2019), THD less than 10%, remote or electronic regulator unit for speed control and all remaining accessories including safety pin, nut bolts, washers, temperature rise=75 degree C (max.), insulation resistance more than 2 mega ohm, suitable for 230 V, 50 Hz, single phase AC Supply, earthing etc. complete as required.				
			3	Each	2688.00	8064.00
7	NS	Supply and erection of exhaust fan (heavy duty motor with copper wound metallic body) following size complete with motor, metallic blades, double ball bearing with minimum power consumption, rigid frame with rubber mounting for silent operation, epoxy powder coating along with metallic louver to be installed in the existing opening including cost of carriage charges, making connection, testing, commissioning of fan, all labour and petty material required to complete the job to the entire satisfaction of the Engineer in charge.				

	i	Size 12" sweep 900 RPM with louver of Havells make turbo force SP/Orient make industrial heavy duty/crompton make HDEF EXHD 300-6-1/Bajaj make Supreme DLX only (for kitchen)	1	Each	3100.00	3100.00
8	NS	Supply installtion testing and commission of 10" exhaust fan 1350 rpm in plastic body, make Orient, Usha, GEC, Crompton (for toilet/WC)	2	Each	1920.00	3840.00
9	NS	Providing and fixing of MS 10mm dia S type fan hook which includes fixing in the steel bar of RCC slab and repairing the same in good condition.	2	Each	175.00	350.00
10	NS	Supply and erection of RJ-45 Jack for Computer on exisiting G.I Box and Plate including connections	3	Each	100.00	300.00
		Total				145704

Rs One lacs forty five thousand seven hundred and four only

Conditions

- 1 The work shall be carried out according to CPWD General Specifications.
- 2 The work shall be completed to the entire satisfaction of the Engineer-in-charge.
- 3 The firm will have to follow fair wage clause.
- 4 The work shall have to be completed side by side with building work.
- 5 Sub-standard work will not be accepted.
- 6 No claim on account of fluctuation in prices due to any reason shall be considered.
- 7 The quantity can be increased or decreased as per actual requirement at site.
- 8 No premium will be allowed on M.R. Items, abatement, if any shall be applicable on all items including market rates.
- 9 The contractor has to employ qualified Engineer for the supervision of work at site.
- 10 Any error or omission in nomenclature or unit can be corrected at any stage.
- 11 The quality of material shall be strictly in accordance with the specification given in DNIT.
- 12 All the material shall be inspected by the Engineer-in-charge before installation at site.
- 13 The boards & M.S. boxes should be painted with 2 coats of superior quality paint after one coat of primer.
- 14 Separate colour of wires shall be used for phase and neutral so as the distinguish it for live conductor.
- 15 All the cables connections should be done through lugs/thimbles duly crimped with proper crimping tools & no extra payment shall be made on this account.
- 16 The department has reserve the right to issue any amendment to the work order as emergency demands or allow of altogether cancel the contract without assigning any reason. The Deptt. Reserves the right to delete any item.

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- 17 Discount offered by the firm should also be considered in additional/ extra DSR/ MR Items, if the rate quoted are lesser than the DNIT amount.
- 18 Security @ 5% shall be deducted on the work done amount of each running/ Final bill of the firm as per CPWD manual 2014 which shall be refunded after one year from the date of completion if no defects are found in the work.
- 19 The firm shall ensure, the availability a licensed electrician/ supervisor/ qualified Engineer during the erection, testing and commissioning.
- 20 The contractor shall be responsible for having got ensured all risk comprehensive Insurance for men valid up to the completion of the work, right from the initial stage and handing over to the department.
- 21 The firm shall quote the rates inclusive all the taxes/ GST whatever required and no extra payment shall be made in this respect.
- 22 The work of S/E material except LED fittings shall be guaranteed for a period of one year and lamp for six months for any manufacturing defect from dated of commissioning including labour charges, inspection at site. No extra payment shall be made on this account.
- 23 The LED fittings including their drivers/ rods shall be guaranteed for a period of one years for free replacement from the date of completion of work/ taking over the department.
- 24 The following dismantled material will be the property of the contractor. The recovery of the dismantled material shall be made from the minimum rated mentioned against each. The job also includes the cost of dismantling the same.

i	Aluminum wiring, light point, fan point, call bell etc	nos	29 @	15	Each
ii	Wall socket point 5 amp	nos	7 @	20	Each
iii	Power plug 15 amp	nos	4 @	25	Each
iv	Batton Holder	nos	21 @	5	Each
v	Call Bell	nos	1 @	5	Each
vi	Ceiling fan 56"	nos	2 @	300	Each
vii	Exhaust fan 12"	nos	2 @	350	Each
Viii	MCB TPN BDB 6 way with MCB's and isolater	nos	1 @	200	Each
ix	Fan regulator	nos	5 @	10	Each
x	Switch 5 amp Piano	nos	40 @	3	Each
xi	Wooden switch board of various sizes	nos	14 @	1	Each

25 The approved makes are as under

A Piano type accessories

Anchor Penta/ Havells Reo/ Gold Medal Essenza

B Modular type accessories/sheets/boxes

Legrand (Arteor)/Schneider (Zencelo)/Crabtree (Murano)/ L&T (Englaze/ MK(Elements)/ ABB (Cheiron)/ Gold Medal(GIFA)

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PVC batten/Conduit pipe (ISI marked)

Polycab/Diplast/AKG/Polyplast

PVC copper wires FRLS (ISI Marked)

Polycab/L&T/Havells/ Finolex/R.R.
Kables

MCB's/RCCB's/ELCB's

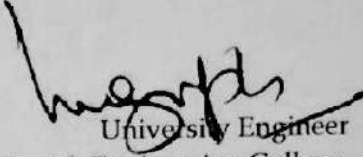
L&T (Exora)/ Legrand (DX3)/ Hager
(H3)/ /Schneider (Acti-9)/ ABB
(SH200M)/ Siemens
(Betagard)/Havells

BDB's/ A.C. Plug. Socket

L&T/Legrand/Hager//Schneider/Si
emens/ABB

GI Pipe ISI Marked

Jindal Hissar/ Tata


University Engineer
Punjab Engineering College,
Sector-12, Chandigarh
