# INDIAN INSTITUTE OF TECHNOLOGY DELHI HAUZ KHAS, NEW DELHI-110016

# **Index of Tender documents**

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This Tender documents contains pages One to Ninety One Only

NIT Amounting to Rs. 8,34,52,367/- (Rs. Eight Crore Thirty Four Lakhs Fifty Two Thousand Three Hundred Sixty Seven Only)

**Institute Engineer** 

### 2

### **Notice Inviting E-Tender (E-Procurement mode)**

# INDIAN INSTITUTE OF TECHNOLOGY DELHI

# HAUZ KHAS, NEWDELHI-110016

Dated : 25/02/2021

# Open Tender Notice No.IITD/ WORKS(SP-3400) /2021

Indian Institute of Technology Delhi is in the process of purchasing following item(s)/ services as per details as given as under.

Details of the item	Name of work- Construction of temporary faculty rooms, labs, corridors and toilets in the Gramodaya Parisar at IIT Delhi. Sub Head- Civil, Electrical, Air conditioning & CCTV works
Earnest Money Deposit submitted	NIL (Filled Performa for Earnest Money Deposit Declaration (Relaxation for Earnest Money Deposit as per OM No. F9/14/2020/PPD dated 12-11-2020 issued by the Department of Expenditure and DG/ CON/Misc./13)
Warranty / Maintenance Period	1 Year
Performance Security	3% of Tender Amount

Tender Documents may be downloaded from Central Public Procurement Portal <u>http://eprocure.gov.in/eprocure/app</u>

AspiringBidderswhohavenotenrolled/registeredine-procurementshouldenroll/registerbeforeparticipating through the website <u>http://eprocure.gov.in/eprocure/app</u>. The portal enrolment is free of cost. Bidders are advised to go through instructions provided at 'Instructions for online Bid Submission.

Tender can access tender documents on the website (For searching in the NIC site, kindly go to Tender Search option and type 'IIT'. Thereafter, Click on "GO" button to view all IIT Delhi tenders). Select the appropriate tender and fill them with all relevant information and submit the completed tender document online on the website <u>http://eprocure.gov.in/eprocure/app</u> as per the schedule given in the next page.

No manual bids will be accepted. All quotation (both Technical and Financial should be submitted in thee - procurement portal)

### **NOTICE INVITING E-TENDERS**

Executive Engineer (CD-III) Indian Institute of Technology, Hauz Khas, New Delhi-16. (Phone No. 011-26596237) on behalf of Board of Governors invites online **Item Rate Tender** from Firms/ Contractors Registered in appropriate class and category with CPWD, MES, BSNL, and Railways for the following work:

1. NIT No	: /IITD/EE(CD-III)/2020-21
2. Name of Work	: Construction of temporary faculty rooms, labs, corridors and toilets in the Gramodaya Parisar at IIT Delhi.
3. Sub Head	:- Civil, Electrical, Air Conditioning & CCTV works
4. Estimated cost	: Rs. 8,34,52,367/-
5. Earnest Money as per OM No. F9/14/2020 Expenditure and DG/ CO 6. Period of completio	

7. Last time& date of submission of bid: 16/03/2021 up to 3:00 pm (on line)

The bid forms and other details can be obtained from the website **wwww.iitd.ac.in or e-procure.gov.in free of cost.** For more clarification you may visit on above website.

Executive Engineer (CD-III), For & on Behalf of BOG, IIT Delhi

### Ch. Head: PLN-12/01A Work code-WO3534

### Copy to: -

- 1. Institute Engineer
- 2. Executive Engineer (CD-III) for information.
- 3. D.A. (Works Accounts)
- 4. A. E. E. (Civil)
- 5. D.R. (A/Cs) for opening of uploaded documents at 3:00 PM on 17/03/2021 in the office of D.R. Store
- 6. Notice Boards.
- 7. Office Copy
- 8. Web site Administrator, I.I.T.D.

# <u>INDIAN INSTITUTE OF TECHNOLOGY: DELHI</u> <u>HAUZ KHAS: NEW DELHI – 110016</u>

# **INFORMATION AND INSTRUCTIONS FOR BIDDERS FOR e-TENDERING (Tender Notice)**

*The Executive Engineer (CD-III), IIT DELHI, HAUZ KHAS, New Delhi-16 (Phone No 011-26596237)* on behalf of Board of Governors invite online **Item Rate Tender** from Firms/ Contractors Registered in appropriate class and category with CPWD, MES, BSNL, and Railways **for Civil works** of the following work:

SL. No.	NIT No.	Name of Work	Estimated Cost (in Rs.)	Earnest Money (in Rs.)	Tender Fees (in Rs.)	Time for completi on
1	/IITD/EE(CD-III)/2020-21.	Name of work : Construction of temporary faculty rooms, labs, corridors and toilets in the Gramodaya Parisar at IIT Delhi Sub Head :- Civil, Electrical, Air Conditioning & CCTV work	<mark>8,34,52,367/-</mark>	NIL	<mark>1500/-</mark>	15 Months

Last date and time of submission of financial & Technical bid :- 16/03/2021 upto 3:00 pm (on line)

# Date and time of opening of Technical bid:-17/03/2021 upto 3.00 pm (office of D.R Store)Price bids of eligible bidders as per NIT shall be opened at a later date after scrutiny of Technical bids.

- 1. The successful bidders shall be required to submit a performance guarantee of 3% of the tendered amount in the form of Bank Guarantee or F.D.R. from a Nationalized/Scheduled Bank within 15 days of issue of letter of intent before award of work. In case of failure by the Contractor to supply the performance guarantee within the specified period, full earnest money will be forfeited and the tender shall be treated as void. The performance guarantee shall be initially valid up to the stipulated date of completion plus 60 (Sixty) days beyond that.
- 2. Contractors who fulfill the following requirements shall be eligible to apply. Joint ventures are not accepted.
  - i) Firms/Contractors must have completed satisfactorily one similar work of value not less than Rs. 6,67,61,894/- or Two similar works each of value not less than Rs. 5,00,71,421/- or there similar works each of value not less than Rs 3,33,80,947/- during last 7 years ending on previous day of last day of submission of bids.
- **3.** The intending bidder must read the terms and conditions of IITD-6 carefully. He should only submit his bid if he considers himself eligible and he is in possession of all the documents required.
- 4. Information and Instructions for bidders posted on website shall form part of bid document.
- **5.** The bid document consisting of plans, specifications, the schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents can be seen and downloaded from website<u>http://eprocure.gov.in/eprocure/app</u>.in free of cost.
- 6. Completion certificates issued by an officer not below the rank of Executive Engineer of similar works completed by the Agency.
- 7. Work means only work under Government/ Public Sector Under taking / Autonomous bodies.
- 8. Similar work means composite work of Maintenance of building/ Renovation/ Addition Alteration/ Rehabilitation/ New construction of buildings (Each work shall be inclusive of Civil, Electrical and Air Conditioning Work).
- **9.** The value of executed work 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 previous day of last date of submission of financial bid.

- **10.** IITD is committed to follow the principle of transparency, equity and competitiveness in public procurement. Before submission of bid each bidder should sign integrity pact at respective places and submit the bid, if duly signed integrity pact is not submitted by bidder such bid shall not be considered.
- **11.** Those contractors not registered on the website mentioned above, are required to get registered beforehand. If needed they can be imparted training on online bidding process as per details available on the website
- 12. The intending bidder must have valid class-III digital signature to submit the bid.
- **13.** On opening date, the contractor can login and see the bid opening process. After opening of bids he will receive the competitor bid sheets.
- 14. Contractor can upload documents in the form of JPG format and PDF format.
- **15.** Contractor must ensure to quote rate of each item, while selecting any of the cells a warning appears that if any cell is left blank the same shall be treated as "0". Therefore, if any cell is left blank and no rate is quoted by the bidder, rate of such item shall be treated as "0" (ZERO).
- **16.** The department reserves the right to reject any prospective application without assigning any reason and to restrict the list of qualified contractors to any number deemed suitable by it, if too many bids are received satisfying the laid down criterion.
- **17.** In e-Tendering intending bidder can quote his rates in figures only. The rates in words, amount of each item and total is generated automatically. Therefore, the rate quoted by the bidder in figures is to be taken as correct.
- **18.** The following undertaking in this regard shall be uploaded by intending bidders "EMD declaration as per page-53 duly signed and uploaded with Technical bid.
- **19.** The EMD undertaking uploaded shall be deposited by the lowest tenderer within a week after opening of financial bid failing which the tender shall be rejected.
- 20. Copy of enlistment order and certificate of work experience and other documents as specified in the Press Notice / web notice shall be scanned and up-loaded to the e-tendering website within the period of bid submission. However, certified / original copy of all the scanned and up-loaded documents as specified in press notice/ web notice shall have to be submitted by the lowest bidder within a week physically in the office of e-tender authority and it shall be sole responsibility of lowest bidder.
- 21. Online bid documents submitted by intending bidders shall be opened only of those bidders, who has uploaded EMD Declaration and other documents scanned and uploaded are found in order.
- 22. When bids are invited in two /three stages systems and if it is desired to submit revised financial bid it shall be mandatory to submit revised financial bid. If not submitted then the bid submitted earlier shall become invalid Not applicable.
- 23. The bid submitted shall become invalid if:
  - a. The bidder is found ineligible if he fails to upload documents from 1 to 14 on tender notice page 5-6.
  - b. The bidder does not upload all the documents (including GST registration) as stipulated in the bid document.
  - c. 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.
  - 24. Bid validity shall be 90 days from opening of financial bid.
  - **25.** Rate of bidders shall be considered inclusive of GST.

### List of Documents to be scanned and uploaded within the period of bid submission:

- 1. Performa of EMD declaration (duly filled & signed by the bidders) as given on page-18.
- 2. Enlistment order of contractor.
- 3. Attested certificate of work experience.
- 4. Certificate of Registration for GST and acknowledgement of up to date filed return of GST.
- Affidavit as per Notice Inviting Tender Condition 1.3 page 19 of NIT. (Affidavit shall be purchased/ notarized between date of publishing and last date of submission of bids beside this NIT/Tender ID and name of work must be mentioned on the affidavit.).
- 6. Acceptance to execute INTEGRITY PACT.
- 7. ESI & EPF registration.
- 8. FORM "F" (Duly filled with all required details).
- 9. Tender Fee of Rs. 1500/- to be deposited through RTGS to Registrar IIT Delhi as per detail given in schedule page-09 and its proof to be uploaded with technical bid

- 10. Annexure-I (duly filled & signed by the bidders)
- 11. Annexure-II (duly filled & signed by the bidders)
- 12. Annexure-III (duly filled & signed by the bidders)
- 13. In case of Partnership firm if all the papers of tender not signed by all the partners than a power of attorney authorizing the person who has signed the tender paper must be uploaded with the tender documents.
- 14. Undertaking by the firm that if the firm becomes lowest then they shall submit along with Performance guarantee from the OEM after acceptance of tender regarding:
  - a. Valid OEM Authorization Certificate.
  - b. Written commitment from OEM of VRF/ VRV to supply the units and its delivery schedule.
  - c. The letter of OEM that the OEM unconditionally supports the bidder technically throughout the execution of the contract as well as for maintenance contract for the useful life of the system.
  - d. The letter of OEM that they will provide all the spares required for healthy functioning of the equipment for at least 7 years from the date of supply of equipment.
  - e. VRF/VRV air conditioning work shall only be got executed only by the manufacturer or their authorized dealers.

Executive Engineer (CD-III), For & on Behalf of BOG, IIT Delhi Hauz Khas,New Delhi-110016.

### Ch. Head:PLN-12/01A

### Work code-WO3534

Copy to: -

- 1. Executive Engineer (CD-III) for information.
- 2. D.A. (Works Accounts)
- 3. A. E. E. ( Civil )
- 4. D.R. (A/Cs) for opening of tenders on 17/03/2021 at 3:00 PM in the office of D.R. Store
- 5. Notice Boards.
- 6. Office Copy
- 7. Web site Administrator, I.I.T.D
- 8. NIT :- Publicity on Website on Institute as well as on CPP portal <u>http://eprocure.gov.in</u> may be ensured as per instruction issued.
- 9. E-tendering Web. http://eprocure.gov.in/eprocure/app or www.iitd.ac.in

### FORM "F"

# **STRUCTURE & ORGANISATION**

- 1. Name & Address of the bidder
- 2. Telephone no./ Telex no./ Fax no.
- 3. Legal status of the bidder (attach copies of original document defining the legal status)
  - a. An Individual
  - b. A proprietary firm
  - c. A firm in partnership
  - d. A limited company or Corporation
- 4. Particulars of registration with various Government Bodies (attach attested photocopy)

Or	ganization/ Place of registration	Registration No.
	1.	
	2.	
	3.	
5.	Name and tiles of Directors & Officers with designation to	
	be concerned with this work	!
6.	Designation of individuals authorized to act for the organization	!
7.	Has the bidder or any constituent partner in case of partnership	
	firm, ever abandoned the awarded work before its completion?	
	If so, give name of the project and reasons for abandonment	!
8.	Has the bidder or any constituent partner in case of partnership	
	firm, ever been debarred/ black listed for tendering in any organization	
	at any time? If so, give details	!
9.	Has the bidder, or any constituent partner in case of partnership firm,	
	ever been convicted by the court of law? If so, give details	!
10.	Past work experience in IIT Delhi will be considered in deciding the Technical bid	!

Signature of Bidder(S)

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# <u>Notice Inviting Tender</u> <u>INDIAN INSTITUTE OF TECHNOLOGY DELHI</u> <u>HAUZ KHAS, NEW DELHI-110016</u> <u>Terms & Conditions</u>

8

Indian Institute of Technology Delhi is in the process of purchasing following item(s) as per details as given as under.

Details of the item	As per Tender Notice
Earnest Money Deposit to be submitted	NIL (Filled Performa for Earnest Money Deposit Declaration (Relaxation for Earnest Money Deposit as per OM No. F9/14/2020/PPD dated 12-11-2020 issued by the Department of Expenditure and DG/ CON/Misc./13)
Warranty	As per Tender Notice, NIT & IITD form 8
Performance security	As per Tender Notice, NIT & IITD form 8

Tender Documents may be downloaded from Central Public Procurement Portal <u>http://eprocure.gov.in/eprocure/app</u>.Aspiring Bidders who have not enrolled / registered in e-procurement should enroll / register before participating through the website <u>http://eprocure.gov.in/eprocure/app</u>. The portal enrolment is free of cost. Bidders are advised to go through instructions provided at 'Instructions for online Bid Submission '.

Tenderers can access tender documents on the website (For searching in the NIC site, kindly go to Tender Search option and type 'IIT'. Thereafter, Click on "GO" button to view all IIT Delhi tenders). Select the appropriate tender and fill them with all relevant information and submit the completed tender document online on the website <u>http://eprocure.gov.in/eprocure/app</u> as per the schedule given in the next page.

No manual bids will be accepted. All quotes (both Technical and Financial should be submitted in the E-procurement portal).

C----NIL

# 9 <u>Schedule</u>

Name of Organization	Indian Institute of Technology Delhi
Tender Type (Open/Limited/EOI/Auction/Single)	Open
Tender Category (Services/Goods/works)	Works
Type/Form of Contract (Work/Supply/ Auction/Service/Buy/Empanelment/ Sell)	Works
Product Category (Civil Works/Electrical Works/Fleet Management/ Computer Systems)	Civil
Source of Fund (Institute/Project)	Budget Code PLN01A/ WO3534
Is Multi Currency Allowed	No
Date of Issue/Publishing	25/02/2021 at 15:00 Hrs
Document Download/Sale Start Date	25/02/2021 at 15:00 Hrs
Document Download/Sale End Date	16/03/2021 at 15:00 Hrs
Date for Pre-Bid Conference	Nil
Venue of Pre-Bid Conference	
Last Date and Time for Uploading of Bids	16/03/2021 at 15:00 Hrs
Date and Time of Opening of Technical Bids	17/03/2021 at 15:00 Hrs
EMD	Nil
Tender Fees	Rs. 1500/- (To be paid through RTGS/NEFT. IIT Delhi Bank details are as under: Name of the Bank A/C : Registrar IIT Delhi SBI A/C No. : 10773572622 Name of the Bank : State Bank of India, IIT Delhi, Hauz Khas, New Delhi-110016 
No. of Covers (1/2/3/4)	02
Bid Validity days (180/120/90/60/30)	90 days (From last date of opening of bids)
Address for Communication	EE(CD-III), East Campus Maintenance (Residential Area Maintenance), IIT DELHI.
Contact No.	011-26596237
Fax No.	Nil
Email Address	a26516@admin.iitd.ac.in

# **Instructions for Online Bid Submission:**

As per the directives of Department of Expenditure, this tender document has been published on the Central Public Procurement Portal (<u>URL:http://eprocure.gov.in/eprocure/app</u>). The bidders are required to submit soft copies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal.

More information useful for submitting online bids on the CPP Portal may be obtained at:

http://eprocure.gov.in/eprocure/app

# **REGISTRATION**

- Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL:<u>http://eprocure.gov.in/eprocure/app</u>) by clicking on the link "Click here to Enroll". Enrolment on the CPP Portal is free of charge.
- 2) As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
- 3) Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.
- 4) Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class II or Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / TCS / nCode / eMudhra etc.), with their profile.
- 5) Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSCs to others which may lead to misuse.
- 6) Bidder then logs in to the site through the secured log-in by entering their userID / password and the password of the DSC / eToken.

# SEARCHING FOR TENDER DOCUMENTS

- 1) There are various search options built in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, organization name, location, date, value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as organization name, form of contract, location, date, other keywords etc. to search for a tender published on the CPP Portal.
- 2) Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective 'My Tenders' folder. This would enable the CPP Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the tender document.
- 3) The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.

# PREPARATION OF BIDS

- 1) Bidder should take into account any corrigendum published on the tender document before submitting their bids.
- 2) Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.

C----NIL

- 3) Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF / XLS / RAR / DWF formats. Bid documents may be scanned with 100 dpi with black and white option.
- 4) To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use "My Space" area available to them to upload such documents. These documents may be directly submitted from the "My Space" area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.

# SUBMISSION OF BIDS

- 1) Bidder should log into the site well in advance for bid submission so that he/she upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
- 2) The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- 3) Bidder has to select the payment option as "on-line" to pay the tender fee as applicable and enter details of the instrument. Whenever, Tender fees is sought, bidders need to pay the tender fee separately on-line through RTGS (Refer to Schedule, Page No.2).
- 4) A standard BoQ format has been provided with the tender document to be filled by all the bidders. Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. Bidders are required to download the BoQ file, open it and complete the white coloured (unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. If the BoQ file is found to be modified by the bidder, the bid will be rejected.

OR

In some cases Financial Bids can be submitted in PDF format as well (in lieu of BOQ).

- 5) The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
- 6) All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128 bit encryption technology. Data storage encryption of sensitive fields is done.
- 7) The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- 8) Upon the successful and timely submission of bids, the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
- 9) Kindly add scanned PDF of all relevant documents in a single PDF file of compliance sheet.

C----NIL

# ASSISTANCE TO BIDDERS

- 1. Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.
- 2. Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk. The contact number for the helpdesk is 1800 233 7315.

# General Instructions to the Bidders

- 1) The tenders will be received online through portal <u>http://eprocure.gov.in/eprocure/app</u>. In the Technical Bids, the bidders are required to upload all the documents in .pdf format.
- 2) Possession of a Valid Class II/III Digital Signature Certificate (DSC) in the form of smart card/e-token in the company's name is a prerequisite for registration and participating in the bid submission activities through https://eprocure.gov.in/eprocure/app . Digital Signature Certificates can be obtained from the authorized certifying agencies, details of which are available in the web site https://eprocure.gov.in/eprocure/app under the link "Information about DSC".
- 3) Tenderer are advised to follow the instructions provided in the 'Instructions to the Tenderer for the e-submission of the bids online through the Central Public Procurement Portal for e Procurement at https://eprocure.gov.in/eprocure/app.

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<u>Terms & Conditions Details</u>

S.No.	Specification
1.	Due date: The tender has to be submitted on-line before the due date. The offers received after the
	due date and time will not be considered. No manual bids will be considered.
2.	<b>Preparation of Bids</b> : The offer/bid should be submitted in two bid systems (i.e.) Technical bid and financial bid. The technical bid should consist of all technical details along with commercial terms and conditions. Financial bid should indicate item wise price for the items mentioned in the technical bid in the given format i.e BOQ_XXXX.
	OR Financial Bids to be submitted in Excel. The Technical bid and the financial bid should be submitted Online.
3.	EMD (if applicable): As per NIT
4.	Refund of EMD :- As per NIT
5.	Opening of the tender: As per Tender Notice, NIT & IITD form 8
6.	Acceptance/ Rejection of bids: The competent authority of IIT Delhi reserves the right to reject any or all offers without assigning any reason.
7.	Pre-qualification criteria: - Mentioned in Tender notice
8.	Performance Security:-Mentioned in Tender notice
9.	Force Majeure :- As per IITD form 8
10.	Risk & Cost Clause : As per IITD form 8
11.	Delivery and Documents: As per Tender Notice & NIT & IITD form 8
12.	Delayed delivery: As per Tender Notice & NIT & IITD form 8
13.	Prices: As per Tender Notice & NIT & IITD form 8
14.	Progress of Work : As per Tender Notice & NIT & IITD form 8
15.	Inspection and Tests: As per Tender Notice & NIT & IITD form 8
16.	Resolution of Disputes: As per Tender Notice & NIT & IITD form 8
17.	Applicable Law:As per Tender Notice & NIT & IITD form 8
18.	Supplier Integrity : As per Tender Notice & NIT & IITD form 8
19.	Training : As per Tender Notice & NIT & IITD form 8
20.	Installation & Demonstration : As per Tender Notice & NIT & IITD form 8
21.	Incidental services: As per Tender Notice & NIT & IITD form 8

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22.	Defect liability Period : As per Tender Notice & NIT & IITD form 8
23.	Governing Language : As per Tender Notice & NIT & IITD form 8
24.	Applicable Law : As per Tender Notice & NIT & IITD form 8
25.	Notices : As per Tender Notice & NIT & IITD form 8
26.	Taxes : As per Tender Notice & NIT & IITD form 8
27.	Termination for Default : As per Tender Notice & NIT & IITD form 8
28.	Disputes and Jurisdiction: As per Tender Notice & NIT & IITD form 8
29.	Completion certificate: As per Tender Notice & NIT & IITD form 8

O----NIL

C----NIL

# **ANNEXURE-I**

# **COMPLIANCE SHEET**

# **TECHNICAL SPECIFICATION**

S.No.	Technical Bid Requirement As per Tender Notice & NIT & IITD form 8	Compliance Y/N
1	Performa of EMD declaration (duly filled & signed by the bidders) as given on page-18.	
2	Enlistment order of contractor.	
3	Attested certificate of work experience.	
4	Certificate of Registration for GST and acknowledgement of up to date filed return of GST.	
5	Affidavit as per Notice Inviting Tender Condition 1.3 page 19 of NIT. (Affidavit shall be purchased/ notarized between date of publishing and last date of submission of bids beside this NIT/Tender ID and name of work must be mentioned on the affidavit.).	
6	Acceptance to execute INTEGRITY PACT.	
7	ESI & EPF registration.	
8	FORM "F" (Duly filled with all required details).	
9	Tender Fee of Rs. 1500/- to be deposited through RTGS to Registrar IIT Delhi as per detail given in schedule page-09 and its proof to be uploaded with technical bid	
10	Annexure-1 (Dully Filled & signed by the bidders)	
11	Annexure 2 (Dully Filled & signed by the bidders)	
12	Annexure 3 (Dully Filled & signed by the bidders)	
13	In case of Partnership firm if all the papers of tender not signed by all the partners than a power of attorney authorizing the person who has signed the tender paper must be uploaded with the tender documents.	
14	Undertaking for the VRV/ VRF AC system as given at S.N-14 on page-6	
15	Any other documents given in NIT	
16	BOQ	

I have also enclosed all relevant documents in support of my claims, (as above) in the following pages.

Signature of Bidder

Name: \_\_\_\_\_

Designation: \_\_\_\_\_

Organization Name: \_\_\_\_\_

Contact No. : \_\_\_\_\_

C----NIL

I----NIL O-----NIL

A.E.E. (Civil)

### **ANNEXURE-II**

# << Organization Letter Head >> DECLARATION SHEET

We, \_\_\_\_\_\_\_\_hereby certify that all the information and data furnished by our organization with regard to this tender specification are true and complete to the best of our knowledge. I have gone through the specification, conditions and stipulations in details and agree to comply with the requirements and intent of specification.

This is certified that our organization has been registered as per Tender Notice & NIT & IITD form 8Tender.We further certified that our organization meets all the conditions of eligibility criteria laid down in this tender document.

We, further specifically certify that our	NAME & ADDRESS OF
organization has not been Black Listed/De	THE Vendor/ Manufacturer / Agent
Listed or put to any Holiday by any Institutional	
Agency/ Govt. Department/ Public Sector	
Undertaking in the last three years.	
1. Phone	
2. Fax	
3. E-mail	
4. Contact Person Name	
5. Mobile Number	As per Tender Notice & NIT
6. GST Number	
7. PAN Number	
(In case of on-line payment of Tender Fees)	
8. UTR No. (For Tender Fee)	

(Signature of the Tenderer) Name:

Seal of the Company

# List of Government Organizations for whom the Bidder has undertaken such work As per Tender Notice & NIT & IITD form 8 Name of the organization Name of Contact Person Contact No. As per Tender Notice & NIT Signature of Bidder Name: Designation: Organization Name:

# List of Govt. Organization/Deptt.

Contact No. : \_\_\_\_\_

Annexure-III

# Performa for earnest Money Deposit Declaration on Firms letter head

1. If after the opening tender, I/we withdraw or modify my/our during the period of validity of tender/ quotation (including extended validity of tender/ quotation) specified in the tender documents,

### Or

2. If, after the award of work, I/we fail to sign the contract, or to submit performance guarantee before the deadline defined in the tender documents,

I/we shall be suspended for one year and shall not be eligible to bid for IIT Delhi tenders from date of issue of suspension order.

Signature of contractor (s)

### **IITD-6 FOR e-TENDERING ANDTERM&CONDITIONS**

Item rate tenders are invited on behalf of Board of Governors from contractors/firms engaged in the field of civil construction work in appropriate category for the *work As per tender notice*.

1. The enlistment of the contractors should be valid on the last date of submission of tenders. In case the last date of submission of tender is extended, the enlistment of contractor should be valid on the original date of submission of tenders.

- **1.1** The work is estimated to cost **as per tender notice** This estimate, however, is given merely as a rough guide.
- **1.2** Details of criteria for eligibility As Indicated in "INFORMATION AND INSTRUCTIONS FOR CONTRACTORS FOR e-TENDERING FORMING PART OF NIT AND TO BE POSTED ON WEBSITE"
- 1.3 To become eligible for issue of tender, the tenderer shall have to furnish an affidavit as under:-

I/We undertake and confirm that eligible similar works(s) has/have not been got executed through another contractor on back to back basis. Further that, if such a violation comes to the notice of Department, then I/we shall be debarred for tendering in IITD in future forever. Also, if such a violation comes to the notice of Department before date of start of work, the Engineer-in-Charge shall be free to forfeit the entire amount of Performance Guarantee.

- 2. Agreement shall be drawn with the successful bidders on prescribed Form No. IITD 8 (or other Standard Form as mentioned) which is available as a Govt. of India Publication. Bidders 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 **as per tender notice** from the date of start as defined in schedule 'F' or from the first date 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 shall be made available in parts as and when site will be available.
- 5. The bid document consisting of plans, specifications, the schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents except Standard General Conditions of Contract Form can be seen from the web Site <a href="http://eprocure.gov.in/eprocure/appor">http://eprocure.gov.in/eprocure/appor</a> iitd.ac.in or e-procure.gov.in free of cost.
- 6. After submission of the bid the contractor can re-submit revised bid any number of times but before last time and date of submission of tender as notified.
- 7. While submitting the revised bid, contractor can revise the rate of one or more item(s) any number of times (he need not re-enter rate of all the items) but before last time and date of submission of tender as notified.
- 8. If it is desired to submit revised financial bid then it shall be mandatory to submit revised financial bid. If not submitted then the tender submitted earlier shall become invalid
- 9. The bid submitted shall become invalid if:
- (i) The bidders are found not eligible.
- (ii) The bidders do not upload all the documents (including GST registration and **other documents as per Tender Notice**) as stipulated in the bid document.
- (iii) If any discrepancy is noticed between the documents as uploaded at the time of submission of bid and hard copies as submitted physically in the office of tender opening authority.
- **10.** The time & date of submission & opening of financial bid of contractors qualifying the **criteria as per Tender Notice** shall be communicated to them at a later date.
- 11. The contractor whose bid is accepted, will be required to furnish performance guarantee of 3% (Three Percent) of the tendered and accepted of the bided amount within the period specified in Schedule F. This guarantee shall be in the form of cash (in case guarantee amount is less than Rs. 10000/-) or Deposit at Call receipt of any scheduled bank/Banker's cheque of any scheduled bank/ Demand Draft of any scheduled bank/Pay order of any Scheduled Bank of any scheduled bank (in case guarantee amount is less than Rs. 1,00,000/-) or Government Securities or Fixed Deposit Receipts or irrevocable Bank Guarantee Bonds of any Scheduled Bank or the State Bank of India in accordance with the prescribed form. In case the contractor fails to deposit the said performance guarantee within the period as indicated in Schedule 'F' including the extended period if any, the contractor shall be debarred from tendering in IIT Delhi for a period of one year as per EMD Declaration.
- 12. Intending Bidders 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

C----NIL

- **13.** The competent authority on behalf of the Board of Governors does not bind itself to accept the lowest or any other tender and reserves to itself the authority to reject any or all the tenders received without the assignment of any reason. All tenders in which any of the prescribed condition is not fulfilled or any condition including that of conditional rebate is put forth by the tenderer shall be summarily rejected.
- 14. Canvassing whether directly or indirectly, in connection with tenderers is strictly prohibited and the tenders submitted by the contractors who resort to canvassing will be liable to rejection.
- **15.** The competent authority on behalf of Board of Governors 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.
- 16. The contractor shall not be permitted to tender for works in the IITD responsible for award and execution of contracts, in which his near relative is posted a Divisional Accountant or as an officer in any capacity between the grades of Superintending Engineer and Junior Engineer (both inclusive). He shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives to any gazetted officer in the Central Public Works Department or in the Ministry of Urban Development. Any breach of this condition by the contractor would render him liable to be removed from the approved list of contractors of this Department.
- 17. No Engineer of gazetted rank or other Gazetted Officer employed in Engineering or Administrative duties in an Engineering Department of the Government of India is allowed to work as a contractor for a period of one year after his retirement from Government service, without the previous permission of the Government of India in writing. This contract is liable to be cancelled if either the contractor or any of his employees is found any time to be such a person who had not obtained the permission of the Government of India as afore said before submission of the tender or engagement in the contractor's service.
- **18.** The tender for the works shall remain open for acceptance for a period of ninety (90) days from the date of opening of tenders, 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 Government shall, without prejudice to any other right or remedy, be at liberty to forfeit 50% of the said earnest money as aforesaid. Further the tenderer shall not be allowed to participate in the retendering process of the work.
- **19.** 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 contract consisting of:
  - a) The Notice Inviting Tender, all the documents including additional conditions, specifications and drawings, if any, forming part of the tender as uploaded at the time of invitation of tender and the rates quoted online at the time of submission of bid and acceptance thereof together with any correspondence leading thereto.
- b) Standard IITD Form 8 or other Standard IITD Form as mentioned.
- **20.** In case any discrepancy is noticed between the documents as uploaded at the time of submission of the bid online and hard copies as submitted physically in the office of Executive Engineer, then the bid submitted shall become invalid.

Executive Engineer (CD-III) IIT Delhi, Hauz Khas, New Delhi - 110016

# **Notice Inviting Tender**

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# INDIAN INSTITUTE OF TECHNOLOGY DELHI HAUZ KHAS, NEW DELHI (Works Department)

I.I.T.D

### INDIAN INSTITUTE OF TECHNOLOGY HAUZ KHAS, NEW DELHI - 110016

### NOTICE INVITING TENDER

Item rate tenders are invited on behalf of The Board of Governors, I.I.T. Delhi, Hauz Khas, New Delhi - 16 from approved and eligible contractors of **CPWD** and those of appropriate class of **M.E.S., BSNL and Railway** dealing with building and roads for the work of **Construction of temporary faculty rooms, labs, corridors and toilets in the Gramodaya Parisar at IIT Delhi. Sub Head: - Civil, Electrical, Air Conditioning & CCTV works** 

The enlistment of the contractors should be valid on the last date of submission of tenders.

In case only the last date of submission of tender is extended, the enlistment of contractor should be valid on the original date of submission of tenders.

- 1.1 The work is estimated to cost **Rs. 8,34,52,367/-** This estimate, however, is given merely as a rough guide.
  - 1.1.1 The authority competent to approve NIT for the combined cost and belonging to the major discipline will consolidate NITs for calling the bids. He will also nominate Division which will deal with all matters relating to the invitation of bids.

For composite bid, besides indicating the combined estimated cost put to tender, should clearly indicates the estimated cost of each component separately. The eligibility of bidders will correspond to the combined estimated cost of different components put to bid.

**1.2** Intending bidder is eligible to submit the bid provided he has definite proof from the appropriate authority, which shall be to the satisfaction of the competent authority, of having satisfactorily completed similar works of magnitude specified below:-

### Criteria of eligibility for submission of bid documents.

### **1.2.1** Criteria of eligibility for CPWD as well as non-CPWD contractors.

Three similar works each of value not less than 40% of estimated cost or two similar work each of value not less than 60% of estimated cost or one similar work of value not less than 80% of estimated cost (rounded to nearest Rs. 1000/-) during last 7 years ending on previous day of last day of submission of bids.

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 during last 7 years ending on previous day of last day of submission of bids.

# I.I.T.D

- **1.2.2** To become eligible for issue of bid, the bidders shall have to furnish an affidavit as under :-I/We undertake and confirm that eligible similar works(s) has/have not been got executed through another contractor on back to back basis. Further that, if such a violation comes to the notice of Department, then I/we shall be debarred for bidding in I.I.T.D in future forever. Also, if such a violation comes to the notice of Department before date of start of work, the Engineer-in-Charge shall be free to forfeit the entire amount of Performance Guarantee.
- 2. Agreement shall be drawn with the successful bidders on prescribed Form No. I.I.T.D 7/8 which is available as I.I.T.D. Publication. Bidders shall quote their 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 **as per Tender Notice** from the date of start as defined in schedule 'F' or from the first date of handing over of the site, whichever is later, in accordance with the phasing, if any, indicated in the bid documents.
- 4. The site for the work shall be made available in parts as and when site will be available.
- 5. The bid document consisting of plans, specifications, the schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents except Standard General Conditions of Contract Form can be seen from the web Site www.iitd.ac.in or e-procure.gov.in free of cost.
- 6. After submission of the bid the contractor can re-submit revised bid any number of times but before last time and date of submission of tender as notified.
- 7. While submitting the revised bid, contractor can revise the rate of one or more item(s) any number of times (he need not re-enter rate of all the items) but before last time and date of submission of tender as notified.
- **8.** If it is desired to submit revised financial bid then it shall be mandatory to submit revised financial bid. If not submitted then the tender submitted earlier shall become invalid.

Copy of Enlistment Order and certificate of work experience and other documents as specified in the press notice / web notice shall be scanned and uploaded to the tender website within the period of bid submission. However, certified copy of all the scanned and uploaded documents as specified in press notice / web notice shall have to be submitted by the lowest bidder in the office of tendering authority.

Online bid documents submitted by intending bidders shall be opened only of those bidders, who has deposited tender online fees with and earnest money deposit and other documents scanned and uploaded are found in order.

The bid submitted shall become invalid &Tender fees shall not be refunded if:

- (i) The bidder is found ineligible.
- (ii) The bidder does not upload all the documents as stipulated in the bid documents.
- (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.
- **9.** The contractor whose bid is accepted will be required to furnish **performance guarantee of 3% (Three Percent)** of the bid amount within the period specified in Schedule F. This guarantee shall be in the form of cash (in case guarantee amount is less than Rs. 10000/-) or Deposit at Call receipt of any scheduled bank/Banker's cheque of any scheduled bank/ Demand Draft of any scheduled bank/Pay order of any Scheduled Bank (in case guarantee amount is less than Rs.1,00,000/-) or Government Securities or Fixed

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# I.I.T.D

Deposit Receipts or irrevocable Bank Guarantee Bonds of any Scheduled Bank or the State Bank of India in accordance with the prescribed form. In case the contractor fails to deposit the said performance guarantee within the period as indicated in Schedule 'F' including the extended period if any, the Earnest Money deposited by the contractor shall be forfeited automatically without any notice to the contractor.

- **10.** Intending Bidders are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their bids as to the nature of the ground and subsoil (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 bid. A bidder shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charge consequent on any misunderstanding or otherwise shall be allowed. The bidders shall be responsible for arranging and maintaining at his own cost all materials, tools & 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 bid by a bidder 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 conditions and other factors having a bearing on the execution of the work.
- 11. The competent authority on behalf of the Board of Governors does not bind itself to accept the lowest or any other bid and reserves to itself the authority to reject any or all the bids received without the assignment of any reason. All bids in which any of the prescribed condition is not fulfilled or any condition including that of conditional rebate is put forth by the bidder shall be summarily rejected.
- **12.** Canvassing whether directly or indirectly, in connection with bidders is strictly prohibited and the bids submitted by the contractors who resort to canvassing will be liable to rejection.
- **13.** The competent authority on behalf of Board of Governors reserves to himself the right of accepting the whole or any part of the bid and the bidder shall be bound to perform the same at the rate quoted.
- 14. The contractor shall not be permitted to bid for works in the IITD responsible for award and execution of contracts, in which his near relative is posted a Divisional Accountant or as an officer in any capacity between the grades of Superintending Engineer and Junior Engineer (both inclusive). He shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives to any gazetted officer in the IIT Delhi. Any breach of this condition by the contractor would render him liable to be debarred from bidding process in future in IIT Delhi.
- **15.** No Engineer of gazetted rank or other Gazetted Officer employed in Engineering or Administrative duties in an Engineering Department of the Government of India is allowed to work as a contractor for a period of one year after his retirement from Government service, without the prior permission of the Government of India in writing. This contract is liable to be cancelled if either the contractor or any of his employees is found any time to be such a person who had not obtained the permission of the Government of India as aforesaid before submission of the bid or engagement in the contractor's service.
- **16.** The bid for the works shall remain open for acceptance for a period of **ninety (90) days** from the date of opening of financial bids, if any bidder withdraws his bid before the said period or issue of letter of acceptance, whichever is earlier, or makes any modifications in the terms and conditions of the bid which are not acceptable to the department, then the IIT Delhi shall, without prejudice to any other right or remedy, the bidder shall debarred for tendering in IIT Delhi for a period of one year.
- **17.** This notice inviting bid shall form a part of the contract document. The successful bidder / contractor, on acceptance of his bid by the Accepting Authority shall within 15days from the stipulated date of start of the work, sign the contract consisting of:-

# I.I.T.D

- a) The Notice Inviting Bid, all the documents including additional conditions, specifications and drawings, if any, forming part of the bid as uploaded at the time of invitation of bid and the rates quoted online at the time of submission of bid and acceptance thereof together with any correspondence leading thereto.
- b) Standard IITD Form -7/8 or other Standard IITD Form as mentioned.

**18.**In case any discrepancy is noticed between the documents as uploaded at the time of submission of the bid online and hard copies as submitted physically in the office of Executive Engineer, then the bid submitted shall become invalid and the IIT Delhi shall without prejudice to any other right or remedy, the bidder shall debarred for tendering in IIT Delhi for a period of one year.

To,

# ·····,

# Subject:- NIT No. /IITD/EE(CD-III)/2020-21 for the work of Construction of temporary faculty rooms, labs, corridors and toilets in the Gramodaya Parisar at IIT Delhi.

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# Sub Head :- Civil, Electrical, Air Conditioning & CCTV works

Dear Sir,

It is here by declared that I.I.T.D is committed to follow the principle of transparency, equity and competitiveness in public procurement.

The subject Notice Inviting Tender (NIT) is an invitation to offer made on the condition that the Bidder will sign the integrity Agreement, which is an integral part of tender/bid documents, failing which the tenderer / bidder will stand disqualified from the tendering process and the bid of the bidder would be summarily rejected.

This declaration shall form part and parcel of the Integrity Agreement and signing of the same shall be deemed as acceptance and signing of the Integrity Agreement on behalf of the I.I.T.D.

Yours faithfully

**Executive Engineer (CD-III)** 

# Acceptance to execute integrity pact

### (To be signed by bidder and upload the scanned copy)

To, **Executive Engineer (CD-III),** IIT Delhi, Hauz Khas, New Delhi – 110016.

Subject :- Construction of temporary faculty rooms, labs, corridors and toilets in the Gramodaya Parisar at IIT Delhi.

Sub Head :- Civil, Electrical, Air Conditioning & CCTV works

Dear Sir,

I/We acknowledge that I.I.T.D is committed to follow the principles thereof as enumerated in the Integrity Agreement enclosed with the tender/bid document.

I/We agree that the Notice Inviting Tender (NIT) is an invitation to offer made on the condition that I/We will sign the enclosed integrity Agreement, which is an integral part of tender / bid documents, failing which I/We will stand disqualified from the tendering process. I/We acknowledge that THE MAKING OF THE BID SHALL BE REGARDED AS AN UNCONDITIONAL AND ABSOLUTE ACCEPTANCE of this condition of the NIT.

I/We confirm acceptance and compliance with the Integrity Agreement in letter and spirit and further agree that execution of the said Integrity Agreement shall be separate and distinct from the main contract, which will come into existence when tender/bid is finally accepted by I.I.T.D. I/We acknowledge and accept the duration of the Integrity Agreement, which shall be in the line with Article 1 of the enclosed Integrity Agreement.

I/We acknowledge that in the event of my/our failure to sign and accept the Integrity Agreement, while submitting the tender/bid, I.I.T.D shall have unqualified, absolute and unfettered right to disqualify the tender / bidder and reject the tender/bid is accordance with terms and conditions of the tender/bid.

Yours faithfully

(Duly authorized signatory of the Bidder)

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I----NIL O-----NIL

I.I.T.D

To be signed by the bidder and same signatory competent / authorized to sign the relevant contract on behalf of I.I.T.D.

### **INTEGRITY AGREEMENT**

This Integrity Agreement is made at ..... on this ..... day of..... 20.....

# BETWEEN

The Board of Governors, I.I.T. Delhi, Hauz Khas, New Delhi - 16 represented through Executive Engineer (CD-III) IIT Delhi.

....., (Hereinafter referred as the(Address of Division) **'Principal/Owner'**, which expression shall unless repugnant to the meaning or context hereof include its successors and permitted assigns)

### AND

.....

(Name and Address of the Individual/firm/Company) through ...... (Hereinafter referred to as the (Details of duly authorized signatory)

"Bidder/Contractor" and which expression shall unless repugnant to the meaning or context hereof include its successors and permitted assigns)

### Preamble

AND WHEREAS the Principal/Owner values full compliance with all relevant laws of the land, rules, regulations, economic use of resources and of fairness/transparency in its relation with its Bidder(s) and Contractor(s).AND WHEREAS to meet the purpose aforesaid both the parties have agreed to enter into this Integrity Agreement (hereinafter referred to as "Integrity Pact" or "Pact"), the terms and conditions of which shall also be read as integral part and parcel of the Tender/Bid documents and Contract between the parties.

I----NIL O-----NIL

I.I.T.D

# I.I.T.D

NOW, THEREFORE, in consideration of mutual covenants contained in this Pact, the parties hereby agree as follows and this Pact witnesses as under:

### Article 1: Commitment of the Principal/Owner

- 1) The Principal/Owner commits itself to take all measures necessary to prevent corruption and to observe the following principles:
  - (a) No employee of the Principal/Owner, personally or through any of his/her family members, will in connection with the Tender, or the execution of the Contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.
  - (b) The Principal/Owner will, during the Tender process, treat all Bidder(s) with equity and reason. The Principal/Owner will, in particular, before and during the Tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential / additional information through which the Bidder(s) could obtain an advantage in relation to the Tender process or the Contract execution.
  - (c) The Principal/Owner shall endeavour to exclude from the Tender process any person, whose conduct in the past has been of biased nature.
- 2) If the Principal/Owner obtains information on the conduct of any of its employees which is a criminal offence under the Indian Penal code (IPC)/Prevention of Corruption Act, 1988 (PC Act) or is in violation of the principles herein mentioned or if there be a substantive suspicion in this regard, the Principal/Owner will inform the Chief Vigilance Officer and in addition can also initiate disciplinary actions as per its internal laid down policies and procedures.

### Article 2: Commitment of the Bidder(s)/Contractor(s)

- 1) It is required that each Bidder/Contractor (including their respective officers, employees and agents) adhere to the highest ethical standards, and report to the Government / Department all suspected acts of **fraud or corruption or Coercion or Collusion** of which it has knowledge or becomes aware, during the tendering process and throughout the negotiation or award of a contract.
- 2) The Bidder(s)/Contractor(s) commits himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the Tender process and during the Contract execution:
  - a) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm, offer, promise or give to any of the Principal/Owner's employees involved in the Tender process or execution of the Contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the Tender process or during the execution of the Contract.
  - b) The Bidder(s)/Contractor(s) will not enter with other Bidder(s) into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to cartelize in the bidding process.
  - c) The Bidder(s)/Contractor(s) will not commit any offence under the relevant IPC/PC Act. Further the Bidder(s)/Contract(s) will not use improperly, (for the purpose of competition or personal gain), or pass on to others, any information or documents provided by the Principal/Owner as part of the

business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.

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- d) The Bidder(s)/Contractor(s) of foreign origin shall disclose the names and addresses of agents/representatives in India, if any. Similarly Bidder(s)/Contractor(s) of Indian Nationality shall disclose names and addresses of foreign agents/representatives, if any. Either the Indian agent on behalf of the foreign principal or the foreign principal directly could bid in a tender but not both. Further, in cases where an agent participate in a tender on behalf of one manufacturer, he shall not be allowed to quote on behalf of another manufacturer along with the first manufacturer in a subsequent/parallel tender for the same item.
- e) The Bidder(s)/Contractor(s) will, when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the Contract.
- 3) The Bidder(s)/Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.
- 4) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm indulge in fraudulent practice means a willful misrepresentation or omission of facts or submission of fake/forged documents in order to induce public official to act in reliance thereof, with the purpose of obtaining unjust advantage by or causing damage to justified interest of others and/or to influence the procurement process to the detriment of the Government interests.
- 5) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm use Coercive Practices (means the act of obtaining something, compelling an action or influencing a decision through intimidation, threat or the use of force directly or indirectly, where potential or actual injury may befall upon a person, his/ her reputation or property to influence their participation in the tendering process).

### Article 3: Consequences of Breach

Without prejudice to any rights that may be available to the Principal/Owner under law or the Contract or its established policies and laid down procedures, the Principal/Owner shall have the following rights in case of breach of this Integrity Pact by the Bidder(s)/Contractor(s) and the Bidder/ Contractor accepts and undertakes to respect and uphold the Principal/Owner's absolute right:

- If the Bidder(s)/Contractor(s), either before award or during execution of Contract has committed a transgression through a violation of Article 2 above or in any other form, such as to put his reliability or credibility in question, the Principal/Owner after giving 14 days' notice to the contractor shall have powers to disqualify the Bidder(s)/Contractor(s) from the Tender process or terminate/determine the Contract, if already executed or exclude the Bidder/Contractor from future contract award processes. The imposition and duration of the exclusion will be determined by the severity of transgression and determined by the Principal/Owner. Such exclusion may be forever or for a limited period as decided by the Principal/Owner.
- 2) **Forfeiture of Performance Guarantee/Security Deposit**: If the Principal/Owner has disqualified the Bidder(s) from the Tender process prior to the award of the Contract or terminated/determined the Contract or has accrued the right to terminate/determine the Contract according to Article 3(1), the Principal/Owner apart from exercising any legal rights that may have accrued to the Principal/Owner, may in its considered opinion forfeit the entire amount of Performance Guarantee and Security Deposit of the Bidder/Contractor.

C----NIL

# I.I.T.D

3) Criminal Liability: If the Principal/Owner obtains knowledge of conduct of a Bidder or Contractor, or of an employee or a representative or an associate of a Bidder or Contractor which constitutes corruption within the meaning of IPC Act, or if the Principal/Owner has substantive suspicion in this regard, the Principal/Owner will inform the same to law enforcing agencies for further investigation.

# Article 4: Previous Transgression

- 1) The Bidder declares that no previous transgressions occurred in the last 5 years with any other Company in any country confirming to the anticorruption approach or with Central Government or State Government or any other Central/State Public Sector Enterprises in India that could justify his exclusion from the Tender process.
  - 2) If the Bidder makes incorrect statement on this subject, he can be disqualified from the Tender process or action can be taken for banning of business dealings/ holiday listing of the Bidder/Contractor as deemed fit by the Principal/ Owner.
  - 3) If the Bidder/Contractor can prove that he has resorted / recouped the damage caused by him and has installed a suitable corruption prevention system, the Principal/Owner may, at its own discretion, revoke the exclusion prematurely.

# Article 5: Equal Treatment of all Bidders/Contractors/Subcontractors

- 1) The Bidder(s)/Contractor(s) undertake(s) to demand from all subcontractors a commitment in conformity with this Integrity Pact. The Bidder/Contractor shall be responsible for any violation(s) of the principles laid down in this agreement/Pact by any of its Sub-contractors/sub-vendors.
- 2) The Principal/Owner will enter into Pacts on identical terms as this one with all Bidders and Contractors.
- 3) The Principal/Owner will disqualify Bidders, who do not submit, the duly signed Pact between the Principal/Owner and the bidder, along with the Tender or violate its provisions at any stage of the Tender process, from the Tender process.

### Article 6- Duration of the Pact

This Pact begins when both the parties have legally signed it. It expires for the Contractor/Vendor 09 Months after the completion of work under the contract or till the continuation of defect liability period, whichever is more and for all other bidders, till the Contract has been awarded.

If any claim is made/lodged during the time, the same shall be binding and continue to be valid despite the lapse of this Pacts as specified above, unless it is discharged/determined by the Competent Authority, I.I.T.D.

# Article 7- Other Provisions

- 1) This Pact is subject to Indian Law, place of performance and jurisdiction is the Headquarters of the Division of the Principal/Owner, who has floated the Tender.
- 2) Changes and supplements need to be made in writing. Side agreements have not been made.
- 3) If the Contractor is a partnership or a consortium, this Pact must be signed by all the partners or by one or more partner holding power of attorney signed by all partners and consortium members. In case of a Company, the Pact must be signed by a representative duly authorized by board resolution.

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- 4) Should one or several provisions of this Pact turn out to be invalid; the remainder of this Pact remains valid. In this case, the parties will strive to come to an agreement to their original intensions.
- 5) It is agreed term and condition that any dispute or difference arising between the parties with regard to the terms of this Integrity Agreement / Pact, any action taken by the Owner/Principal in accordance with this Integrity Agreement/ Pact or interpretation thereof shall not be subject to arbitration.

### Article 8- LEGAL AND PRIOR RIGHTS

All rights and remedies of the parties hereto shall be in addition to all the other legal rights and remedies belonging to such parties under the Contract and/or law and the same shall be deemed to be cumulative and not alternative to such legal rights and remedies aforesaid. For the sake of brevity, both the Parties agree that this Integrity Pact will have precedence over the Tender/Contact documents with regard any of the provisions covered under this Integrity Pact.

IN WITNESS WHEREOF the parties have signed and executed this Integrity Pact at the place and date first above mentioned in the presence of following witnesses:

(For and on behalf of Principal/Owner)

(For and on behalf of Bidder/Contractor)

WITNESSES:

1. .....

(signature, name and address)

2. ....(signature, name and address)

Place:

Dated :

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# I.I.T.D - 7/8 e-TENDERING

I.I.T.D

# INDIAN INSTITUTE OF TECHNOLOGY HAUZ KHAS, NEW DELHI - 110016

Percentage Rate Tender/Item Rate Tender & Contract for Works

Tender for the work of : Constructions of temporary faculty rooms, labs, corridors and toilets in the Gramodaya Parisar at IIT Delhi. Sub Head :- Civil, Electrical, Air Conditioning & CCTV works

(i) To be submitted by <b>as per tender notice</b> to
(ii) To be opened in presence of bidders who may be present at <b>as per tender notice</b>
in the office of <b>D.R. (Store</b> )
Issued to
Signature of officer issuing the documents
Designation
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 & 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 The Board of Governors, I.I.T. Delhi, Hauz Khas, New Delhi - 16 within the time specified in Schedule 'F' viz., schedule of quantities and in accordance in all respect with the specifications, designs, drawing 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 respect of accordance with, such conditions so far as applicable.

We agree to keep the tender open for ninety (90) days from the date of opening of financial bid.

A sum of **as per tender notice** is hereby forwarded in Banker Cheque or Demand Draft or Fixed Deposit receipt of a schedule bank drawn in favour of IIT Delhi as earnest money. If I/We, fail to furnish the prescribed performance guarantee within prescribed period. I/We agree that the said The Board of Governors, I.I.T. Delhi, Hauz Khas, New Delhi - 16 or his successors, 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 work as specified, I/We agree that The Board of Governors, I.I.T. Delhi, Hauz Khas, New Delhi - 16 or the 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 those in excess of that limit at the rates to be determined in accordance with the provision contained in Clause 12.2 and 12.3 of the tender form. Further, I/We agree that in case of forfeiture of

# I.I.T.D - 7/8 e-TENDERING

Earnest Money & Performance Guarantee as aforesaid. I/We shall be debarred for participation in the retendering process of the work.

I/We undertake and confirm that eligible similar work(s) has/have not been got executed through another contractor on back to back basis. Further that, if such a violation comes to the notice of Department, then I/We shall be debarred for tendering in I.I.T.D in future forever. Also, if such a violation comes to the notice of Department before date of start of work, the Engineer-in-Charge shall be free to forfeit the entire amount of Performance Guarantee.

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 authorized to communicate the same or use the information in any manner prejudicial to the safety of the State.

Dated:

Signature of Contractor

Postal Address

Witness:

Address:

Occupation:

# I.I.T.D - 7/8 e-TENDERING

# I.I.T.D

# ACCEPTANCE

The above tender (as modified by you as provided in the letters mentioned hereunder) is accepted by me for an on behalf of The Board of Governors, I.I.T. Delhi, Hauz Khas, New Delhi - 16 for a sum of (Rupees.....). The letters referred to below shall form part of this contract agreement:-(a) (b) (c) For & on behalf of Board of Governors, IIT Delhi Signature .....

Dated: Designation .....

# **PROFORMA OF SCHEDULES**

# I.I.T.D

# **PROFORMA OF SCHEDULES**

(Separate Performa for Civil, Elect.& Hort. Works in case of Composite Tenders) (Operative Schedules to be supplied separately to each intending tenderer)

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# SCHEDULE 'A'

Schedule of quantities (enclosed)

# SCHEDULE 'B'

### Schedule of materials to be issued to the contractor.

S. No.	Description of item	Quantity	Rates in figures & words at which the material will be charged to the Contractor	Place of issue
1			4	
	Nil			

# SCHEDULE 'C'

Tools and plants to be hired to the contractor

S.No.	Description	Hire charges per day	Place of Issue
1			
	Nil		

# SCHEDULE 'D'

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



# **PROFORMA OF SCHEDULES**

#### SCHEDULE 'E'

Reference to General Conditions of contract.

Name of work:- Construction of temporary faculty rooms, labs, corridors and toilets in the Gramodaya Parisar at IIT Delhi.

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Sub Head :- Civil, Electrical, Air conditioning & CCTV works

(i)	Estimated cost of work	: <b>Rs. 8,34,52,367/-</b>
(ii)	Earnest Money	: NIL
(iii)	Performance Guarantee	: 3% of tendered value
(iv)	Security Deposit	: 5% of tendered value

#### SCHEDULE 'F'

#### GENERAL RULES & DIRECTIONS : Officer inviting tender IITD/ Form – 7/8-2010

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: See below **Definitions:** Engineer-in-Charge **Executive Engineer** 2(v) 2(viii) Accepting Authority Institute Engineer  $2(\mathbf{x})$ Percentage on cost of materials and Labour to cover all overheads and profits: 15% Civil, Electrical :- DSR 2018 & Market Rate 2(xi)Standard Schedule of Rates -2(xii)Department -Works department at I.I.T Delhi 9(ii) Standard I.I.T.D Contract Form GCC 2010, I.I.T.D Form 7/8-2010 modified & Corrected up to date of submission of tender. Clause 1 (i) Time allowed for submission of Performance Guarantee from the date of issue of letter of acceptance 15 days (i) Maximum allowable extension with late fees @ 0.1% per day of performance guarantee amount beyond the period provided in (i) above 1 to 15 days

Clause 2 Authority for fixing compensation under clause

**Institute Engineer** 

# **PROFORMA OF SCHEDULES**

#### Clause 2A

Whether Clause 2A shall be applicable

#### Clause 5

Number of days from the date of issue of letter of award for reckoning date of start

#### Mile stone(s) as per table given below:-

Sl. No.	Description of Milestone (Financial)	Time allowed in days (from date of start)	Amount to be with-held in case of non-achievement of mile stone
			In the event of not achieving the
1	$1/8^{\text{th}}$ (of the whole work)	$1/4^{\text{th}}$ (of the whole work)	necessary progress as assessed
2	$3/8^{\text{th}}$ (of the whole work)	$1/2^{\text{th}}$ (of the whole work)	from the running payment, 1% of
3	$3/4^{\text{th}}$ (of the whole work)	$3/4^{\text{th}}$ (of the whole work)	the Tender value of work will be
4	Full	Full	withheld for failure of each
			milestone.

As per tender notice.

Time allowed for execution of work Authority to decide:

> (i) Extension of time **Institute Engineer.**

> (ii) Rescheduling of mile stones **Institute Engineer.**

#### Clause 6, 6A

Clause applicable - (6 or 6A) ..... Clause 6A.....

#### 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 Rs. 50.00 Lakhs

#### Clause 10A

I.I.T.D

No

10 (Ten) days

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



Whether Clause 10 B (ii) shall be applicable

#### Clause 10C

Component of labour expressed as percent of value of work = 25%

#### Clause 10CA

S.N.	Nearest Materials (other than cement, reinforcement bars and the structural steel) for which All India Wholesale Price Index to be followed	Materials covered under
1		
2		
3		
4		

\* Base price of all the materials covered under clause 10 CA is to be mentioned at the time of approved of NIT.

#### Clause 10CC :- Not applicable in this NIT/Tender

Clause 10 CC to be applicable in contracts with stipulated period of completion exceeding the period shown in next column 18 months

Schedule of component of other Materials, Labour, POL etc. for price escalation.

Component of civil (except materials covered under clause 10CA) /Electrical construction Materials expressed as percent of total value of work	Xm	%
Component of Labour - expressed as percent of total value of work.	Y	%
Component of P.O.L expressed as percent of total value of work.	Z	%

#### Clause 11

Specifications to be followed for execution of work

CPWD specifications 2009 Vol-1 & 2 with upto date correction slips & manufacturers specifications

#### Clause 12

Type of work -Maintenance works including works of up-gradation, aesthetic, special repair, addition/ alteration, temporary construction.

No

PROFORMA OF SCHEDULES I.I.T.D					
12.2. 8	& 12.3 Deviation Limit beyond which clauses 12.2 & 12.3 shall apply for bui	lding work 30%			
Clause 16	Competent Authority for				
	deciding reduced rates.	Institute Engineer			
Clause 18	List of mandatory machinery, tools & plants to 1	be deployed by the contractor at site:-			
Clause 25	4				
Clause 23	Committee (DRC)     D       DRC shall constitute=one=Chairn and a	ompetent Authority to appoint RC ir <del>cetor Indian Inst</del> itute of Technolog elhi			

#### Clause 36 (i)

Requirement of Technical Representative(s) and recovery Rate

	Minimum Qualification of Technical Representative	Discipline	Designation (Principal Technical/ Technical	Minimum Experience (Years)		Rate at which rea made from the co event of not fulfi	ontractor in the
	Technical		Technical/	<b>^</b>			
R				(Years)		event of not fulf	illing provision
R	Representative .		Technical				ning provision
	•					of clause 36(i)	
			Representative)				
						Figures	Words
1. Dip	Graduate Engineer Graduate Engineer Or Diploma Engineer	Civil Civil + Electrical	Project Manager Project Planning/ quality/billing Engineer	5 (and having experience of one similar nature of work) 2 5	1	Rs. 25,000/- Per	

Assistant Engineers retired from Government services that are holding Diploma will be treated at par with Graduate Engineers.

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# **PROFORMA OF SCHEDULES**

#### Clause 42

(i) (a) Schedule/statement for determining theoretical quantity of cement & bitumen on the basis of Delhi Schedule of Rates **2018** printed by C.P.W.D.

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(ii) Variations permissible on theoretical quantities:

(a) Cement

	For works with estimated cost put to tender not more than Rs. 5 lakh. For works with estimated cost put to tender more than Rs. 5 lakh.	3% plus/minus. 2% plus/minus.
(b)	Bitumen All Works	2.5% plus only & nil on minus side.
(c)	Steel Reinforcement and structural steel sections for each diameter, section and category	2% plus/minus
(d)	All other materials.	Nil

## RECOVERY RATES FOR QUANTITIES BEYOND PERMISSIBLE VARIATION

S. No.	Description of Item	Rates in figures and words at which recovery shall b made from the Contractor	
		Excess beyond permissible variation	Less use beyond permissible variation
1.	Cement		
2.	Steel Reinforcement		
3.	Structural Sections	As per CPWD	Specification 2009
4.	Bitumen issued free		
5.	Bitumen issued at stipulated fixed Price		

## **BANK GUARANTEE BOND**

## I.I.T.D

#### Form of Earnest Money Deposit Bank Guarantee Bond

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SEALED with the Common Seal of the said Bank this .....day of ...... 20.... THE CONDITIONS of this obligation are:

- (1) If after tender opening the Contractor withdraws, his tender during the period of validity of tender (including extended validity of tender) specified in the Form of Tender;
- (2) If the contractor having been notified of the acceptance of his tender by the Engineer-in-Charge:
- (a) fails or refuses to execute the Form of Agreement in accordance with the Instructions to contractor, if required;

OR

(b) fails or refuses to furnish the Performance Guarantee, in accordance with the provisions of tender document and Instructions to contractor,

OR

(c) fails or refuses to start the work, in accordance with the provisions of the contract and Instructions to contractor,

OR

(d) fails or refuses to submit fresh Bank Guarantee of an equal amount of this Bank Guarantee, against Security Deposit after award of contract.

We undertake to pay to the Engineer-in-Charge either up to the above amount or part thereof upon receipt of his first written demand, without the Engineer-in-Charge having to substantiates his demand, provided that in his demand the Engineer-in-Charge will note that the amount claimed by his is due to him owing to the occurrence of one or any of the above conditions, specifying the occurred condition or conditions.

This Guarantee will remain in force up to and including the date\* ...... after the deadline for submission of tender as such deadline is stated in the Instructions to contractor or as it may be extended by the Engineer-in-Charge, notice of which extension(s) to the Bank is hereby waived. Any demand in respect of this Guarantee should reach the Bank not later than the above date.

DATE .....

WITNESS .....SEAL

#### SIGNATURE OF THE BANK

(SIGNATURE, NAME AND ADDRESS)

\*Date to be worked out on the basis of validity period of 6 months from last date of receipt of tender

A.E.E. (Civil)

## LIST OF APPROVED MAKES FOR CIVIL & Electrical works

A-0	Civil Items	
	Description	Approved Makes
1	EWC Seat Covers	HINDWARE/PARRYWARE/ CERA
2	C.P Brass Fittings/ Accessories	JAQUAR, MARC, KOHLAR
3	Cement (Grey) OPC/ PPC Grade-43	ACC/ L&T/ J.K./ BIRLA/ ULTRA TECH/ VIKRAM
4	Cement (White)	J.K./ BIRLA
5	Reinforcement Steel	PRIMARY MANUFACTURERS APPROVED BY MINISTRY OF
_		STEEL/ SECONDARY MANUFACTURER HAVING VALID BIS
		LICENSE (TO BE AS PER LATEST BIS PROVISIONS)
6	Structural Steel	PRIMARY MANUFACTURERS APPROVED BY MINISTRY OF
-		STEEL/ SECONDARY MANUFACTURER HAVING VALID BIS
		LICENSE (TO BE AS PER LATEST BIS PROVISIONS)
7	Stainless Steel (Grade 304)	JINDAL/ SAIL/ SALEM
8	Bricks	COMMERCIALLY AVAILABLE OR REQUIRED STRENGTH
9	Aluminum Sections	HINDALCO/ JINDAL/ MAHAVIR
10	Flush Doors	CENTURY/ MERINO/ DURO BOARD/ GREEN
11	Laminates	GREENLAM/ DURO/ ARCHID/ MERINO/ DECOLAM/ CENTURY
12	Glass	SAINT GOBIN/ MODI FLOAT/ ASAHI FLOAT
13	Ceramic Glazed tiles/ Border tiles	1 <sup>ST</sup> QUALITY KAJARIA / NITCO/ JOHNSON/ ORIENT/ SOMANY
13	Vitrified Tiles	JOHNSON/ KAJARIA/ ORIENT/ SOMANY
15	Interlocking precast paver blocks/ Kerb	HINDUSTAN TILES/ SWASTIK/ DALAL
15	Stone	
16	Stainless Steel Hinges	JOLLY/ GARG/ AMIT/ ASI/ SUPREME
17	Stainless Steel Nuts bols / Screws	KUNDAN/ PUJA/ ATUL/ GKW
18	Paint/ Primer/ Oil bound distemper/ Acrylic	1 <sup>ST</sup> QUALITY PAINTS OF ASIAN/ BERGER/ NEROLAC/
10	paint/ Plastic paint	SHALIMAR/ DULUX
19	Water Proof Cement Paint/ Exterior Paint	1 <sup>ST</sup> QUALITY PAINTS OF ASIAN/ BERGER/ NEROLAC/
17	Water 11001 Cement 1 and Exterior 1 and	SHALIMAR/ DULUX
20	Sanitary ware (Vitreous China) (European	HINDWARE/ PARRYWARE/ CERA
20	Seats, Urinals, Wash Basins, etc.)	
21	G.I. Pipes	TATA/ JINDAL(HISSAR)/ BHUSHAN/ APL APPOLO/ TT SWASTIK
22	G.I. Fittings	UNIK/ ZOLOTO/ AM
23	Stainless Steel Sink	NEELKANTH/ JAINA/ KINGSTON (COBRA)/ PRAYAG
24	Commercial Board/ Ply	MERINO/ DURO/ GREEN/ CENTURY/ KIT (SWASTIK)
25	CI Pipes/ Fittings & Manhole covers	RIF/ NECO/ BENGAL IRON WORKS/ BC/ SKF
26	CI Pipes "Class LA"	NICO/ KESORAM/ ELECTRO STEEL/ KAPILANSH
27	Floor Spring	DOORKING/ EVERITE/ SANDHU
28	Door Closer	EVERITE/ SANDHU/ HARDWIN
29	Mirror	ATUL/ MODIGUARD/ SAINT GOBAIN/ AASHI
30	Vertical Blinds	VISTA/ MAC/ MARVEL DÉCOR/ SAINT GOBAIN
31	False Ceiling	ARMSTROBG/ SAINT GOBAIN/ META WORTH
32	Water Proofing Compound	CICO/ FOSROC/ PIDILITE/ ECMAS/ ASIAN
32	Polymer Compound	CICO/ PIDILITE/ FOSROC/ ECMAS/ ASIAN
33	Particle Board	NOVA PAN/ BHUTAN BOARD/ ECO BOARD
35	Rust Remover/ Anticorrosive	FOSROC/ CICO/ PIDILITE/ ECMAS/ ASIAN
36	Adhesive	FEVICOL/ VAMICOL/ DUNLOP/ VAM ORGANIC
37	Tile Adhesive	PIDILITE/ FERROUSCRETE/ BALLNDURA/ CICO
38	Wall Putty	BIRLA / JK/ SARA
38 39	Epoxy Grout	BALLENDURA/ KERAKOLL/ FERROUSCRETE
39 40		SINTEC/ UNI PLAST/ POLYWELL
40	PVC Water storage tank (ISI marked) PVC insulated water storage tank Heavy	SINTEC/ UNI PLAST/ POLY WELL SINTEX/ UNI PLAST/ POLYWELL/ EURO
41	duty 4/5 layer	$\frac{1}{2} \sum_{i=1}^{2} \sum_{j=1}^{2} \sum_{i=1}^{2} \sum_{j=1}^$
42	Brass Ball Valve/ Gate Valve/ Float Valve	ZOLOTO/ AM/ LEADER/ SANT
<b>⊣</b> ∠	Drass Dan varve/ Gale varve/ Fillar valve	

C----NIL

43	Aluminum Door Fittings	CLASSIC/ EVEREST/ ARGENT
44	Brass Bib/ Stop Cock	AGI/ ELITE/ SHAKTI/ SANT/ LEADER/ PRIMA
45	Thermoplastic Paint	CBM/ CMS/ S.N. INDUSTRIES
46	Plaster of Paris Putty	ADHARSHREE/ SHREE RAM/ J.K./ BIRLA
47	Rcc Pipe	LAKSHMI/ SOOD & SOOD/ JAIN & CO. / DIWAN SPUN PIPES
48	Pvc Pipe	PRAKASH/ PRINCE/ SUPREME
49	Sandwich Roof Panel (Puff Panel)	JSW, BHUSHAN, D-META
50	WPC Board And MPC Board	FLORESTA, ECOSTE, RAJ SHREE
51	WPC Door Frame	FLORESTA, ECOSTE, RAJ SHREE
52	Self Closing Hinges	HETTICH, KITCH, PLUM
53	Poly Carbonate Sheet	GE LEXAN / POLYGAL/ TUFLITE
54	Acp Panel	ALSTRONG/ ALUCOBOND/ EUROBOND/ ALUDECOR
55	Acoustic Wooden/ Fabric Paneling	ARMSTRONG/ ANUTONE/CREDENCE/ TOPAKUSTIC
56	Polyvinyl Flooring	ARMSTRONG / POLY FLOR/ TARKETT
57	Glow Stud, Solar Power Stud	ROAD STAR / 3M / DARK EYE /EVERY DENNISON
58	Wooden Flooring	VISTA/ ACTION TESA/ ARMSTRONG/ PERGO
59	Sun Control Film	3M/ GARWARE/ SAINT GOBAIN
60	Insulation	UP TWIGA LTD OR EQUIVALENT
61	Fire Door	NAVAIR/ SHAKTI/ GODREJ/ RADIANT
62	Flush Door Shutters Of Various Thickness	MERINO/ DURO/ GREEN/ CENTURY/ KIT (SWASTIK)
	Furniture	
63	Work Station	GODREJ INTERIO/ HAWORTH/ STEELCASE/ WIPRO/
		FEATHERLITE/ HERMAN MILLER
64	Executive Table/ Other Table	GODREJ INTERIO/ HAWORTH/ STEELCASE/ WIPRO/
-		FEATHERLITE/ HERMAN MILLER
65	Chair/ Audi Chair	GODREJ INTERIO/ HAWORTH/ STEELCASE/ WIPRO/
		FEATHERLITE/ HERMAN MILLER
66	Lab Furniture's	KEWANEE/ WALDNER/ GODREJ/ WIPRO/ FEATHERLITE
67	Hostel Beds And Cots	ZUARI/ EVOK/ GODREJ/ WIPRO/ FEATHERLITE
68	Hospital Beds	HUNTLEY/ STRIKER/ GODREJ/ WIPRO/ FEATHERLITE
	Electrical	
69	LED Luminaire	PHILIPS/ PANASONIC/ WIPRO/ BAJAJ
70	Conduit	ISI MARKED
71	Power Cables	HAVELLS/ NICCO/ SKYTONE/ GLOSTER
72	Copper Wires	FINOLEX/ HAVELLS/ KEI/ POLYCAB
73	MCB	HAVELLS/ L&T/ SIEMENS/ STANDARD/ CROMPTON/
		LEGRAND/ GM/ C&S
74	DB	HAVELLS/ L&T/ SIEMENS/ STANDARD/ CROMPTON/
		LEGRAND/ GM/ C&S
75	Switch & Socket	LEGRAND/ HAVELLS CRABTREE/ L&T/ MDS/ WIPRO NORTH
		WEST/ GM/ POLYCAB/ SCHNEIDER
76	Ceiling Fan	USHA/ HAVELLS/ ATOMBERG/ ORIENT/ BAJAJ
77	Fan Regulator	GM/ NORTH WST/ HAVELLS/ POLYCAB/ MDS/ LEGRAND
78	Industrial Plug Sockets	HAVELLS/ STANDARD/ BCH/ L&T
79	Fresh Air/ Exhaust Fans	HAVELLS/ USHA/ BAJAJ/ ORIENT
80	МССВ	SIEMENS/ L&T/ GE POWER CONTROLS/ C&S/ CROMPTON/
		HAVELLS/ LEGRAND
81	PVC (DMC) Trunking with all accessories	HAGER/ LEGRAND/ GM
82	SFU	HAVELLS/ L&T/ STANDARD/ HPL
83	VRF/ VRV AC Unit (indoor & outdoor)	As per BOQ (vide Schedule of quantity)
84	CPVC Pipe	SUPREME/ SUDHAKAR/ FONOLEX/ PLAZA/ ALG
85	Control Cable	HAVELLS/ GLOSTER/ KEC/ NICCO/ INCAB/ UNIVERSAL/
		FINOLEX/ RR KABEL/ V-GUARD/ KEI WITH ISI MARKED

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## INDIAN INSTITUTE OF TECHNOLOGY: NEW DELHI HAUZ KHAS: NEW DELHI ADDITIONAL CONDITIONS

- Non Judicial stamp paper worth Rs. 10/- (Ten Rupees only) will be submitted by contractor which will have to be signed as token of acceptance.
- 2. No T & P would be supplied by the Institute and contractor will have to make his own arrangement.
- 3. The contractors are advised to get acquitted with the proposed work including specifications & its site and additional conditions carefully before quoting. No claim of any sort shall be entertained or account of any site conditions and ignorance of specifications & additional conditions. The work shall be carried out as per the availability of site.
- 4. The work shall be carried out as per CPWD specifications for civil and electrical work with up to date correction slips unless otherwise specified in the nomenclature of individual item or in the specification, additional conditions where specifications are silent, the decision of Engineer-in-Charge shall be final and binding on contractor.
- 5. The rates quoted by the contractor shall be taken as net and nothing extra shall be paid on any account i.e Royalty, Cartage, GST & stacking of material required at places etc. The rates for different items of work shall apply for Heights & Depths, Leads & Lifts unless otherwise specified in the agreement or specifications applicable in the agreement.
- 6. Any damage done by the contractor to any existing item / any part of the building during the course of execution of work shall be made good by at his own cost.
- 7. Articles manufactured by the reputed firms as per approved make list and as approved by Engineer-in-charge shall only be used at work.
- 8. The sample of material required in the work brought at site shall be got approved from Engineer –in-Charge before use in execution of work.
- 9. The sample of material required for Testing shall be provided at free of cost by the contractor. Testing charges if any shall be borne by the IITD if satisfactory report and if test results are unsatisfactory than testing charges shall be deducted from bills of contractor. All other expenditure to be incurred for taking sample, conveyance, packing etc. shall be borne by the contractor.
- 10. The contractor shall submit a detailed program of work within 7 days of the date of award of work. The Engineer in- Charge can modify the program and the contractors have to work accordingly.
- 11. The contractor shall make his own arrangement for getting the permission with respect to trucks from the Traffic Police.
- 12. No payment shall be made to contractor for any damage caused by the rain, snowfall or any other natural causes what so ever during the execution of work.
- 13. Some restrictions may be imposed by the security staff of IIT Delhi etc. on the working and or movement of labour& material. No labour camp/ huts shall be allowed in IIT Campus. The contractor shall make his own arrangement for labour huts outside the campus. However constructions of cement godown and Chowkidar's hut in the Campus shall be permitted. The contractor shall be bound to follow all such restrictions/ instructions and nothing shall be payable on this account.
- 14. The contractor shall be fully responsible for the safe custody of the material issued or brought at site by him for doing the work.
- 15. The Malba / Garbage generated at site due to construction activities shall be removed from the site immediately & shall be disposed off by the contractor to the approved dumping site of MCD and all statutory approvals from local bodies shall be a sole responsibility of contractor.

45

C----NIL

I----NIL O-----NIL

E. E. (CD-III)

- 16. The contractor shall clean the site thoroughly of scaffolding materials, rubbish, equipment's left out of his work & dress the site around the building to the complete satisfaction of the Engineer-in-Charge before the work is treated as completed.
- 17. Contractor has to quote against the item of schedule of credit of material. The contractor cannot quote either minus rate or Zero rate for these items.
- 18. Income tax and other taxes as applicable shall be deducted from the bills of contractor.
- 19. 1% labour cess or as applicable will be deducted from the bills of contractor.
- 20. Water charges @1% and Electricity charges @0.50% of gross work done shall be deducted from bills of contractor if electricity and water provided by IIT Delhi.
- 21. Agency has to take proper safety major during the execution of work.
- 22. GCC for 7/8 shall form part of NIT and the bidder shall go through GCC before quoting rates and the same shall be deemed to be accepted by bidder if he participates in the tender.
- 23. ESI & EPF shall be reimbursed as per norms on production of original receipt of ESI & EPF from contractor specific to this work.
- 24. The contractor shall submit the programmer of execution of work as per clause 5 of GCC of IIT form 7/8 of NIT including list of workers to be deployed by contractor for this work.
- 25. Contractor shall be responsible for keeping site free of any kind of mosquito breeding. If it is found that breeding is taking place the entire responsibility shall be of contractor to bear challan etc. done by local bodies.
- 26. Work shall be executed as per the Architectural drawings and instructions of retainer Architect or his representatives. The Architectural drawing and instruction of Architect shall be strictly adhered.
- 27. GST shall considered as inclusive in quoted rate of agency.
- 28. Electrical work will be executed only through the agency who is having valid electrical license and the copy of valid electrical license will be submitted before start of work.
- 29. Original warranty certificate from O.E.M/ Original manufacturer of furniture will be obtained by the agency and same will be handed over to the representative of engineer-in-charge.
- 30. Required Guarantee of VRF/VRV units from the OEM in favour of the Engineer-in-charge to cover defect liabilities and final bill will only be released after submitting the required certificate.
- 31. VRF/VRV air-conditioning work shall only be got executed only by the manufacturer or their authorized agency approved by Engineer-in-charge.
- **32.** For design of truss detailed structural design by any structural designer and duly vetted by NIT/IIT will be submitted by the agency. The Successful bidder essentially submit the detailed structural design **within a week** from the date of issue the award letter which will be than vetted by NIT/IIT & agency will also be submit the stability report duly examined & issued by NIT/IIT. All above work will be in the scope of successful bidder & **nothing extra will be paid on account of structural design.**

#### Special Condition for VRV/ VRF :-

- (1) This specification covers supply and delivery of materials at site, all preparatory work assembly and installation, commissioning putting into operation of VRF / VRV system & final testing & commissioning at site.
- (2) The work shall be executed as per CPWD General Specifications for Electrical Works Part-I (Int.) 2013, Part-II (Ext.) 1994, HVAC Work 2017, as amended upto date, relevant I.E. Rules, BIS/IEC and as per directions of Engineer-in- Charge. These additional specifications/conditions are to be read in conjunction with above and in case of variations; specifications given in these additional conditions shall apply. However, nothing extra shall be paid on account of these additional specification and conditions, as the same are to be read along with schedule of quantities for the work.
- (3) All equipment's shall be guaranteed for a period of 12 months from the date of taking over the installation by the department against unsatisfactory performance and / or breakdown due to defective design, workmanship or material. The equipment or component, or any part thereof, so found defective during guarantee period shall be forthwith repaired or replaced free of cost to the satisfaction of the Engineer-in- Charge. In case it is felt by the department that undue delay is being caused by the contactor in doing this, the same will be got done by the department at the risk and cost of the contractor. The decision of Engineer-in-Charge in this regard shall be final & binding on the contractor.
- 3.1 The tenderer shall guarantee among other things, the following:
- 3.2 Quality, strength and performance of the material used as per manufacturer's standards.
- 3.3 Safe mechanical and electrical stress on all part under all specified conditions of operation.
- 3.4 Satisfactory operation during the maintenance period.

4. **VRF/VRV** air conditioning work shall only be got executed only by the manufacturer or their authorized dealers/ representative.

#### 5. **Operation and Maintenance**

5.1 **The** maintenance during one year warranty period & subsequent five years shall be as per **Annexure - 4** of the NIT and as per CPWD General Specifications for HVAC work 2017 as amended up to date and as per Manufacturer Standard for CCTV System. A separate **supplementary agreement** shall be made with the successful tenderer for sub head "AMC *i.e.* Routine, Preventive & Breakdown Maintenance (for 5 years after one year guarantee period)" of schedule of work. The payment of maintenance may be made half yearly after the end of each six months.

5.2 Any fault pertaining to VRF unit shall be attended within 4 hours of reporting. Beyond 4 hours of non-attendance, penalty shall be imposed @Rs.200/- per every hour subject to maximum of 10% of the tendered amount (AMC part). Persistent non-attendance beyond 08 hours may be got done by the Institute at the risk and cost of the contractor. Decision of Engineer-in-charge in this regard shall be final and binding upon the contractor.

# MAINTENANCE

**GENERAL FOR HVAC:** This section covers the maintenance schedule during warranty period and 5 years subsequent to warranty period.

The maintenance provided during the warranty period shall be fully comprehensive and shall include but not limited to all equipment's, labour part and emergency calls providing and site response within 24 hours. However during the maintenance period after the warranty is over, the material shall be arranged by the department if any replacement is warranted.

The maintenance shall also include a minimum 12 monthly preventive maintenance visits by qualified personnel who are thoroughly familiar with the type of equipment and system provided for this project.

Ain	Monthly	1	Increase all air han dling and fan aailit-
Air	Monthly		Inspect all air handling and fan coil units
handling	inspection		Check all air filters and clean or change filters as necessary
units and		3.	Check and re-calibrate modulating valves and controls. Adjust and
fan coil			rectify as necessary to ensure compliance to the original
units			specifications
[Indoor		4.	Check and clean all the condensate pans, trays and drain
units]		5.	Check, measure and re-calibrate all sensors if necessary
		6.	Check spring vibration isolators for abnormal vibration. Rectify if
			necessary.
			Coil to be cleaned
Air	Annual		Perform all functions for monthly check
handling	inspection prior	2.	Tighten motor terminals
units and	to expiry of		Check starter contacts
fan coil	warranty period	4.	Test and calibrate overload settings
units [do]		<u> </u>	
Air cooled	Monthly check	1.	Check condenser fan motor load ampere
packaged		2.	Check fan and motor mounting brackets
units and			Check shafts and bearings. Lubricate with grease as necessary.
VRF /			Check the tension of all belt drives and adjust as necessary
VRV air		5.	Check for refrigerant leaks with electronic leak detector
condition		6.	Check electrical terminals and contactors operation and connections
equipment			for tightness
		7.	Check compressor motor current
		8.	Check refrigerant line driers and moisture indicators
Air cooled	Annual	Per	form all functions listed in the monthly check
packaged	inspection prior		
units VRV	to expiry of		
/ VRF and	warranty period		
precision			
AC			
equipment			
Air	Monthly and	1.	Check operation of all modulating and fixed dampers controlling air
distribution	Annual		flow through unit. Lubricate all damper bearings and linkages as
system	inspection prior		necessary
[Indoor		2.	Carry out space temperature checks on air conditioned areas with
units]	warranty period		thermo hydrograph. Balance air flow as necessary to compliance with
	V 1		requirements of original specifications. These checks include the
			calibration of sensors, thermostat etc.
		3.	Check noise level of discharged air from diffusers
Switch	Six-monthly and	1.	Clean and adjust all switchgear, contactors, relays and associated
board	Annual		electrical equipment at intervals not exceeding six months
	inspection prior	2.	Check and prove operation of thermal overload and protection
	to expiry of		devices
		1	
	warranty period	3.	Check and ensure tightness of all equipment fastenings and cable

	terminations within switch boards
	4. Vacuum clean all switch board cubicles
Monthly and	1. Check all piping system for leaks and repair these where they have
Annual	occurred
inspection prior	2. Check for damage & deterioration of insulation or sheathings. Rectify
to expiry of	as necessary.
Consumable	The department shall supply the following consumable materials as and
materials	when required:-
	1. All greases and oils required for lubrication of compressors, fan
	bearings, motor bearings, pivots and other moving parts
	2. All refrigerant required for topping up. Refrigerant loss if due to
	manufacturing defect or due to negligence shall be made good by the
	contractor
	3. All consumable filter elements / rolls
	4. All electric contact points required to replace worm electric contact
	points in switchgears, motor starter gears, electronic control gears and
	electric relays
	5. All electric fuses required to replace blown fuses
	Just before the expiry of the warranty of the contract, the contractor shall
	carry out a complete system operability test on all the systems or sub
	systems as called for in the contract.
	The purpose of the test is to verify that the performance of all the systems
	or sub systems in the contract is in accordance to the specifications.
	All test shall be carried out in the presence of the Engineer-in-charge or
	his representative.
	The warranty period is deemed to be over if the department or his
	representative is completely satisfied with the system performance during
	the test.
	Annual inspection prior to expiry of warranty period Consumable

Reference	Existing Provision	Modified Provision
Clause 3 (vii)	If the contractor shall obtain a contract with Government as	If the contractor had secured the contract with
	a result of wrong tendering or other non-bonafide methods	Government as a result of wrong tendering or
	of competitive tendering.	other non-bonafide methods of competitive
		tendering or commits breach of Integrity
		Agreement.
Reference	Existing Provision	Modified Provision
Deviations	CLAUSE 12	CLAUSE 12
/variation	The Engineer-in-Charge shall have power (i) to make	The Engineer-in-Charge shall have power (i) to
extent and	alteration in, omissions from, additions to, or substitutions	make alteration in, omissions from, additions
pricing	for the original specifications, drawings, designs and	to, or substitutions for the original
pricing	instructions that may appear to him to be necessary or	specifications, drawings, designs and
	advisable during the progress of the work, and (ii) to omit a	instructions that may appear to him to be
	part of the works in case of non-availability of a portion of	necessary or advisable during the progress of
	the site or for any other reasons and the contractor shall be	the work, and (ii) to omit a part of the works in
	bound to carry out the works in accordance with any	case of non-availability of a portion of the site
	instructions given to him writing signed by the Engineer-	or for any other reasons and the contractor shall
	in-Charge and such alterations, omissions, additions or	be bound to carry out the works in accordance
	substitutions shall form part of the contract as if originally	with any instructions given to him writing
	provided therein and any altered, additional or substituted	signed by the Engineer-in-Charge and such
	work which the contractor may be directed to do in the	alterations, omissions, additions or substitutions
	manner specified above as part of the works, shall be	shall form part of the contract as if originally
	carried out by the contractor on the same conditions in all	provided therein and any altered, additional or
	respects including price on which he agreed to do the main	substituted work which the contractor may be
	works except as hereafter provided.	directed to do in the manner specified above as
	works except as nereatier provided.	part of the works, shall be carried out by the
		contractor on the same conditions in all respects
		including price on which he agreed to do the
		main works except as hereafter provided.
		The completion cost of any agreement for
		Maintenance works including works of
		upgradation, aesthetic, special repair,
		addition/ alteration shall not exceed 1.5 times
		of Tendered amount.
Deviations	12.2 In the case of extra items (items that are completely	12.2 <b>A.</b> For Project and original works:
/,Extra items,	new and are in addition to the items contained in the	In the case of extra items (items that are
pricing	contract), the contractor may within 15 days of receipt of	completely new and are in addition to the
pricing	order or occurrence of the item(s) claim rate, supported by	items contained in the contract), the contractor
	proper analysis, for the work and the Engineer-in-charge	may within 15 days of receipt of order or
	shall within one month of the receipt of the claims	occurrence of the item(s) claim rate, supported
	supported by analysis after giving considerations to the	by proper analysis, for the work and the
	analysis of the rates submitted by the contractor,	Engineer-in-charge shall within one month of
	determined the rates on basis of market rates and the	the receipt of the claims supported by analysis
	contractor shall be paid in accordance with the rates so	after giving considerations to the analysis of
	determined.	the rates submitted by the contractor,
	determined.	determined the rates on basis of market rates
		and the contractor shall be paid in accordance
		with the rates so determined.
		<b>B.</b> For Maintenance including works of
		upgradation, aesthetic, special repair,
		addition/ alteration:
		In the case of Extra Item(s) being the
		schedule items (Delhi Schedule of Rates
		items), these shall be paid as per the
		schedule rate plus cost index (at the time
		of tender) plus/minus percentage above
		below quoted contract amount.
		Payment of Extra items in case of non-
		ayment of EAU a nems in case of non-

**IITD -2010 CORRECTION SLIP** In General Condition of contract for IIT Delhi Work Department 2010

**Modified Provision** 

Reference

**Existing Provision** 

<b>[</b>		
		schedule items (Non-DSR items) shall be made as per the prevailing market rate.
Deviations, Substituted items, pricing	<ul> <li>In the case of substituted items (items that are taken up with partial substitution or lieu of items of work in the contract), the rate for the agreement item (to be substituted) and substituted item shall also be determined in the manner as mentioned in the following Para.</li> <li>(a) If The market rate for the substituted item so determined is more than the market rate of the agreement item (to be substituted), the rate payable to the contractor for the substituted item shall be the rate for the agreement item (to be substituted).</li> <li>(b) If the market rate for the substituted item so determined is less than the market rate of the agreement item (to be substituted), the rate payable to the contractor for the substituted), the rate payable to the contractor for the substituted item shall be the rate for the agreement item (to be substituted) item shall be the rate for the agreement item (to be substituted) item shall be the rate for the agreement item (to be substituted) item shall be the rate for the agreement item (to be substituted) item shall be the rate for the agreement item (to be substituted) item shall be the rate for the agreement item (to be substituted) item shall be the rate for the agreement item (to be substituted) item and the agreement item (to be substituted) item (to be substituted) item (to be substituted)</li> </ul>	<ul> <li>A. For Project and original works: In the case of substituted items (items that are taken up with partial substitution or lieu of items of work in the contract), the rate for the agreement item (to be substituted) and substituted item shall also be determined in the manner as mentioned in the following Para.</li> <li>(a) If The market rate for the substituted item so determined is more than the market rate of the agreement item (to be substituted), the rate payable to the contractor for the substituted item shall be the rate for the agreement item (to be substituted).</li> <li>(b) If the market rate for the substituted item so determined is less than the market rate of the agreement item (to be substituted), the rate payable to the contractor for the substituted item shall be the rate for the agreement item (to be substituted), the rate payable to the contractor for the substituted item shall be the rate for the agreement item (to be substituted), the rate payable to the contractor for the substituted item shall be the rate for the agreement item (to be substituted) item and the agreement item (to be substituted) item and the agreement item (to be substituted item and the agreement item (to be substituted item and the agreement item (to be substituted).</li> <li>B. For Maintenance including works of upgradation, aesthetic, special repair, addition/ alteration: In the case of Substitute Item(s) being the schedule items (Delhi Schedule of Rates items), these shall be paid as per the schedule rate plus cost index (at the time of tender) plus/minus percentage above below quoted contract amount.</li> </ul>
		Payment of Extra items in case of non- schedule items (Non-DSR items) shall be made as per the prevailing market rate.
Deviations, Deviated Quantities, pricing	In the case of contract items, substituted items, contract cum substituted items, which exceed the limits laid down in schedule F, the contractor may within fifteen days of receipt of order or occurrence of the excess, claim revision of the rates, supported by proper analysis for the work in excess of the above mentioned limits, provided that if the rates so claimed are in excess of the rates specified in the schedule of quantities, the Engineer-in-Charge shall within one month of receipt of the claims supported by analysis, after giving consideration to the analysis of the rates submitted by the contractor, determine the rates on the basis of the market rates and the contractor shall be paid in accordance with the rates so determined.	A. For Project and original works: In the case of contract items, substituted items, contract cum substituted items, which exceed the limits laid down in schedule F, the contractor may within fifteen days of receipt of order or occurrence of the excess, claim revision of the rates, supported by proper analysis for the work in excess of the above mentioned limits, provided that if the rates so claimed are in excess of the rates specified in the schedule of quantities, the Engineer-in- Charge shall within one month of receipt of the claims supported by analysis, after giving consideration to the analysis of the rates submitted by the contractor, determine the rates on the basis of the market rates and the

	contractor shall be paid in accordance with the rates so determined. B. For Maintenance including works of
	upgradation, aesthetic, special repair,
	addition/ alteration:
	In the case of contract items, which exceed
	the limit laid down in schedule F, the
	contractor shall be paid rates specified in
	the schedule of quantities.
12.3 The provisions of the preceding paragraph shall also	12.3 A. For Project and original works: The
apply to the decrease in the rates of items for the work	provisions of the preceding paragraph shall also
excess of the limits laid down in Schedule F, and the	apply to the decrease in the rates of items for
Engineer-in-Charge shall after giving notice to the	the work excess of the limits laid down in
contractor within one month of occurrence of the excess	
	Schedule F, and the Engineer-in-Charge shall
and after taking into consideration any reply received from	after giving notice to the contractor within one
him within fifteen days of the receipt of the notice, revise	month of occurrence of the excess and after
the rates for the work in question within one month of the	taking into consideration any reply received
expiry of the said period of fifteen days having regard to	from him within fifteen days of the receipt of
the market rates.	the notice, revise the rates for the work in
	question within one month of the expiry of the
	said period of fifteen days having regard to the
	market rates.
	B. For Maintenance including works of
	upgradation, aesthetic, special repair,
	addition/ alteration:
	In the case of decrease in the rates
	<b>Prevailing in the market</b> of items for the
	the work excess of the limits laid down in
	Schedule F, and the Engineer-in-Charge
	shall after giving notice to the contractor
	within one month of occurrence of the
	excess and after taking into consideration
	any reply received from him within fifteen
	days of the receipt of the notice, revise the
	rates for the work in question within one
	month of the expiry of the said period of
	fifteen days having regard to the market
	rates.
 14. The Tender of the work shall remain open for	CPWD-6
acceptance for a period of ninety (90) days from the date of	<b>14.</b> The Tender of the work shall remain open
opening of tenders / ninety days from the date of opening	for acceptance for a period of ninety (90) days
of financial bid in case Tenders are invited on 2/3 envelope	from the date of opening of tenders / Ninety
system (strike out as case may be) if any Tenderer	days from the date of opening of Technical
withdraws his tender before the said period or issue of	bid in case Tenders are invited on 2 envelope
letter of acceptance of acceptance, whichever is earlier or	system / 120 days from the date of opening of
makes any modifications in the terms and conditions of the	Technical bids bids in case tenders are
tender which are not acceptable to th department, then the	invited for specialized works on 3 envelope
Government shall, without prejudice to any other right or	system (strike out as case may be) if any
remedy, if the said earnest money	Tenderer withdraws his tender before the said
as aforesaid, Further the tenderer shall not be allowed to	period or issue of letter of acceptance of
participate in the retendering process of the work.	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 Government shall, without
	prejudice to any other right or remedy, if the
	said earnest money as aforesaid, Further the
	tenderer shall not be allowed to participate in
	the retendering process of the work.
<b>11.</b> The contractor whose bid is accepted will be required	<b>11.</b> The contractor whose bid is accepted will
to furnish performance guarantee of 3% (Three Percent) of	be required to furnish performance guarantee of
the bid amount within the period specified in Schedule F.	3% (Three Percent) of the bid amount within

This guarantee shall be in the form of cash (in case guarantee amount is less than Rs. 10000/-) or Deposit at call receipt of any scheduled bank /Banker's cheque of any scheduled bank/ Demand Draft of any scheduled bank/ Pay Order of any Scheduled Bank of any Scheduled bank (in case guarantee amount is less than Rs. 1,00,000/-) or Government Securities or Fixed Deposit Receipts or Guarantee Bonds of any Scheduled Bank or the State Bank of India in accordance with the prescribed form. In case the contractor fails to deposit the said performance guarantee within the period as indicated in Schedule 'F', including the extended period if any, the Earnest Money deposited by the contractor shall be forfeited automatically without any notice to the contractor. The earnest money deposited along with bid shall be returned after receiving the aforesaid performance guarantee.	the period specified in Schedule F. This guarantee shall be in the form of cash (in case guarantee amount is less than Rs. 10000/-) or Deposit at call receipt of any scheduled bank /Banker's cheque of any scheduled bank/ Demand Draft of any scheduled bank/ Pay Order of any Scheduled Bank of any Scheduled bank (in case guarantee amount is less than Rs. 1,00,000/-) or Government Securities or Fixed Deposit Receipts or Guarantee Bonds of any Scheduled Bank or the State Bank of India in accordance with the prescribed form. In case the contractor fails to deposit the said performance guarantee within the period as indicated in Schedule 'F', including the extended period if any, the Earnest Money deposited by the contractor shall be forfeited automatically without any notice to the contractor. The earnest money deposited along with bid shall be returned after receiving the aforesaid performance guarantee. <b>The Contractor whose bid is accepted will also be required to furnish either copy of applicable licenses/ registrations or proof of applying for obtaining labour licenses, registration with EPFO, ESIC and BOCW Welfare Board and Programme Chart (Time and Progress) Within the period specified in schedule in Schedule F.</b>
No Provision	for the work till the applicable labour licenses, registration with EPFO, ESIC and BOCW Welfare Board, Whatever applicable are submitted by the contractor to the Engineer-in-Charge.
The contractor shall obtain a valid license under the Contract Labour (R&A) Act, 1970 and the Contract Labour (Regulation and Abolition) Central Rules, 1971 before the commencement of the work, and continue to have a valid license until completion of the work.	The contractor shall obtain a valid license under the Contract Labour (R&A) Act, 1970 and the Contract Labour (Regulation and Abolition) Central Rules, 1971 before the commencement of the work, and continue to have a valid license until completion of the work. <b>The contractor shall also comply with</b> <b>provisions of the Inter-State Migrant</b> <b>Workmen (Regulation of Employment and Conditions of Service) Act, 1979.</b>
(i)Time allowed for submission of performance Guarantee from the date of issue of letter of acceptancedays.	(i)Time allowed for submission of performance Guarantee , <b>Programme</b> <b>Chart (Time and Progress) and</b> <b>applicable labour licenses, registration</b> <b>with EPFO, 'ESIC and BOCW Wefare</b> <b>Board or proof of applying thereof</b> from the date of issue of letter of acceptancedays.
No Provision	Whether Clause 7A Shall be Applicable Yes
15. Sales-tax/VAT (expect service tax), purchase tax,	<b>15.</b> GST or any other tax applicable in respect

turnover tax 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 service tax same shall be paid by the contractor to the concerned department on demand and it will be reimbursed to him by the engineer-in-charge after satisfying that it has been actually and genuinely paid by the contractor.	of input procured by the contractor for this contract shall be payable by the Contractor and Government will not entertain any claim whatsoever in respect of the same, However, component of GST at time of supply of service (as provided in CGST Act 2017) provided by the contract shall be varied if different from that applicable on the last date of receipt of tender including, extension if any.
CLAUSE 37	CLAUSE- 37
(i) Sales Tax. Vat (except Service Tax), Building and other Construction Workers Cess or any other tax or Cess in respect of this contract shall be payable by the contractor and Government shall not entertain any claim whatsoever in this respect. However, in respect of service tax. same shall be paid the contractor to the concerned department on demand and it will be reimbursed to him by the Engineer-i- charge after satisfying that it has been actually and genuinely paid by the contractor.	(i) GST, Building and other construction workers welfare Cess or any other tax, Levy or cess in respect of input for or output by this contract shall be payable by the contractor and Government shall not entertain any claim whatsoever in this respect except as provided under clause 38.
CLAUSE-38	CLAUSE-38
<b>CLAUSE-38</b> (i) All tendered rates, shall be inclusive of all taxes and levies (except Service Tax) payable under respective statutes. However, if any further tax or levy or cess is imposed by the statute. after the last stipulated date for the receipt of tender including extensions if any and the contractor thereupon necessarily and properly pays such taxes/levies/cess, the contractor shall be reimbursed the amount so paid, provided such payments, if any, is not, in the opinion of the Superintending Engineer whose decision shall be final and binding on the contractor) attributable to delay in execution of work within the control of the contractor.	(i) All tendered rates shall be inclusive of any tax, levy or cess applicable on last stipulated date of receipt of tender including extension if any. No adjustment i.e, increase or decrease shall be made for any variation in the rate of GST, Building and Other Construction Workers Welfare Cess or any tax, levy or cess applicable on inputs. However, effect of variation in rates of GST or Building and Other Construction workers welfare Cess or imposition or repeal of any other tax, levy or cess applicable on output of the works contract shall be adjusted on either side, increase or decrease. Provided for Building and other Construction Workers Welfare Cess or any tax (other than GST), levy or cess varied or imposed after the last date of receipt of tender including extension if any, any increase shall be reimbursed to the contractor only if the contractor necessarily and properly pays such increased amount of taxes/levies/cess. Provided further that such adjustment including GST shall not be made in the extended period of contract for which the contractor alone in responsible for delay as determined by authority for extension of time under Clause 5 in Schedule F.

# **BID SUBMISSION**

## **ONLINE BID SUBMISSION**

The Online bids (complete in all respect) must be uploaded online in two Envelops as explained below:-

	(Following	Envelope – 1 documents to be provided as single PDF file)	
Sl. No.	Documents	Content	File Types
	Technical Bid		
1.		Performa of EMD declaration (duly filled & signed by the	.PDF
		bidders) as given on page-18	
2.		Enlistment order of contractor.	.PDF
3.		Attested certificate of work experience.	.PDF
4.		Certificate of Registration of GST and acknowledgment of up to date field return of GST.	.PDF
5.		Affidavit as per Notice Inviting Tender condition 1.3 of page 19 of NIT to be submitted on stamp paper.(Affidavit shall be purchased/ notarized between date of publishing and last date of submission of bids beside this NIT/Tender ID and name of work must be mentioned on the affidavit.).	.PDF
6.		Acceptance to execute INTEGRITY PACT.	.PDF
7.		ESI and EPF Registration.	PDF
8.		FORM "F" (Duly filled with all required details	.PDF
9.		Proof of tender fees	.PDF
10		Annexure-I	.PDF
11		Annexure-II	.PDF
12		Annexure-III	.PDF
13		In case of Partnership firm if all the papers of tender not	.PDF
		signed by all the partners than a power of attorney authorizing	
		the person who has signed the tender paper must be uploaded	
		with the tender documents.	
14.		Undertaking for the VRV/ VRF AC system as given at S.N- 14 on page-6	.PDF
15		Any other document given in NIT	.PDF
		Envelope – 2	
Sl. No.	TYPES	Content	
1.	Financial Bid	Price bid should be submitted in BOQ format.	.Xls

All above documents shall be as per Tender Notice.

## SCHEDULE OF QUANTITY

# Name of work :- Construction of temporary faculty rooms, labs, corridors and toilets in the Gramodaya Parisar at IIT Delhi.

## Sub Head :- Civil, Electrical, Air conditioning & CCTV work

Sr.No	Description	Unit	Qty	Rate	Amount
1	Surface dressing of the ground including removing vegetation and inequalities not exceeding 15 cm deep and disposal of rubbish, lead up to 50 m and lift up to 1.5 m : All kind of soil	sqm	2423.42		
2	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m: All kinds of soil	Cum	1297.27		
3	Excavating trenches of required width for pipes, cables, etc including excavation for sockets, and dressing of sides, ramming of bottoms, depth upto 1.5 m, including getting out the excavated soil, and then returning the soil as required, in layers not exceeding 20 cm in depth, including consolidating each deposited layer by ramming, watering, etc. and disposing of surplus excavated soil as directed, within a lead of 50 m : All kinds of soil : Pipes, cables etc, not exceeding 80 mm dia.	Metre	180.00		
4	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.	Cum	1116.41		
5	Supplying and filling in plinth with sand under floors, including watering, ramming, consolidating and dressing complete.	cum	242.34		
6	Supplying chemical emulsion in sealed containers including delivery as specified. : Chlorpyriphos/ Lindane emulsifiable concentrate of 20%	Litre	3760.00		

7	Diluting and injecting chemical emulsion for POST-CONSTRUCTIONAL anti-termite treatment (excluding the cost of chemical emulsion) : Treatment of existing masonry using chemical emulsion @ one litre per hole at 300 mm interval including drilling holes at 45 degree and plugging them with cement mortar 1:2 (1 cement : 2 coarse sand) to the full depth of the hole : With Chlorpyriphos/Lindane E.C. 20% with 1% concentration	Meter	1128.00	
8	Providing and laying damp-proof course 40mm thick with cement concrete 1:2:4 (1 cement : 2 coarse sand (zone-III): 4 graded stone aggregate 12.5mm nominal size)	sqm	47.25	
9	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level : 1:2:4 (1 cement : 2 coarse sand (zone-III) : 4 graded stone aggregate 20 mm nominal size	cum	121.17	
10	Providing and laying in position ready mixed plain cement concrete, with cement content as per approved design mix and manufactured in fully automatic batching plant and transported to site of work in transit mixer for all leads, having continuous agitated mixer, manufactured as per mix design of specified grade for plain cement concrete work, including pumping of R.M.C. from transit mixer to site of laying and curing, excluding the cost of centering, shuttering and finishing, including cost of curing, admixtures in recommended proportions as per IS : 9103 to accelerate/ retard setting of concrete, improve workability without impairing strength and durability as per direction of the Engineer-in- charge. Note : 1) Excess/less cement used than specified in this item is payable/recoverable separately. :All works upto plinth level : M-10 grade plain cement concrete (cement content considered @ 220 kg/cum)	cum	188.58	
11	Centering and shuttering including strutting, propping etc. and removal of form for :Foundations, footings, bases of columns, etc. for mass concrete	sqm	945.60	

12	Centering and shuttering including strutting, propping etc. and removal of form for : Lintels, beams, plinth beams, girders, bressumers and cantilevers	sqm	235.64	
13	Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer-in- charge. (Note :- Cement content considered in this item is @ 330 kg/cum. Excess/ less cement used as per design mix is payable/recoverable separately). : All works upto plinth level	Cum	153.83	
14	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete above plinth level :Thermo-Mechanically Treated bars of grade Fe-500D or more	KG	4358.41	
15	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in: Cement mortar 1:6 (1 cement : 6 coarse sand)	Cum	355.80	
16	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level in all shapes and sizes in :Cement mortar 1:6 (1 cement : 6 coarse sand)	Cum	144.92	

17	Providing and fixing 18 mm thick gang saw cut, mirror polished, premoulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations of required size, approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement : 4 coarse sand), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels. : Granite of any colour and shade : Area of slab over 0.50 sqm	sqm	23.70	
18	Extra for providing opening of required size & shape for wash basin/ kitchen sink in kitchen platform, vanity counter and similar location in marble/ Granite/ stone work, including necessary holes for pillar taps etc. including moulding, rubbing and polishing of cut edges etc. complete	Each	31.00	
19	Providing and fixing Ist quality ceramic glazed wall tiles conforming to IS: 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm, including pointing in white cement mixed with pigment of matching shade complete.	sqm	526.89	
20	Providing and fixing bright finished brass 100 mm mortice latch and lock, ISI marked, with six levers and a pair of anodised (anodic coating not less than grade AC 10 as per IS : 1868) aluminium lever handles of approved quality with necessary screws etc. complete.	Each	37.00	
21	Extra for providing lipping with 2nd class teak wood battens 25 mm minimum depth on all edges of flush door shutters (over all area of door shutter to be measured).	sqm	380.52	

22	Providing and fixing aluminium extruded section body tubular type universal hydraulic door closer (having brand logo with ISi, IS : 3564, embossed on the body, door weight upto 36 kg to 80 kg and door width from 701 mm to 1000 mm), with double speed adjustment with necessary accessories and screws etc. complete.	Each	104.00	
23	Providing and fixing aluminium sliding door bolts, ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868), transparent or dyed to required colour or shade, with nuts and screws etc. complete : 300x16 mm	Each	215.00	
24	Providing and fixing aluminium tower bolts, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete : 250x10 mm	Each	358.00	
25	Providing and fixing aluminium handles, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete : 125 mm	Each	469.00	
26	Providing and fixing aluminium hanging floor door stopper, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour and shade, with necessary screws etc. complete. : Twin rubber stopper	Each	104.00	
27	Providing and fixing in position collapsible steel shutters with vertical channels 20x10x2 mm and braced with flat iron diagonals 20x5 mm size, with top and bottom rail of T-iron 40x40x6 mm, with 40 mm dia steel pulleys, complete with bolts, nuts, locking arrangement, stoppers, handles, including applying a priming coat of approved steel primer.	sqm	84.00	

28	Steel work in built up tubular (round, square or rectangular hollow tubes etc.) trusses etc., including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc. complete. : Hot finished welded type tubes. <b>Note</b> :- For design of truss detailed structural design by any structural designer and duly vetted by NIT/IIT will be submitted by the agency. The Sucesfull bidder esentially submit the detailed structural design within a week from the date of issue the award letter which will be than vetted by NIT/IIT & agency will also be submit the stability report duly examined & issued by NIT/IIT. All above work will be in the scope of sucessful bidder & nothing extra will be paid on account of structural design.	kg	137000.00	
29	Providing and laying Vitrified tiles in floor with different sizes (thickness to be specified by the manufacturer), with water absorption less than 0.08% and conforming to IS:15622, of approved brand & manufacturer, in all colours and shade, laid with cement based high polymer modified quick set tile adhesive (water based) conforming to IS : 15477, in average 6 mm thickness, including grouting of joints (Payment for grouting of joints to be made separately). Size of Tile 600x600 mm	Sqm	898.80	
30	Providing and laying Polished Granite stone flooring in required design and patterns, in linear as well as curvilinear portions of the building all complete as per the architectural drawings with 18 mm thick stone slab over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with cement slurry and pointing with white cement slurry admixed with pigment of matching shade including rubbing , curing and polishing etc. all complete as specified and as directed by the Engineer-in-Charge.: Polished Granite stone slab jet Black, Cherry Red, Elite Brown, Cat Eye or equivalent.	sqm	849.93	

31	Providing and fixing thermal insulation with Resin Bonded Fibre glass wool conforming to IS: 8183 having density 24 kg/m3, 50 mm thick, wrapped in 200G Virgin Polythene Bags fixed to wall with screw, rawel plug & washers and held in position by criss crossing GI wire etc. complete as per directions of Engineer-in- Charge.	sqm	3020.84	
32	Providing and fixing on wall face unplasticised Rigid PVC rain water pipes conforming to IS : 13592 Type A, including jointing with seal ring conforming to IS : 5382, leaving 10 mm gap for thermal expansion, (i) Single socketed pipes. : 110 mm diameter	metre	147.00	
33	Providing and fixing precoated galvanised steel sheet roofing accessories 0.50 mm (+0.05 %) total coated thickness, Zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns using self drilling/ self tapping screws complete : <b>Ridges plain (500 - 600mm)</b>	metre	362.12	
34	Providing and fixing precoated galvanised steel sheet roofing accessories 0.50 mm (+0.05 %) total coated thickness, Zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns using self drilling/ self tapping screws complete : <b>Gutter (600 mm</b> <b>over all girth)</b>	metre	590.11	

35	Providing and fixing tiled false ceiling of specified materials of size 595x595 mm in true horizontal level, suspended on inter locking metal grid of hot dipped galvanized steel sections (galvanized @ 120 grams/ sqm, both side inclusive) consisting of main "T" runner with suitably spaced joints to get required length and of size 24x38 mm made from 0.30 mm thick (minimum) sheet, spaced at 1200 mm center to center and cross "T" of size 24x25 mm made of 0.30 mm thick (minimum) sheet, 1200 mm center to center and cross "T" at 600 mm center to center to form a grid of 1200x600 mm and secondary cross "T" of length 600 mm and size 24x25 mm made of 0.30 mm thick (minimum) sheet to be interlocked at middle of the 1200x600 mm panel to form grids of 600x600 mm and wall angle of size 24x24x0.3 mm and laying false ceiling tiles of approved texture in the grid including, required cutting/making, opening for services like diffusers, grills, light fittings, fixtures, smoke detectors etc. Main "T" runners to be suspended from ceiling using GI slotted cleats of size 27 x 37 x 25 x1.6 mm fixed to ceiling with 12.5 mm dia and 50 mm long dash fasteners, 4 mm GI adjustable rods with galvanised butterfly level clips of size 85 x 30 x 0.8 mm spaced at 1200 mm center to center along main T, bottom exposed width of 24 mm of all T-sections shall be pre- painted with polyester paint, all complete for all heights as per specifications, drawings and as directed by Engineer-in-charge.			
35.1	GI Metal Ceiling Lay in perforated Tegular edge global white color tiles of size 595x595 mm and 0.5 mm thick with 8 mm drop; made of GI sheet having galvanizing of 100 gms/sqm (both sides inclusive) and 20% perforation area with 1.8 mm dia holes and having NRC (Noise Reduction Coefficient ) of 0.5, electro statically polyester powder coated of thickness 60 microns (minimum), including factory painted after bending and perforation, and backed with a black Glass fiber acoustical fleece.	sqm	1680.60	
36	Distempering with 1st quality acrylic distemper (ready mixed) having VOC content less than 50 gms/litre, of approved manufacturer, of required shade and colour complete, as per manufacturer's specification. Two or more coats on new work	sqm	4564.88	

37	Finishing walls with Premium Acrylic Smooth exterior paint with Silicone additives of required shade: New work (Two or more coats applied @ 1.43 ltr/10 sqm over and including priming coat of exterior primer applied @ 2.20 kg/10 sqm)	sqm	2789.29	
38	Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.	sqm	7354.17	
39	12 mm cement plaster of mix : 1:4 (1 cement: 4 coarse sand)	sqm	948.15	
40	15 mm cement plaster on rough side of single or half brick wall of mix: 1:4 (1 cement: 4 coarse sand)	sqm	602.53	
41	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade : Two or more coats on new work	sqm	4535.45	
42	Providing and fixing floor mounted, white vitreous china single piece, double traps syphonic water closet of approved brand/make, shape, size and pattern including integrated white vitreous china cistern of capacity 10 litres with dual flushing system, including all fittings and fixtures with seat cover, cistern fittings, nuts, bolts and gasket etc including making connection with the existing P/S trap, complete in all respect as per directions of Engineer-in-Charge	Each	23.00	
43	Providing and fixing water closet squatting pan (Indian type W.C. pan) with 100 mm sand cast Iron P or S trap, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever) conforming to IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required: White Vitreous china Orissa pattern W.C. pan of size 580x440 mm with integral type foot rests	Each	6.00	
44	Providing and fixing CP Brass 32mm size Bottle Trap of approved quality & make and as per the direction of Engineer-in-charge.	Each	31.00	

45	Providing and fixing white vitreous china battery based infrared sensor operated urinal of approx. size 610 x 390 x 370 mm having pre & post flushing with water (250 ml & 500 ml consumption), having water inlet from back side, including fixing to wall with suitable brackets all as per manufacturers specification and direction of Engineer-in-charge.	Each	11.00	
46	Providing and fixing P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete. Flexible pipe: 32 mm dia	each	60.00	
47	Providing and fixing mirror of superior glass (of approved quality) and of required shape and size with plastic moulded frame of approved make and shade with 6 mm thick hard board backing : Rectangular shape 1500x450 mm	each	20.00	
48	Providing and fixing soil, waste and vent pipes : 100 mm dia Centrifugally cast (spun) iron socket & spigot (S&S) pipe as per IS: 3989	metre	137.46	
49	Providing and fixing soil, waste and vent pipes : 75 mm dia Centrifugally cast (spun) iron socket & spigot (S&S) pipe as per IS: 3989	metre	103.50	
50	Providing and fixing plain bend of required degree. <b>100 mm dia: Sand cast iron S&amp;S as per IS : 3989</b>	each	45.00	
51	Providing and fixing plain bend of required degree. 75 mm dia, Sand cast iron S&S as per IS - 3989	Each	30.00	
52	Providing and fixing single equal plain junction of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete. 100x100x100 mm : Sand cast iron S&S as per IS - 3989	each	32.00	
53	Providing and fixing single equal plain junction of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete : <b>75x75x75 mm : Sand cast</b> <b>iron S&amp;S as per IS - 3989</b>	Each	39.00	
54	Providing and fixing terminal guard : 100 mm Sand cast iron S&S as per IS - 3989	each	14.00	
55	Providing and fixing collar : 75 mm : Sand cast iron S&S as per IS - 3989	each	20.00	
56	Providing lead caulked joints to sand cast iron/centrifugally cast (spun) iron pipes and fittings of diameter : 100 mm	Each	72.00	

57	Providing lead caulked joints to sand cast iron/centrifugally cast (spun) iron pipes and fittings of diameter :75 mm	Each	98.00	
58	Providing and fixing trap of self cleansing design with screwed down or hinged grating with or without vent arm complete, including cost of cutting and making good the walls and floors : 100 mm inlet and 100 mm outlet: Sand cast iron S&S as per IS: 3989	Each	31.00	
59	Providing and fixing trap of self cleansing design with screwed down or hinged grating with or without vent arm complete, including cost of cutting and making good the walls and floors : 100 mm inlet and 75 mm outlet : Sand cast iron S&S as per IS - 3989	Each	69.00	
60	Providing & fixing chrome plated brass battery based infrared sensor operated pillar cock, having foam flow technology	Each	31.00	
61	Providing and placing on terrace (at all floor levels) polyethylene water storage tank, IS : 12701 marked, with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank.	Per. Litre	24000.00	
62	Providing and fixing G.I. pipes complete with G.I. fittings and clamps, i/c cutting and making good the walls etc. : 40 mm dia nominal bore	metre	308.30	
63	Making connection of G.I. distribution branch with G.I. main of following sizes by providing and fixing tee, including cutting and threading the pipe etc. complete : 25 to 40 mm nominal bore	Each	8.00	
64	Providing and fixing G.I. pipes complete with G.I. fittings and clamps, i/c cutting and making good the walls etc.: 25 mm dia nominal bore	metre	218.00	
65	Providing and fixing G.I. Pipes complete with G.I. fittings and clamps, i/c making good the walls etc. concealed pipe, including painting with anti corrosive bitumastic paint, cutting chases and making good the wall : : 15 mm dia nominal bore	metre	113.00	
66	Providing and fixing G.I. Pipes complete with G.I. fittings and clamps, i/c making good the walls etc. concealed pipe, including painting with anti corrosive bitumastic paint, cutting chases and making good the wall :20 mm dia nominal bore	Meter	159.00	

67	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) : 20 mm nominal bore	Each	22	
68	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) : 25 mm nominal bore	Each	8.00	
69	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) : 40 mm nominal bore	Each	8.00	
70	Providing and fixing G.I. Union in G.I. pipe including cutting and threading the pipe and making long screws etc. complete (New work) :20 mm nominal bore	Each	40.00	
71	Providing and fixing G.I. Union in G.I. pipe including cutting and threading the pipe and making long screws etc. complete (New work) : 40 mm nominal bore	Each	40.00	
72	Providing and fixing G.I. Union in G.I. pipe including cutting and threading the pipe and making long screws etc. complete (New work) 15 mm nominal bore	Each	40.00	
73	Providing and fixing G.I. Union in G.I. pipe including cutting and threading the pipe and making long screws etc. complete (New work) :25 mm nominal bore	Each	30.00	
74	Providing, laying and jointing glazed stoneware pipes class SP-1 with stiff mixture of cement mortar in the proportion of 1:1 (1 cement : 1 fine sand) including testing of joints etc. complete : 100 mm diameter	metre	80.00	
75	Providing and laying cement concrete 1:5:10 (1 cement : 5 coarse sand : 10 graded stone aggregate 40 mm nominal size) all-round S.W. pipes including bed concrete as per standard design : 100 mm diameter S.W. pipe	metre	80.00	
76	Providing and fixing square-mouth S.W. gully trap class SP-1 complete with C.I. grating brick masonry chamber with water tight C.I. cover with frame of 300 x300 mm size (inside) the weight of cover to be not less than 4.50 kg and frame to be not less than 2.70 kg as per standard design: 100x100 mm size P type : With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Each	16.00	

77	Constructing brick masonry chamber for underground C.I. inspection chamber and bends with bricks in cement mortar 1:4 (1 cement : 4 coarse sand) C.I. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover with frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg), R.C.C. top slab with 1:1.5:3 mix (1 cement : 1.5 Fine sand : 3 graded stone aggregate 20 mm nominal size), foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand), finished smooth with a floating coat of neat cement on walls and bed concrete etc. complete as per standard design: Inside dimensions 600x 850 mm and 45 cm deep for pipe line with three or more inlets : With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Each	4.00	
78	Making connection of drain or sewer line with existing manhole including breaking into and making good the walls, floors with cement concrete 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) cement plastered on both sides with cement mortar 1:3 (1 cement : 3 coarse sand), finished with a floating coat of neat cement and making necessary channels for the drain etc. complete : For pipes 100 to 250 mm diameter	Each	4.00	
79	Providing and laying non-pressure NP2 class (light duty) R.C.C. pipes with collars jointed with stiff mixture of cement mortar in the proportion of 1:2 (1 cement : 2 fine sand) including testing of joints etc. complete :250 mm dia. R.C.C. Pipe	metre	100.00	

80	Constructing brick masonry manhole in cement mortar 1:4 (1 cement : 4 coarse sand) with R.C.C. top slab with 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 coarse sand : 8 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement complete as per standard design : Inside size 90x80 cm and 45 cm deep including C.I. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg) : With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Each	5.00	
81	Constructing brick masonry manhole in cement mortar 1:4 (1 cement : 4 coarse sand) with R.C.C. top slab with 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 coarse sand : 8 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement complete as per standard design Inside size 120x90 cm and 90 cm deep including C.I. cover with frame (medium duty) 500 mm internal diameter, total weight of cover and frame to be not less than 116 kg (weight of cover 58 kg and weight of frame 58 kg) : With common burnt clay F.P.S. (non modular) bricks of class designation 7.5	Each	6.00	

82	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in- charge. (Glazing, paneling and dash fasteners to be paid for separately) : For fixed portion : Powder coated aluminium (minimum thickness of powder coating 50 micron)	Kg	3374.25	
83	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/neoprene gasket etc. Aluminium sections shall be smooth, rust free,straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately) :For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber / neoprene gasket required (Fittings shall be paid for separately) : Powder coated aluminium (minimum thickness of powder coating 50 micron)	Kg	2166.00	

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84	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge .(Cost of aluminium snap beading shall be paid in basic item): With float glass panes of 5 mm thickness (weight not less than 12.50 kg/ sqm)	sqm	59.18	
85	Filling the gap in between aluminium/ stone/ wood frame and adjacent RCC/Brick/ Stone/ wood/ Ceramic/ Gypsum work by providing weather/structural non sag elastomeric PU sealant over backer rod of approved quality as per architectural drawings and direction of Engineer-in-charge complete, complying to ASTM C920, DIN 18540- F & ISO 11600: Upto 20 mm depth and 20 mm width	metre	1349.70	
86	Providing and fixing 100mm C.P. grating with or without hole for nahani trap/floor trap of approved make and as per directions of Engineer-In-Charge.	metre	70.00	
87	Providing and fixing factory made hot pressed both side laminated flush door ready made shutter with one mm thick decorative laminate on both side confirming to IS:2202 (Part-I) non decorative type, core of block board construction with frame of 1st class hard wood and well matched teak 3 ply veneering with vertical grain or cross bands and face veneer on both face of shutters.: 35mm thick including ISI marked stainless steel butt hinges with necessary screws.	sqm	380.52	
88	Providing and fixing C.P. brass angle valve/angular stop cock for wash basin and geyser and WC points of approved quality complete as per the direction of Engineer in- charge.(Make - Jaquar (Fusion series)/ Roca- (Victoria Series) or equivalent of Kohler)	Each	120.00	

89	1.11) Providing and fixing 10 mm thick non - asbestos multipurpose cement board rainforced with cellulose fiber manufactured through autoclaving process ( high pressure steam cured ) as per IS:14862 of Everest industries Ltd or equivalent make, over the exidting MS frame work ( to be paid in basic items ) with 25 mm counter sunk ribbed hard screws @200m center to center.	sqm	5736.00	
90	1.9) Providing and fixing 50 mm thick sandwich roof puff panel (factory made only) as per specification as follow. A) trapezoidal steel sheet having minimum 30mm crest depth, polyester top coat & alkyd backer. Zinc coating shall be 120g/sqm as per IS-277. Top coat polyester 15-18 microns over 5-7 micron epoxy primer. b) Insulation: High density puff insulation. c) Inner sheet: Colour coated galvanized slightly ribbed. Thickness 0.50mm (TCT) minimum 15-18 micron top coat polester coation, zinc coating 120g/sqm as per IS-277	sqm	3394.55	
91	Providing and laying unglazed matt finished heavy duty homogenous body 10mm thick vitrified tiles having water absorption less than 0.5% and confirming to IS-15622 & ISof size- 600x600 mm of approved make and brand (Somany STONE 10 series or equivelent) laid on 20 mm thick base on cement mortar 1:4 (1 cement : 4 Coarse Sand)/ 6 mm thick (Avg.) base cement based high polymer modified quick set tile adhesive (water based) confirming to IS- 15477, including grouting of joints with white cement and matching pigment etc. complete as per direction of Engineer-in-Charge.	sqm	542.50	
92	Providing and Fixing of CP Brass bib cock (Short body) of approval quality complete as per the direction of Engineer in-charge. (Make - Jaquar/Marc/Kohler)	Each	29.00	

93	Providing and fixing 18 mm thick WPC (wooden polymer composit) board inside shelves, sides, back portion or in drawer units etc. for specific size and 18 mm thickness, composed of wood dust (min 30% - 40% and remaining PVC, fungus/Acid/termite/water proof, fire retardent, formaldehyde free, virgin thermoplastic, single Extruded and screw-able/nail-able, having density of 680 - 720 kg/cum. and water absorption up to 1 % with approved make with necessary fixing arrangement and as per requirement complete as per direction of Engineer in charge.	sqm	55.80	
94	Providing and fixing wash basin with C.I./M.S. brackets, 32mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever required. : Oval shaped counter top wash basin (Size - 560mm x 400mm)	Each	31.00	
95	Providing and fixing C.P. Health Faucet with 1 Mtr long tube & Hook complete as per the direction of Enginere- in-charge. (Make - Jaquar (Fusion series)/ Roca- (Victoria Series) or equivalent of Kohler)	Each	23.00	
96	Providing and fixing fire resistance Roller blinds of 400 GSM (make VISTA or equivalent) with anodized aluminium channel weight, chord, runners, end caps, hangers and chain etc.	Sqm	108.00	
97	Supply and installation of reqired size, shape, design and colour Table 1650 mm wide (as per enclosed drawing) as per approved make and direction of Engineer- in-charge. (Make- Godrej Model No ARISTO Back unit 750H (W= 1650mm,D=500mm,H=750mm ) /equivalent of Featherlite/ equivalent of Wipro, In this estimate , Godrej Interio's "ARISTO Back unit 750H Model" in Table 1650 mm wide series has been considered. In case of other makes, technical specifications should be equivalent and cost adjustment shall also be done if the equivalent make is of lesser market price than Godrej Interio)	Each	37.00	

98	Supply and installation of reqired size, shape, design and colour Chair (as per enclosed drawing) as per approved make and direction of Engineer- in-charge. (Make-Godrej Model No Marvel HB Chair /equivalent of Featherlite/ equivalent of Wipro, In this estimate , Godrej Interio's "Marvel HB Chair Model" in Chair series has been considered. In case of other makes, technical specifications should be equivalent and cost adjustment shall also be done if the equivalent make is of lesser market price than Godrej Interio)	Each	37.00	
99	Supply and installation of reqired size, shape, design and colour Visitor Chair (as per enclosed drawing) as per approved make and direction of Engineer- in-charge. (Make-Godrej Model No Marvel Visitor Chair / equivalent of Featherlite/ equivalent of Wipro, In this estimate , Godrej Interio's "Marvel Visitor Chair Model" in Visitor Chair series has been considered. In case of other makes, technical specifications should be equivalent and cost adjustment shall also be done if the equivalent make is of lesser market price than Godrej Interio)	Each	74.00	

<ul> <li>Supply and installation of Glass Door Storewell shall have an overall size of 916mm(W)x486mm(D)x1980mm(H) with welded construction. It should have shelf thickness of 0.7 mm, Back thickness of 0.8mm, Door thickness of 0.8mm (high yield strength) and all other components shall have a thickness of 0.9mm. These components shall be made of CRCA 'D' grade high yield strength as per IS:513. The glass door storwel shall have a brass handle and a 2 way locking mechanism with shooting bolt . It should have a height wise adjustable shelf mounting which shall have a Uniformly Distributed Load Capacity of max 40 Kg. It should also have a M10 Screw type Leveller with Hex plastic base. The finishing shall include Epoxy powder coated to the thickness of 50 microns (+/- 10). Plenty of colour options and shelving options as decided by Engineer-in-charge. In this estimate , Godrej Interio's "Glass Door Storewell Model" in Storewell series has been considered. In case of other makes, technical specifications should be equivalent and cost adjustment shall also be done if the equivalent make is of lesser market price than Godrej Interio)</li> </ul>	Each	37.00		
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101	Top Panel :Made of 25mm thick MDF one side pre-laminate board confirming to IS- 14587:1998 with 0.4mm PVC membrane pressed on to top Slide Door Unit: Made of 25mm Thick Pre-laminated twin board of E1-P2 grade and approved shade confirming to IS- 12823:1990, Edge banded with matching 2 mm thick PVC lipping for body panels like side, bottom,back and shelves. Shutters are made of 25mm thick MDF one side pre- laminate board confirming to IS- 14587:1998 with 0.4mm PVC membrane pressed on to top. Shutters have a soft closing & anti slam mechanism. Handles are provided for ease of opening. Storage is provided with lock for security. In this estimate , Godrej Interio's "Aristo Bckunt 1650 W 750H (1650x500x750) Model" in Backunit series has been considered. In case of other makes, technical specifications should be equivalent and cost adjustment shall also be done if the equivalent make is of lesser market price than Godrej Interio)	Each	37.00	
102	Providing services of a Computer Operator cum supervisor for utilization of computer installed in the office of the Executive Engineer during the office hours for day to day work on 22 working days in a month. The person to be employed for this job should have working experience of M.S. Word, M.S. Excel & Esta as required for preliminary estimate, detailed estimate, justification, NIT, E.I.S, D.I.S preparation of monthly reports, quarterly report for various categories of works, financial progress report, letters, budget report etc. and update the works information system. (The rate should be quoted inclusive of all satutory payments & all other applicable Government taxes if any).	Months	15.00	
103	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 steel 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. Group C	Point	300.0	

104	Wiring for group controlled (looped) light			
	point/fan point/exhaust fan point/ call bell			
	point (without independent switch etc.) with			
	1.5 sq. mm FRLS PVC insulated copper			
	conductor single core cable in surface/			
	recessed steel conduit, and earthing the point			
	with 1.5 sq. mm FRLS PVC insulated copper			
	conductor single core cable etc. as required.			
104.1		Deline	200.0	
104.1	Group C	Point	200.0	
105	Wiring for light/ power plug with 2X4			
	sq.mmFRLS PVC insulated copper conductor			
	single core cable in surface/ recessed steel			
	conduit along with 1 No 4 sq.mm FRLS PVC			
	insulated copper conductor single core cable		1000.0	
100	for loop earthing as reqd.	Meter	1000.0	
106	Wiring for light/ power plug with 4X4 sq. mm			
	FRLS PVC insulated copper conductor single			
	core cable in surface/ recessed steel conduit			
	alongwith 2 Nos. 4 sq. mm FRLS PVC			
	insulated copper conductor single core cable	Motor	500.0	
107	for loop earthing as required. Wiring for circuit/ submain wiring alongwith	Meter	500.0	
107	earth wire with the following sizes of FRLS			
	PVC insulated copper conductor, single core			
	cable in surface/ recessed steel conduit as			
	required			
107.1	$2 \times 2.5 \text{ sq. mm} + 1 \times 2.5 \text{ sq. mm}$ earth wire	Matan	150.0	
		Meter Metre	150.0 100.0	
107.2	$2 \times 6$ sq. mm + $1 \times 6$ sq. mm earth wire			
107.3	$2 \times 10 \text{ sq. mm} + 1 \times 6 \text{ sq. mm}$ earth wire	Metre	100.0	
107.4	$4 \times 2.5 \text{ sq. mm} + 2 \times 2.5 \text{ sq. mm}$ earth wire	Metre	70.0	
107.5	4 X 6 sq. mm + 2 X 6 sq. mm earth wire	Metre	50.0	
107.6	4  X 10  sq. mm + 2  X 6  sq. mm earth wire	Metre	100.0	
108	Supplying and drawing following sizes of			
	FRLS PVC insulated copper conductor, single			
	core cable in the existing surface/recessed			
	steel/ PVC conduit as required.			
108.1	3 x 4 sq mm		400.0	
	3 x 4 sq. mm	Meter	400.0	
108.2	6 x 4 sq. mm	Meter	300.0	
109	Supplying and fixing following modular			
	switch/ socket on the existing modular plate &			
	switch box including connections but			
	excluding modular plate etc. as required.			
109.1	5/6 A switch	Each	120.0	
109.2	15/16 A switch	Each	120.0	
109.2	3 pin 5/6 A socket outlet	Each	120.0	
109.4	*	Each	120.0	
107.4	6 pin 15/16 A socket outlet Supplying and fixing two module stepped type	Lach	100.0	
110	electronic fan regulator on the existing			
	modular plate switch box including			
	connections but excluding modular plate etc.			
	as required.	Each	120.0	
	us requireu.	Lucii	120.0	

111	Supplying and fixing following size/ modules,				
	GI box alongwith modular base & cover plate				
	for modular switches in recess etc. as required.				
111.1	$(N_{1})$	<b>F</b> 1	40.0		
	6 Module (200 mmX75 mm)	Each	40.0		
111.2	12 Module (200 mmX150 mm)	Each	50.0		
112	Supplying and fixing following size/ modules,				
	PVC box alongwith modular base & cover				
	plate for modular switches in recess etc. as				
	required.				
112.1	6 Module (200 mmX75 mm)	Each	10.0		
112.2	12 Module (200 mmX150 mm)	Each	10.0		
113					
	Supplying & fixing suitable size GI box with				
	modular plate & cover in front on surface or in				
	recess, including providing & fixing 3 pin5/6				
	amps modular socket outlet & 5/6 amps				
	modular switch, connection etc. as reqd.	Each	5.0		
114	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 amps modular socket outlet and				
	15/16 amps modular switch, connection etc. as				
	required.	Each	160.0		
115	Providing and fixing following rating and				
	breaking capacity and pole MCCB with				
	thermomagnetic release and terminal spreaders				
	in existing cubicle panel board including				
	drilling holes in cubicle panel, making				
	connections, etc. as required.				
115.1	125 A, 16 kA,TPMCCB	Each	6.0		
116	Supplying and fixing following way, single				
	pole and neutral, sheet steel, MCB distribution				
	board, 240 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)				
116.1	8 way, Double door	Each	2.0		
116.2	12 way, Double door	Each	2.0		
116.3	16 way, Double door	Each	2.0		
110.5	Supplying and fixing of following ways	Lucii	2.0	<u> </u>	
11/	surface/ recess mounting, vertical type, 415 V,				
	TPN MCB distribution board of sheet steel,				
	dust protected, duly powder painted, inclusive				
	of 200 A, tinned copper bus bar, common				
	neutral link, earth bar, din bar for mounting				
	MCBs (but without MCBs and incomer				
	MCCB) as required. (Note : Vertical type				
	MCB TPDB is normally used where 3 phase				
	outlets are required.)				
117.1	4  way  (4 + 12),  Double door	Each	2.0		
117.2	$\frac{1}{8}$ way (4 + 12), Double door 8 way (4 + 24), Double door	Each	2.0		
11/.2	$0 \text{ way } (4 \pm 24), \text{ Double 0001}$	LaCII	2.0		

125	Providing and fixing M.S. Fan clamp type I or II of 16 mm dia M.S. bar, bent to shape with hooked ends in R.C.C. slabs or beams during laying, including painting the exposed portion of loop, all as per standard design complete as required. Rate to be taken	Each	120.00	
126	Supplying and Fixing DLP U-PVC turnking of 105mm x 50mm on surface etc as required.	Meter	400.0	
127	Supplying and Fixing Full Flexible cover of width 85mm on existing DLP U-PVC turnking etc as required.	Meter	400.0	
128	Supplying and Fixing of 90° flat angle in existing DLP U-PVC turnking etc as required.	Each	30.0	
129	Supplying and Fixing of End cap on existing DLP U-PVC turnking etc as required.	Each	30.0	
130	Supplying and Fixing 3 module support for 85mm cover etc as required.	Each	200.0	
131	Supplying and Fixing 6 module support for 85mm cover etc as required.	Each	200.0	
132	Supplying and fixing following modular switch/ socket on the existing U-PVC trunking system including connections etc. as required.			
132.1	10 A switch	Each	200.0	
132.2	20 A switch	Each	400.0	
132.3	3 pin 10 amp socket outlet	Each	200.0	
132.4	6 pin 20 A socket outlet	Each	200.0	
133	S/I/T/C of 1200 mm size (5 star) of double ball bearing,copper winding, capacitor start Ceiling fan of approved make suitable for 230 volt, 50 Hz, sigle phase A.C. supply and complete with all standard accessories such as Motors, Blades & Capacitor, fan box cover i/c wiring the down rod with 1.5 sq.mm FRLS copper conductor wires from the point outlet etc complete as required.	Each	110	
134	S/I/T/C of 1400 mm size of double ball bearing,copper winding, capacitor start Ceiling fan of approved make suitable for 230 volt, 50 Hz, sigle phase A.C. supply and complete with all standard accessories such as Motors, Blades & Capacitor, fan box cover i/c wiring the down rod with 1.5 sq.mm FRLS copper conductor wires from the point outlet etc complete as required.	Each	10	

135	S/I/T/C of 12"(300mm) size,1400rpm,copper				
	wound, heavy duty metalic Exhaust Fan of				
	double ball bearing capacitor start, suitable for				
	230 volt,50 Hz,single phase A.C. supply and				
	complete with accessories such as motor,				
]	legs,frame,loober and Nut & bolts etc				
(	complete as required	Each	50.0		
136	S/I/T/C of 10"(250mm) size,copper wound,				
1 1 2	ventiling fresh air fan of double ball bearing				
	с				
	capacitor start, suitable for 230 volt, 50				
	Hz,single phase A.C. supply and complete				
	with accessories such as motor,				
]	legs,frame,loober and Nut & bolts etc				
(	complete as required.	Each	40.0		
137	S/I/T/C of Recess/ Surface mounting LED				
	luminaire equipped with CRCA powder				
	coating housing, anti glare polycarbonate				
	diffuser with energy efficient electronic driver				
	e				
	operating voltage and frequency: 130-300				
	Va.c, 50 Hz.; wattage not more than 34				
	Watts;Output lumens not less than 3300 lm;				
	CCT 6500K; Dimension in mm				
(	(595X595X70); Nominal surge protection 2.5				
] ]	kV;Power factor not less than 0.9; Minimum				
	IP protection 20;	Each	200.0		
	S/I/T/C of 18 watt LED batten with its				
	coextrusion polycarbonate construction &				
	Integrated electric driver IP20 protection,				
	6500k.	Each	10		
	S/I/T/C of 12 watt Surface mounted LED with	Lacii	10		
	its coextrusion polycarbonate construction &				
	Integrated electric driver IP20 protection,				
	6500k.	Each	100		
	S/I/T/C of 60watt LED Floodlight equiped				
	with Aluminium die cast housing luminaire				
	and toughened glass with silicon gasket for				
	IP66 protection. Suitable for operation 230				
	volt,50Hz and output lumens not less than				
	6000lm etc as required.	Each	10		
	Earthing with copper earth plate 600 mm X	20011	10		
	600 mm X 3 mm thick including accessories,				
	and providing masonry enclosure with cover				
	plate having locking arrangement and watering				
	pipe of 2.7 metre long etc. with charcoal/ coke		_		
	and salt as required.	Each	2.0		
142	Supplying and laying 25 mm X 5 mm copper				
5	strip at 0.50 metre below ground as strip earth				
	electrode, including connection/terminating				
I.					
	with nut, bolt, spring, washer etc. as required.				
(	with nut, bolt, spring, washer etc. as required. (Jointing shall be done by overlapping and				
	with nut, bolt, spring, washer etc. as required.	Metre	10.0		

143	Providing and fixing 25 mm X 5 mm copper			
	strip in 40 mm dia G.I. pipe from earth			
	electrode including connection with G.I. nut,			
	bolt, spring, washer excavation and re-filling		10.0	
1.1.1	etc. as required.	Metre	10.0	
144	Providing and fixing 25 mm X 5 mm copper			
	strip on surface or in recess for connections	Matur	10.0	
145	etc. as required.	Metre	10.0	
145	Providing and fixing 6 SWG dia G.I. wire on			
	surface or in recess for loop earthing along			
	with existing surface/ recessed conduit/			
	submain wiring/ cable as required.	Metre	1300.0	
146	Supplying and Laying of one number PVC			
	insulated and PVC sheathed / XLPE			
	Aluminium power cable of 1.1 KV grade of			
	following size direct in ground including			
	excavation, sand cushioning, protective			
	covering and refilling the trench etc as			
	required.			
	Above 35 sq. mm and upto 95 sq. mm (3.5C x			
146.1	95 sq.mm)	Metre	200.0	
	Above 95 sq. mm and upto 185 sq. mm (3.5C			
146.2	x 150 sq.mm)	Metre	200.0	
147	Supplying & Laying and fixing of one number	1110110	20010	
	PVC insulated and PVC sheathed / XLPE			
	Aluminium power cable of 1.1 kV grade of			
	following size on wall surface as required.			
	Upto 35 sq. mm ( <b>3C x 25 sq.mm</b> ) (clamped			
147.1	with 1mm thick saddle)	Metre	100.0	
	Upto 35 sq. mm (3.5C x 35 sq.mm) (clamped			
147.2	with 1mm thick saddle)	Metre	100.0	
	Above 35 sq. mm and upto 95 sq. mm (3.5C x			
	50 sq.mm) (clamped with 25x3mm MS flat			
147.3	clamp)	Metre	100.0	
148	Supplying and making end termination with			
	brass compression gland and aluminium lugs			
	for following size of PVC insulated and PVC			
	sheathed / XLPE aluminium conductor cable			
	of 1.1 KV grade as required.			
148.1	3 X 25 sq. mm (25mm)	Each	6	
148.2	3½ X 35 sq. mm (32mm)	Each	6	
148.3	3½ X 50 sq. mm (35mm)	Each	4	
148.4	3½ X 95 sq. mm (45mm)	Each	2	
148.5	3 <sup>1</sup> / <sub>2</sub> X 150 sq. mm (50mm)	Each	2	

153	Supplying, installation, testing & commissioning response indicator on			
	surface/recess MS box having two LEDs			
	metallic cover complete with all connections etc. as require	Each	50.0	
154	Supplying, installation, testing &	Each	30.0	
151	commissioning fire alarm sounder with facility			
	to make announcement, mounted in M.S. box			
	(16 SWG) with hinged cover plate & suitable			
	for operation with amplifier i/c line matching transformer etc. complete as required	Each	3.0	
155	Supplying & laying and fixing of 2x1.5 sqmm	Each	3.0	
155	fire alarm armoured cable, 600/1000V rated			
	with annealed copper conductor having XLPE			
	insulation, steel wire armouring & FRLS outer			
156	sheath complete as required. Supplying and drawing following sizes of	Metre	400.0	
130	FRLS PVC insulated copper conductor, single			
	core cable in the existing surface/ recessed			
	steel/ PVC conduit as required.			
156.1	2 x 1.5 sq. m	Metre	50.0	
157	Supplying and fixing of following sizes of	metre	50.0	
	steel conduit along with accessories in			
	surface/recess including painting in case of			
	surface conduit, or cutting the wall and making			
	good the same in case of recessed conduit as required.			
157.1	20 mm	Metre	50.0	
157.1	Supplying, installation, testing &		2010	
	commissioning sector panel suitable for			
	following zones, complete with visual			
	indications for short circuit fault, open circuit fault, fire condition and all other standard			
	facilities as per IS:2189 with mimic diagram			
	for all area/zone covered, complete with all			
	connections, interconnections as required.			
158.1	4 Zone	Each	1.0	
	CCTV			

159	Supply & Fixing 1080p 2 MP IP Network			
	TDN Low-Light IR Bullet Camera, 1/2.7"			
	CMOS, 2 MP @ 25fps, triple stream, Min.			
	Illumination required 0.01 lux @ F1.4 (color),			
	120dB True WDR, Min. Pixels $1920 \times 1080$ ,			
	triple stream, 2.7-12 mm motorized focus &			
	zoom lens, BLC, HLC, 3DNR, Privacy Mask,			
	4 IR LEDs Smart IR with upto 60m IR			
	distance, Dual channel Audio			
	G.711a/G.711u/AAC, 128GB SD card support,			
	Alarm: 2 In/ 1out, PoE, H.264 High Profile			
	and MJPEG, PoE Class 3 and 12V DC, IP 67,			
	IK 10 vandal proof, Having Operating temp			
	range : $-40^{\circ}$ C to $60^{\circ}$ C. Certifications: ONVIF			
	Profile S & Profile G compliant, UL, CSA			
	60950-22, CE (EN 50130-4 & EN 55022),			
	FCC Part 15 & RoHS compliant. Approved			
	Makes MAF/Letter of Authorization from			
	original equipment manufacturer (OEM) on			
	the same and specific to the tender should be			
	enclosed.	Each	28	
160	Supply & Fixing of 32 Channel NVR with			
	Dualcore embedded processor, Embedded			
	LINUX, BIDIRECTIONAL AUDIO 1 channel			
	input; 1 channel output; RCA, RESOLUTION			
	1920 x 1080; 1280 x 1024; 1280 x 720; 1024 x			
	768, OSD Camera title; Time; Video loss;			
	Camera lock; Motion detection; Recording,			
	COMPRESSION H.264 / MJPEG, BIT			
	RATE* 48 to 8192 Kbps, RECORDING			
	MODE Manual; Schedule (Regular			
	[Continuous], Motion Detection, Alarm,			
	Motion Detection+Alarm); Stop,			
	SUPPORTED PROTOCOLS** HTTP;			
	TCP/IP; IPv4/IPv6; UPnP; RTSP; UDP;			
	SMTP; NTP; DHCP; DNS; IP filter; PPPoE;			
	DDNS; FTP; Alarm server; IP search,			
	ETHERNET 1 x RJ-45 port (10/100/1000			
	Mbps, USB 2 ports: USB 3.0 on rear panel;			
	USB 2.0 on front panel. The proposed system			
	should provide 15 days recording. Approved			
	Makes NVR & Cameras should be from the			
	same make only.	Each	1	
161	Supply & Fixing of Layer -2 Switch with	Lacii	1	
101				
	Power on Ethernet (PoE) enabled, with 24			
	port. 10/100/1000 base Tx PoE port, 1 no. dual			
	personality Gbe Port for copper/fiber uplink,			
	3.7 Gbps switching capacity, 2.7 MPPS			
	forwarding rate, maximum power consumption			
	135 watt. Approved Makes	Each	2	

162       Supply & Fixing of Layer -2 Switch with Power on Ethernet (PoE) enabled, with 8 nos. 10/100/1000 base Tx PoE port, 1 no. dual personality Gbe Port for copper/fiber uplink, 3.7 Gbps switching capacity, 2.7 MPS forwarding rate, maximum power consumption 135 wart. Approved Makes       Each       1         163       Supply & Fixing of 24 port jack panel. Approved Makes       Each       2         164       Supply & Fixing of 17U rack for switch Mounting with Fan and power Strip, PDU, Hardware Mounting Kit. Approved Makes       Each       1         165       Supply & Fixing of 6U rack for switch Mounting with Fan and power Strip, PDU, Hardware Mounting Kit. Approved Makes       Each       1         166       Supply & Fixing of 42° LED Monitor, Full HD, HDMI Port, Component Video Inputs, 1 Digital Audio Out, VGA, Port. Approved Makes       Each       1         167       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.       Metre       200.0         168.1       1 run of cable       Metre       800.0       1         168.2       2 run of cable       Metre       420.0       1         168.1       1 run of cable       Metre       420.0       1         168.2       2 run of cable       Metre       420.0       1         168.2       1 run of cable       Metre						
10/100/1000 base Tx PoE port, 1 no. dual personality Gbe Port for copper/fiber uplink, 3.7 Gbps switching capacity, 2.7 MPPS forwarding rate, maximum power consumption 135 watt. Approved Makes       Each 1         163       Supply & Fixing of 24 port jack panel. Approved Makes       Each 2         164       Supply & Fixing of 17U rack for switch Mounting with Fan and power Strip, PDU, Hardware Mounting Kit. Approved Makes       Each 1         165       Supply & Fixing of 6U rack for switch Mounting with Fan and power Strip, PDU, Hardware Mounting Kit. Approved Makes       Each 1         166       Supply & Fixing of 42" LED Monitor, Full HD, HDM Port, Component Video Inputs, 1 Digital Audio Out, VGA, Port. Approved Makes       Each 1         167       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.       Metre 200.0         168.1       1 run of cable       Metre 800.0       Metre 420.0         169       Supplying and laying of following size DWC HDPE pipe ISI marked along with all accessories like socket, bend, couplers etc. conforming to IS 14930, Part II complete with fitting and cutting, jointing etc.direct in ground (75 cm below ground level) in cluding excavation and refilling the trench but excluding sand cushioning and protective covering etc., complete as required.         169.1       63 mm dia (OD-63 mm & ID-51 mm nominal)       Mtr       100	162					
personality Gbe Port for copper/fiber uplink, 3.7 Gbps switching capacity, 2.7 MPPS forwarding rate, maximum power consumption 135 watt. Approved Makes       Each       1         163       Supply & Fixing of 24 port jack panel. Approved Makes       Each       2         164       Supply & Fixing of 17U rack for switch Mounting with Fan and power Strip, PDU, Hardware Mounting Kit. Approved Makes       Each       1         165       Supply & Fixing of 10 rack for switch Mounting with Fan and power Strip, PDU, Hardware Mounting Kit. Approved Makes       Each       1         166       Supply & Fixing of 42" LED Monitor, Full Hardware Mounting Sit. Approved Makes       Each       1         166       Supply & Fixing of 42" LED Monitor, Full Hardware Mounting Sit. Approved Makes       Each       1         167       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.       Metre       200.0         167.1       2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire       Metre       200.0       1         168.2       1 un of cable       Metre       420.0       1         168.1       1 run of cable       Metre       420.0       1         168.2       2 run of cable       Metre       420.0       1         168.2       2 run of cable       Metre		Power on Ethernet (PoE) enabled, with 8 nos.				
3.7       Gbps switching capacity, 2.7       MPPS forwarding rate, maximum power consumption 135 watt. Approved Makes       Each       1         163       Supply & Fixing of 24 port jack panel. Approved Makes       Each       2         164       Supply & Fixing of 17U rack for switch Mounting with Fan and power Strip, PDU, Hardware Mounting Kit. Approved Makes       Each       1         165       Supply & Fixing of 6U rack for switch Mounting with Fan and power Strip, PDU, Hardware Mounting Kit. Approved Makes       Each       1         166       Supply & Fixing of 42" LED Monitor, Full HD, HDMI Port, Component Video Inputs, 1 Digital Audio Out, VGA, Port. Approved Makes       Each       1         167       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.       Metre       200.0         168       Supplying and drawing of UTP 4 pair CAT 6 LAN Cable in the existing surface/ recessed Steel/ PVC conduit as required.       Metre       800.0         169       Supplying and laying of following size DWC HDPE pipe ISI marked along with fitting and cutting, jointing etc. direct in ground (75 cm below ground level) including excavation and refilling the trench but excluding sand cushing and protective covering etc., complete as required.       Metre       40.0         168.1       1 run of cable       Metre hound and refilling the trench but excluding sand custhioning and protective covering etc., comple						
in forwarding rate, maximum power consumption 135 watt. Approved Makes     Each     1       163     Supply & Fixing of 24 port jack panel. Approved Makes     Each     2       164     Supply & Fixing of 17U rack for switch Mounting with Fan and power Strip, PDU, Hardware Mounting Kit. Approved Makes     Each     1       165     Supply & Fixing of 6U rack for switch Mounting with Fan and power Strip, PDU, Hardware Mounting Kit. Approved Makes     Each     1       166     Supply & Fixing of 42" LED Monitor, Full HD, HDMI Port, Component Video Inputs, 1 Digital Audio Out, VGA, Port. Approved Makes     Each     1       167     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.     Metre     200.0       168.     Supplying and drawing of UTP 4 pair CAT 6 LAN Cable in the existing surface/ recessed Steel/ PVC conduit as required.     Metre     800.0       169.     Supplying and laying of following size DWC HDPE pipe ISI marked along with all accessories like socket, bend, couplers etc. conforming to IS 14930, Part II complete with fitting and cutting, jointing etc.direct in ground (75 cm below ground level) including eccavation and refilling the trench but excluding sand cushioning and protective covering etc., complete as required.     Mtr     100       170     Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recessincluding with accessories in surface/recessincluding with accessories in surface/recessincluding with acce						
135 watt. Approved Makes       Each       1         163       Supply & Fixing of 24 port jack panel. Approved Makes       Each       2         164       Supply & Fixing of 17U rack for switch Mounting with Fan and power Strip, PDU, Hardware Mounting Kit. Approved Makes       Each       1         165       Supply & Fixing of 6U rack for switch Mounting with Fan and power Strip, PDU, Hardware Mounting Kit. Approved Makes       Each       1         166       Supply & Fixing of 42" LED Monitor, Full HD, HDMI Port, Component Video Inputs, 1       Each       1         167       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.       Metre       200.0         168       Supplying and drawing of UTP 4 pair CAT 6 LAN Cable in the existing surface/ recessed Steel/ PVC conduit as required.       Metre       800.0         168.1       1 run of cable       Metre       800.0       1         168.2       2 run of cable       Metre       800.0       1         169       Supplying and laying of following size DWC HDPE pipe ISI marked along with all accessories like socket, bend, couplers etc. conforming to IS 14930, Part II complete with fitting and cutting, jointing etc. direct in ground (75 cm below ground level) including excavation and refilling the trench but excluding sand cushioning and protective covering etc., complete as required.       100 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
163       Supply & Fixing of 24 port jack panel. Approved Makes       Each       2         164       Supply & Fixing of 17U rack for switch Mounting with Fan and power Strip, PDU, Hardware Mounting Kit. Approved Makes       Each       1         165       Supply & Fixing of 6U rack for switch Mounting with Fan and power Strip, PDU, Hardware Mounting Kit. Approved Makes       Each       1         165       Supply & Fixing of 42" LED Monitor, Full HD, HDMI Port, Component Video Inputs, 1 Digital Audio Out, VGA, Port. Approved Makes       Each       1         167       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       Metre       200.0         167.1       2 X 2.5 sq. mm + 1 X 2.5 sq. mm carth wire       Metre       200.0         168.1       1 run of cable       Metre       800.0       1         168.2       2 run of cable       Metre       800.0       1         168.2       2 run of cable       Metre       800.0       1         168.2       2 run of cable       Supplying and laying of following size DWC conforming to IS 14930, Part II complete with fifting and curling, jointing etc.direct in ground (75 cm below ground level) including excavation and refilling the trench but excluding sand cushioning and protective covering etc., complete as required.       100         169.1       63 mm dia (OD-63 mm &						
Approved Makes       Each       2         164       Supply & Fixing of 17U rack for switch Mounting with Fan and power Strip, PDU, Hardware Mounting Kit. Approved Makes       Each       1         165       Supply & Fixing of 6U rack for switch Mounting with Fan and power Strip, PDU, Hardware Mounting Kit. Approved Makes       Each       1         166       Supply & Fixing of 42" LED Monitor, Full HD, HDMI Port, Component Video Inputs, 1 Digital Audio Out, VGA, Port. Approved Makes       Each       1         167       Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC isulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required.       Metre       200.0         168.1       1 run of cable       Metre       800.0       1         168.2       2 run of cable       Metre       420.0       1         169       Supplying and laying of following size DWC HDPE pipe ISI marked along with all accessories like socket, bend, couplers etc. conforming to IS 14930, Part II complete with fifting and cuting, jointing etc. direct in ground (75 cm below ground level) including excavation and refilling the trench but excluding sand cushinoing and protective covering etc., complete as required.       100         169.1       63 mm dia (OD-63 mm & ID-51 mm nominal)       Mtr       100			Each	1		
164       Supply & Fixing of 17U rack for switch Mounting with Fan and power Strip, PDU, Hardware Mounting Kit. Approved Makes       Each       1         165       Supply & Fixing of 6U rack for switch Mounting with Fan and power Strip, PDU, Hardware Mounting Kit. Approved Makes       Each       1         166       Supply & Fixing of 42" LED Monitor, Full HD, HDMI Port, Component Video Inputs, 1 Digital Audio Out, VGA, Port. Approved Makes       Each       1         167       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.       Metre       200.0         168.       Supplying and drawing of UTP 4 pair CAT 6 LAN Cable in the existing surface/ recessed Steel/ PVC conduit as required.       Metre       800.0         168.1       1 run of cable       Metre       800.0       1         169       Supplying and laying of following size DWC HDPE pipe ISI marked along with all accessories like socket, bend, couplers etc. conforming to IS 14930, Part II complete with fitting and cutting, jointing etc.direct in ground (75 cm below ground level) including excavation and refilling the trench but excluding sand cushioning and protective covering etc., complete as required.       Mtr       100         169.1       63 mm dia (OD-63 mm & ID-51 mm nominal)       Mtr       100	163					
Mounting with Fan and power Strip, PDU, Hardware Mounting Kit. Approved Makes       Each       1         165       Supply & Fixing of 6U rack for switch Mounting with Fan and power Strip, PDU, Hardware Mounting Kit. Approved Makes       Each       1         166       Supply & Fixing of 42" LED Monitor, Full HD, HDMI Port, Component Video Inputs, 1 Digital Audio Out, VGA, Port. Approved Makes       Each       1         167       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.       Metre       200.0         168       Supplying and drawing of UTP 4 pair CAT 6 LAN Cable in the existing surface/ recessed Steel/ PVC conduit as required.       Metre       800.0         168.1       1 run of cable       Metre       420.0       1         169       Supplying and laying of following size DWC HDPE pipe ISI marked along with all accessories like socket, bend, couplers etc. conforming to IS 14930, Part II complete with fitting and cutting, jointing etc.direct in ground (75 cm below ground level) including excavation and refilling the trench but excluding sand cushioning and protective covering etc., complete as required.       Mtr       100         170       Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting       Mtr       100		Approved Makes	Each	2		
Mounting with Fan and power Strip, PDU, Hardware Mounting Kit. Approved Makes     Each     1       165     Supply & Fixing of 6U rack for switch Mounting with Fan and power Strip, PDU, Hardware Mounting Kit. Approved Makes     Each     1       166     Supply & Fixing of 42" LED Monitor, Full     Each     1       166     Supply & Fixing of 42" LED Monitor, Full     Each     1       167     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     Each     1       167     Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC conduit as required.     Metre     200.0       168     Supplying and drawing of UTP 4 pair CAT 6 LAN Cable in the existing surface/ recessed Steel/ PVC conduit as required.     Metre     800.0       168.1     1 run of cable     Metre     420.0       169     Supplying and laying of following size DWC HDPE pipe ISI marked along with all accessories like socket, bend, couplers etc. conforming to IS 14930, Part II complete with fitting and cutting, jointing etc.direct in ground (75 cm below ground level) including excavation and refilling the trench but excluding sand cushioning and protective covering etc., complete as required.     100       169.1     63 mm dia (OD-63 mm & ID-51 mm nominal)     Mtr     100       170     Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recress including cutting </td <td>164</td> <td>Supply &amp; Fixing of 17U rack for switch</td> <td></td> <td></td> <td></td> <td></td>	164	Supply & Fixing of 17U rack for switch				
Hardware Mounting Kit. Approved Makes       Each       1         165       Supply & Fixing of 6U rack for switch Mounting with Fan and power Strip, PDU, Hardware Mounting Kit. Approved Makes       Each       1         166       Supply & Fixing of 42" LED Monitor, Full HD, HDMI Port, Component Video Inputs, 1 Digital Audio Out, VGA, Port. Approved Makes       Each       1         167       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.       Metre       200.0         168       Supplying and drawing of UTP 4 pair CAT 6 LAN Cable in the existing surface/ recessed Steel/ PVC conduit as required.       Metre       800.0         168.1       1 run of cable       Metre       420.0       1         169       Supplying and laying of following size DWC HDPE pipe ISI marked along with all accessories like socket, bend, couplers etc. conforming to IS 14930, Part II complete with fitting and cutting, jointing etc.direct in ground (75 cm below ground level) including excavation and refilling the trench but excluding sand cushioning and protective covering etc., complete as required.       100         170       Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting       Mtr       100						
165       Supply & Fixing of 6U rack for switch Mounting with Fan and power Strip, PDU, Hardware Mounting Kit. Approved Makes       Each       1         166       Supply & Fixing of 42" LED Monitor, Full HD, HDMI Port, Component Video Inputs, 1 Digital Audio Out, VGA, Port. Approved Makes       Each       1         167       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.       Metre       200.0         167.1       2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire LAN Cable in the existing surface/ recessed Steel/ PVC conduit as required.       Metre       200.0         168.1       I run of cable       Metre       800.0       1         168.2       2 run of cable       Metre       420.0       1         169       Supplying and laying of following size DWC HDPE pipe ISI marked along with all accessories like socket, bend, couplers etc. conforming to IS 14930, Part II complete with fitting and cutting, jointing etc.direct in ground (75 cm below ground level) including excavation and refilling the trench but excluding sand cushioning and protective covering etc., complete as required.       100         169.1       63 mm dia (OD-63 mm & ID-51 mm nominal)       Mtr       100         170       Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting       Mtr       100		Hardware Mounting Kit. Approved Makes	<b>F</b> 1	1		
Mounting with Fan and power Strip, PDU, Hardware Mounting Kit. Approved Makes       Each       1         166       Supply & Fixing of 42" LED Monitor, Full HD, HDMI Port, Component Video Inputs, 1 Digital Audio Out, VGA, Port. Approved Makes       Each       1         167       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.       Each       1         167.1       2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire       Metre       200.0         168       Supplying and drawing of UTP 4 pair CAT 6 LAN Cable in the existing surface/ recessed Steel/ PVC conduit as required.       Metre       800.0         168.1       I run of cable       Metre       420.0       1         169       Supplying and laying of following size DWC HDPE pipe ISI marked along with all accessories like socket, bend, couplers etc. conforming to IS 14930, Part II complete with fitting and cutting, jointing etc.direct in ground (75 cm below ground level) including excavation and refilling the trench but excluding sand cushioning and protective covering etc., complete as required.       100         170       Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting       Mtr       100	1.65		Each	1		
Hardware Mounting Kit. Approved Makes     Each     1       166     Supply & Fixing of 42" LED Monitor, Full HD, HDMI Port, Component Video Inputs, 1 Digital Audio Out, VGA, Port. Approved Makes     Each     1       167     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.     Each     1       167.1     2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire     Metre     200.0       168     Supplying and drawing of UTP 4 pair CAT 6 LAN Cable in the existing surface/ recessed Steel/ PVC conduit as required.     Metre     800.0       168.2     2 run of cable     Metre     800.0       169     Supplying and laying of following size DWC Gording and cushing etc.direct in ground (75 cm below ground level) including excavation and refilling the trench but excluding sand cushioning and protective covering etc., complete as required.     Hot       169.1     63 mm dia (OD-63 mm & ID-51 mm nominal)     Mtr     100       170     Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting     Mtr     100	165					
International and the second state of the second						
HD, HDMI Port, Component Video Inputs, 1 Digital Audio Out, VGA, Port. Approved Makes       Each       1         167       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.       Each       1         167.1       2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire       Metre       200.0         168       Supplying and drawing of UTP 4 pair CAT 6 LAN Cable in the existing surface/ recessed Steel/ PVC conduit as required.       Metre       800.0         168.1       1 run of cable       Metre       800.0       1         169       Supplying and laying of following size DWC HDPE pipe ISI marked along with all accessories like socket, bend, couplers etc. conforming to IS 14930, Part II complete with fitting and cutting, jointing etc.direct in ground (75 cm below ground level) including excavation and refilling the trench but excluding sand cushioning and protective covering etc., complete as required.       100         169.1       63 mm dia (OD-63 mm & ID-51 mm nominal)       Mtr       100         170       Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including with accessories in surface/recess including cutting       Mtr		Hardware Mounting Kit. Approved Makes	Each	1		
Digital Audio Out, VGA, Port. Approved Makes       Each       1         167       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.       Netre       200.0         167.1       2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire       Metre       200.0         168       Supplying and drawing of UTP 4 pair CAT 6 LAN Cable in the existing surface/ recessed Steel/ PVC conduit as required.       Metre       800.0         168.1       1 run of cable       Metre       800.0         168.2       2 run of cable       Metre       420.0         169       Supplying and laying of following size DWC HDPE pipe ISI marked along with all accessories like socket, bend, couplers etc. conforming to IS 14930, Part II complete with fitting and cutting, jointing etc.direct in ground (75 cm below ground level) including excavation and refilling the trench but excluding sand cushioning and protective covering etc., complete as required.       100         169.1       63 mm dia (OD-63 mm & ID-51 mm nominal)       Mtr       100         170       Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting       Mtr       100	166	Supply & Fixing of 42" LED Monitor, Full				
Makes       Each       1         167       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.       Image: Complete as a sequence of the surface/ recessed medium class PVC conduit as required.         167.1       2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire       Metre       200.0         168       Supplying and drawing of UTP 4 pair CAT 6 LAN Cable in the existing surface/ recessed Steel/ PVC conduit as required.       Metre       800.0         168.1       1 run of cable       Metre       800.0         168.2       2 run of cable       Metre       420.0         169       Supplying and laying of following size DWC HDPE pipe ISI marked along with all accessories like socket, bend, couplers etc. conforming to IS 14930, Part II complete with fitting and cutting, jointing etc.direct in ground (75 cm below ground level) including excavation and refilling the trench but excluding sand cushioning and protective covering etc., complete as required.       100         169.1       63 mm dia (OD-63 mm & ID-51 mm nominal)       Mtr       100         170       Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting       Mtr       100						
167       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.         167.1       2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire       Metre       200.0         168       Supplying and drawing of UTP 4 pair CAT 6 LAN Cable in the existing surface/ recessed Steel/ PVC conduit as required.       Metre       800.0         168.1       1 run of cable       Metre       420.0         168.2       2 run of cable       Metre       420.0         169       Supplying and laying of following size DWC HDPE pipe ISI marked along with all accessories like socket, bend, couplers etc. conforming to IS 14930, Part II complete with fitting and cutting, jointing etc.direct in ground (75 cm below ground level) including excavation and refilling the trench but excluding sand cushioning and protective covering etc., complete as required.       100         169.1       63 mm dia (OD-63 mm & ID-51 mm nominal)       Mtr       100         170       Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting       Mtr       100		Digital Audio Out, VGA, Port. Approved				
earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required.       167.1       2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire LAN Cable in the existing surface/ recessed Steel/ PVC conduit as required.       Metre       200.0         168       Supplying and drawing of UTP 4 pair CAT 6 LAN Cable in the existing surface/ recessed Steel/ PVC conduit as required.       Metre       800.0         168.1       1 run of cable       Metre       800.0         168.2       2 run of cable       Metre       420.0         169       Supplying and laying of following size DWC HDPE pipe ISI marked along with all accessories like socket, bend, couplers etc. conforming to IS 14930, Part II complete with fitting and cutting, jointing etc.direct in ground (75 cm below ground level) including excavation and refilling the trench but excluding sand cushioning and protective covering etc., complete as required.       100         169.1       63 mm dia (OD-63 mm & ID-51 mm nominal)       Mtr       100         170       Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting       Mtr       100		Makes	Each	1		
PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required.       167.1       2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire       Metre       200.0         168       Supplying and drawing of UTP 4 pair CAT 6 LAN Cable in the existing surface/ recessed Steel/ PVC conduit as required.       Metre       800.0         168.1       1 run of cable       Metre       800.0         168.2       2 run of cable       Metre       420.0         169       Supplying and laying of following size DWC HDPE pipe ISI marked along with all accessories like socket, bend, couplers etc. conforming to IS 14930, Part II complete with fitting and cutting, jointing etc.direct in ground (75 cm below ground level) including excavation and refilling the trench but excluding sand cushioning and protective covering etc., complete as required.       Mtr       100         169.1       63 mm dia (OD-63 mm & ID-51 mm nominal)       Mtr       100         170       Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting       Mtr       100	167					
cable in surface/ recessed medium class PVC conduit as required.       167.1       2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire       Metre       200.0         168       Supplying and drawing of UTP 4 pair CAT 6 LAN Cable in the existing surface/ recessed Steel/ PVC conduit as required.       Metre       800.0         168.1       1 run of cable       Metre       800.0         168.2       2 run of cable       Metre       420.0         169       Supplying and laying of following size DWC HDPE pipe ISI marked along with all accessories like socket, bend, couplers etc. conforming to IS 14930, Part II complete with fitting and cutting, jointing etc.direct in ground (75 cm below ground level) including excavation and refilling the trench but excluding sand cushioning and protective covering etc., complete as required.       100         169.1       63 mm dia (OD-63 mm & ID-51 mm nominal)       Mtr       100         170       Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting       100		earth wire with the following sizes of FRLS				
conduit as required.Metre200.0167.12 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wireMetre200.0168Supplying and drawing of UTP 4 pair CAT 6 LAN Cable in the existing surface/ recessed Steel/PVC conduit as required.Metre800.0168.11 run of cableMetre800.0168.2169Supplying and laying of following size DWC HDPE pipe ISI marked along with all accessories like socket, bend, couplers etc. conforming to IS 14930, Part II complete with fitting and cutting, jointing etc.direct in ground (75 cm below ground level) including excavation and refilling the trench but excluding sand cushioning and protective covering etc., complete as required.Mtr169.163 mm dia (OD-63 mm & ID-51 mm nominal) medium class PVC conduit along with accessories in surface/recess including cuttingMtr						
167.1       2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire       Metre       200.0         168       Supplying and drawing of UTP 4 pair CAT 6 LAN Cable in the existing surface/ recessed Steel/ PVC conduit as required.       Metre       800.0         168.1       1 run of cable       Metre       800.0         168.2       2 run of cable       Metre       420.0         169       Supplying and laying of following size DWC HDPE pipe ISI marked along with all accessories like socket, bend, couplers etc. conforming to IS 14930, Part II complete with fitting and cutting, jointing etc.direct in ground (75 cm below ground level) including excavation and refilling the trench but excluding sand cushioning and protective covering etc., complete as required.       Mtr       100         169.1       63 mm dia (OD-63 mm & ID-51 mm nominal)       Mtr       100         170       Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting       Mtr       100						
168       Supplying and drawing of UTP 4 pair CAT 6 LAN Cable in the existing surface/ recessed Steel/ PVC conduit as required.       168.1       1 run of cable       Metre       800.0         168.1       1 run of cable       Metre       800.0       168.2       2 run of cable       Metre       420.0         169       Supplying and laying of following size DWC HDPE pipe ISI marked along with all accessories like socket, bend, couplers etc. conforming to IS 14930, Part II complete with fitting and cutting, jointing etc.direct in ground (75 cm below ground level) including excavation and refilling the trench but excluding sand cushioning and protective covering etc., complete as required.       100         169.1       63 mm dia (OD-63 mm & ID-51 mm nominal)       Mtr       100         170       Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting       Mtr       100						
LAN Cable in the existing surface/ recessed Steel/ PVC conduit as required.       Metre       800.0         168.1       1 run of cable       Metre       800.0         168.2       2 run of cable       Metre       420.0         169       Supplying and laying of following size DWC HDPE pipe ISI marked along with all accessories like socket, bend, couplers etc. conforming to IS 14930, Part II complete with fitting and cutting, jointing etc.direct in ground (75 cm below ground level) including excavation and refilling the trench but excluding sand cushioning and protective covering etc., complete as required.       Mtr       100         169.1       63 mm dia (OD-63 mm & ID-51 mm nominal)       Mtr       100         170       Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting       Mtr	167.1	2 X 2.5  sq. mm + $1 X 2.5 $ sq. mm earth wire	Metre	200.0		
Steel/ PVC conduit as required.Metre800.0168.11 run of cableMetre800.0168.22 run of cableMetre420.0169Supplying and laying of following size DWC HDPE pipe ISI marked along with all accessories like socket, bend, couplers etc. conforming to IS 14930, Part II complete with fitting and cutting, jointing etc.direct in ground (75 cm below ground level) including excavation and refilling the trench but excluding sand cushioning and protective covering etc., complete as required.Mtr169.163 mm dia (OD-63 mm & ID-51 mm nominal) medium class PVC conduit along with accessories in surface/recess including cuttingMtr	168					
168.11 run of cableMetre800.0168.22 run of cableMetre420.0169Supplying and laying of following size DWC HDPE pipe ISI marked along with all accessories like socket, bend, couplers etc. conforming to IS 14930, Part II complete with fitting and cutting, jointing etc.direct in ground (75 cm below ground level) including excavation and refilling the trench but excluding sand cushioning and protective covering etc., complete as required.Mtr169.163 mm dia (OD-63 mm & ID-51 mm nominal) medium class PVC conduit along with accessories in surface/recess including cuttingMtr		LAN Cable in the existing surface/ recessed				
168.2       2 run of cable       Metre       420.0         169       Supplying and laying of following size DWC HDPE pipe ISI marked along with all accessories like socket, bend, couplers etc. conforming to IS 14930, Part II complete with fitting and cutting, jointing etc.direct in ground (75 cm below ground level) including excavation and refilling the trench but excluding sand cushioning and protective covering etc., complete as required.       Mtr       100         169.1       63 mm dia (OD-63 mm & ID-51 mm nominal)       Mtr       100         170       Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting       Mtr       100		Steel/ PVC conduit as required.				
168.2       2 run of cable       Metre       420.0         169       Supplying and laying of following size DWC HDPE pipe ISI marked along with all accessories like socket, bend, couplers etc. conforming to IS 14930, Part II complete with fitting and cutting, jointing etc.direct in ground (75 cm below ground level) including excavation and refilling the trench but excluding sand cushioning and protective covering etc., complete as required.       Mtr       100         169.1       63 mm dia (OD-63 mm & ID-51 mm nominal)       Mtr       100         170       Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting       Mtr       100	168 1	1 run of cable	Metre	800.0		
169       Supplying and laying of following size DWC HDPE pipe ISI marked along with all accessories like socket, bend, couplers etc. conforming to IS 14930, Part II complete with fitting and cutting, jointing etc.direct in ground (75 cm below ground level) including excavation and refilling the trench but excluding sand cushioning and protective covering etc., complete as required.       Image: Complete as a sequired.         169.1       63 mm dia (OD-63 mm & ID-51 mm nominal)       Mtr       100         170       Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting       Mtr						
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accessories like socket, bend, couplers etc.         conforming to IS 14930, Part II complete with         fitting and cutting, jointing etc.direct in ground         (75 cm below ground level) including         excavation and refilling the trench but         excluding sand cushioning and protective         covering etc., complete as required.         169.1       63 mm dia (OD-63 mm & ID-51 mm nominal)         Mtr       100         170       Supplying and fixing of following sizes of         medium class       PVC conduit along with         accessories in surface/recess including cutting	109					
conforming to IS 14930, Part II complete with fitting and cutting, jointing etc.direct in ground (75 cm below ground level) including excavation and refilling the trench but excluding sand cushioning and protective covering etc., complete as required.         169.1       63 mm dia (OD-63 mm & ID-51 mm nominal)       Mtr       100         170       Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting       Mtr       100						
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excluding sand cushioning and protective covering etc., complete as required.       Image: complete as required.         169.1       63 mm dia (OD-63 mm & ID-51 mm nominal)       Mtr       100         170       Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting       Image: complete as required.						
covering etc., complete as required.       169.1       63 mm dia (OD-63 mm & ID-51 mm nominal)       Mtr       100         170       Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting       100						
169.1     63 mm dia (OD-63 mm & ID-51 mm nominal)     Mtr     100       170     Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting     Image: Conduct along with accessories in surface/recess including cutting		<b>U U I</b>				
170 Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting	160.1			100		
medium class PVC conduit along with accessories in surface/recess including cutting			Mtr	100		
accessories in surface/recess including cutting	170					
the wall and making good the same in case of						
recessed conduit as required.       170.1     25 mm       Metre     675.0	170.1			(75.0		
171     Supply & Fixing of 1 mtr patch cord.     Each     30			Each	30		
172 Supply & Fixing of 3 KVA UPS INVERTOR	172					
With 30 Minutes Backup. Approved Makes   Each   1		with 50 Minutes Backup. Approved Makes	Each	1		

173 173.10 174	Supply Installation, Testing & Commissioning of modular type Variable Refrigerant Flow/Variable Refrigerant Volume air cooled Outdoor units suitable for cooling and heating, having all hermetically sealed inverter type Scroll Compressor(s), <b>minimum two</b> <b>compressors for above 14 HP modules</b> , microprocessor based controller, top discharge type condensing unit(s), with R 410 A Refrigerant, vibration isolators, with suitable foundation etc. complete as required. The unit shall deliver the rated capacity at 43 Degree C ambient and work even at 50 Degree C ambient temperature without tripping. The unit shall be suitable to work on $400V +/- 10\%$ , 3 Phase, 50Hz AC power supply. The unit shall be filled with first charge of the refrigerant and ready for use as required. The COP at AHRI conditions (35 deg C) at 50% load shall not be less than 6.4 and IEER not less than 6.5 (Make: Bluestar / LG / Carrier / Toshiba / Mitsubishi / Hitachi) 3 x 32 HP Supply, installation, testing and commissioning of following minimum capacity VRV/VRF High wall type Indoor unit equipped with washable synthetic media pre - filter, fan section with low noise fan/dynamically balanced blower, multispeed motor, coil section with DX copper coil, electronic expansion valve, outer cabinet, cord less remote control, drain pan, necessary accessories etc., suitable for operation on 230 V +/- 10%, 50 Hz, single phase AC supply, complete as required. The unit shall have automatic force shut down provision in case of fire on receiving signal from BMS System. The cooling capacity of indoor unit will be at air inlet conditions of 27 Degree C DB and 19 Degree C WB temperature. (same as outdoor unit)	HP	96	
1741	unit)	E - 1	27	
174.1	1.3 TR	Each	37	
174.2	1.65 TR	Each	38	

175	Supply, Installation, testing and commissioning including vaccumisation and nitrogen testing of following nominal sizes of soft / hard drawn copper refrigerant piping for VRV/VRF system, complete with fittings, Y-type joints wherever required, with adjustable with ring type hanger supports, jointing / brazing including accessories, insulated with XLPE class - O tubular insulation / with Class-O closed cell elastomeric nitrile rubber tubular sleeves sections of specified thickness as given below for suction and liquid lines, all accessories as per specifications etc. as required: NOTE: (1) The copper piping and piping circuit should be with minimum number of joints, which shall be attained by: (a) Using one end expanded tubes (b) bending the tubes instead of using elbow joints wherever 90 degree bending is required (2) Piping should be routed at site in such a manner, that brazed joints in the refrigeration piping are kept to a minimum (3) The makes of tube fittings used shall be same as that of tubes (4) The thickness of fittings used shall be same as that of the pipe			
175.2	9.5 mm dia (OD) (soft drawn) with tube thickness 1.2 mm with 19 mm thick insulation	Metre	100	
175.3	12.7 mm dia (OD) (soft drawn) with tube thickness 1.2 mm with 19 mm thick insulation	Metre	75	
175.4	15.86 mm dia (OD) (soft drawn) with tube thickness 1.2 mm with 19 mm thick insulation	Metre	35	
175.5	19 mm dia (OD) (hard drawn) with tube thickness 1.2 mm with 19 mm thick insulation	Metre	35	
175.6	22.2 mm dia (OD) (hard drawn) with tube thickness 1.2 mm with 19 mm thick insulation	Metre	30	
175.7	25.4 mm dia (OD) (hard drawn) with tube thickness 1.2 mm with 19 mm thick insulation	Metre	30	
175.8	28.58 mm dia (OD) (hard drawn) with tube thickness 1.62 mm with 19 mm thick insulation	Metre	35	
175.9	34.9 mm dia (OD) (hard drawn) with tube thickness 1.62 mm with 19 mm thick insulation	Metre	45	

176	Supplying and installing following size of perforated Hot Dipped Galvanised Iron Cable tray (galvanisation thickness not less than 50 microns) with perforation not more than 17.5% in convenient sections, joined with connectors, suspended from the ceiling / steel truss as available with GI suspenders including GI bolts and nuts, etc. as required.			
176.1	225 mm width x 50 mm depth x 1.6 mm thickness	Metre	250	
177	Supplying and laying of ISI marked CPVC pipe of 32 mm dia for draining of sweated water from AC evaporator unit including providing tee, joints, elbows, supports, etc. with thermal insulation wherever necessary etc. complete as required.	Metre	300	
178	Fabricating, Providing and fixing M.S. iron frame fabricated with M.S. C-channel of size 100 mm x 50 mm x 6 mm (thick) for resting the condenser unit on the roof / floor of the building duly supported from the bottom as required including painting the framework etc. complete as required.	Metre	50	
179	Supplying and laying of ISI marked FR pvc insulated flexible copper cable of size 2 core x 1.5 sqmm of 1.1 kv grade including making connection etc. for communication between indoor and outdoor unit and other units, etc. through conduit complete as required.	Metre	350	
180	Supplying and laying of following size pvc insulated pvc sheathed XLPE armoured copper conductor cable of 1.1 kV grade including making connections etc. as required.			
180.1	3 core x 2.5 sqmm	Metre	400	
181	Supplying and laying of following size pvc insulated pvc sheathed XLPE armoured aluminium conductor cable of 1.1 kV grade direct in ground including excavation, sand cushioning, protective covering and refilling the trench including making connections etc. as required.			
181.1	3.5 core x 35 sqmm	Metre	175	 
182	Supplying and making end termination with brass compression gland and tinned copper lugs for following size of pvc insulated and pvc sheathed / XLPE copper conductor cable of 1.1 kV grade as required.			
182.1	3 core x 2.5 sqmm	Each	150	
183	Supplying and making end termination with brass compression gland and aluminium lugs for following size of pvc insulated and pvc sheathed / XLPE aluminium conductor cable of 1.1 kV grade as required.			

## **Special Conditions:**

1. No labour huts shall be allowed in IIT Campus and nothing shall be paid extra on this account.

2. The contractor must visit the site of work /buildings before quoting the rates.

3. No labour to stay in IIT Campus nothing shall be paid extra on this account.

4. Site shall be available in parts or phases as per directions of Engineer in Charge and nothing extra on this account shall be paid to the Contractor.

5. Quoted rates of participating agencies shall be inclusive of GST

I----NIL O-----NIL

A.E.E. (Civil)