



GURU GHASIDAS VISHWAVIDYALAYA

(A Central University)

Koni, Bilaspur-495009(C.G.)

Phone: 07752-260036, e-mail: ueggvbsp@gmail.com

Website: www.ggu.ac.in

e- Tender

(Percentage Rate Tender)

Reference NIT No.	: NI e-T No. 55(R)/ENGG/GGV/Civil R&M Work/2022, BILASPUR, Dated: 01/09/2022
Name of Work	: "CIVIL REPAIRING & MAINTENANCE WORK" AT GGV CAMPUS, BILASPUR (C.G.)
Estimated Cost (As per CG SOR-2015)	: Rs. 20,00,000/- (Inclusive of all)
Tender Cost	: Rs. 2,500/- (in form of D.D.)
Earnest Money Deposit	: Rs. 40,000/- (in the form of D.D./FDR)
Period of Completion	: 03 months (Three- Months) from date of Work Order
Tender Document	: Available online through the websites www.eprocure.gov.in and www.ggu.ac.in

गुरु घासीदास विश्वविद्यालय
बिलासपुर (छ.ग.)
(केन्द्रीय विश्वविद्यालय)
कोनी, बिलासपुर-495009 (छ.ग.)
दूरभाष : 07752-260036, फ़ैक्स -07752-260154
वेबसाइट : www.ggu.ac.in



GURU GHASIDAS VISHWAVIDYALAYA
BILASPUR (C.G.)
(A Central University)
Koni, Bilaspur-495009 (C.G.)
Phone: 07752-260036, Fax : 07752-260154
Website : www.ggu.ac.in

e-Tender Notice (Percentage Rate Tender)

Reference NI e-T No.	:	NI e-T No. 55(R)/ENGG/GGV/CIVIL R&M Work/2022, BILASPUR, Dated: 30/08/2022
Name of Work	:	"CIVIL REPAIRING & MAINTENANCE WORK" AT GGV CAMPUS, BILASPUR (C.G.)
Estimated Cost	:	Rs. 20,00,000/- (Inclusive All)
Earnest Money Deposit	:	Rs. 40,000/- (In form of D.D./FDR)
Tender Cost/Processing Fee	:	Rs. 2500/- (In form of D.D.)
Period of Completion	:	3 months (Three- Months) from date of Work Order
Tender Documents	:	Available online through the websites www.eprocure.gov.in and www.ggu.ac.in
Tender Document Download Start Date	:	01/09/2022, from 03.00 PM
Mode of submission	:	Online through www.eprocure.gov.in
Last date of submission of e- Tender	:	15/09/2022 up to 3.00 PM
Technical Bid opening Date	:	16/09/2022, at 3:30 PM
Corrigendum (if any)	:	Will be notified later through www.eprocure.gov.in
Financial Bid opening Date	:	Will be notified later through www.eprocure.gov.in

INDEX

**NAME OF WORK- "CIVIL REPAIRING & MAINTENANCE WORK" AT GGV CAMPUS,
BILASPUR (C.G.)**

S. No.	Description	Page
	COVER PAGE	01
1	TITLE PAGE	02
2	INDEX	03
3	PART-A	04
4	e-TENDER NOTICE	05
5	Information and instructions for contractors for e-tendering	06
6	FORM-G1 for e-Tendering	10
7	FORM-G2 for percentage rate e-Tender & Contract	16
8	Performa of Schedules	19
9	PART-B	25
10	Particulars Specifications & Special Conditions (Civil)	26
11	List of Approved materials & Specialised Agencies (for Civil Works)	44
12	Schedule of quantities/Rate Civil work in campus	47
13	PART-C	49
14	(PRICE BID/Percentage-BOQ (Format)Intending tenderer shall quote rate percentage Below/ At Par/ Above	51
15	Special Instructions To Tenderer	52
NI e-T Amounting to Rs. 20,00,000/- containing Cover Page, Title Page, INDEX, PART-A from page No.04 to 24, PART-B from page No.25 to 48. And PART-C from page No.49 to 52.		

UNIVERSITY ENGINEER (I/C)
Guru Ghasidas Vishwavidyalaya,
Bilaspur (C.G.)

PART-A

e-TENDER NOTICE
Information and instructions for contractors for e-tendering
FORM-G1 for e-Tendering
FORM-G2 for percentage rate e-Tender & Contract
Pro forma of Schedules

e- TENDER NOTICE

GURU GHASIDAS VISHWAVIDYALAYA, BILASPUR

<p>गुरु घासीदास विश्वविद्यालय बिलासपुर (छ.ग.) (केंद्रीय विश्वविद्यालय) कोनी, बिलासपुर-495009 (छ.ग.) दूरभाष : 07752-260036, फ़ैक्स -07752-260154 वेबसाइट :www.ggu.ac.in</p>		<p>GURU GHASIDAS VISHWAVIDYALAYA BILASPUR (C.G.) (A Central University) Koni, Bilaspur-495009 (C.G.) Phone: 07752-260036, Fax : 07752-260154 Website : www.ggu.ac.in</p>
--	---	--

e- Tender Notice

Guru Ghasidas Vishwavidyalaya (a Central University), Bilaspur, (C.G.), invites online **percentage rate e-Tender** for the "CIVIL REPAIRING & MAINTENANCE WORK" with following details from eligible bidders.

Reference NIe-T No.	:	NI e-T No. 55(R)/ENGG/GGV/CIVIL R&M Work/2022, BILASPUR, Dated: 30/08/2022
Name of Work	:	"CIVIL REPAIRING & MAINTENANCE WORK" AT GGV CAMPUS, BILASPUR (C.G.).
Estimated Cost	:	Rs. 20,00,000/- (Inclusive All)
Tender Cost	:	Rs. 2,500/- (in form of D.D.)
Earnest Money Deposit	:	Rs. 40,000/- (in form of D.D./FDR)
Period of Completion	:	03 months (Three-months)
Last date of submission of e-Tender	:	15/09/2022, Up to 03:00 PM
Technical Bid opening Date	:	16/09/2022, at 03:30 PM

The bid documents, other details, formats, terms & conditions regarding the e-Tender can be downloaded from the websites: - www.eprocure.gov.in and www.ggu.ac.in

REGISTRAR (Acting)
Guru Ghasidas Vishwavidyalaya,
Bilaspur (C.G.)

**INFORMATION AND INSTRUCTIONS FOR CONTRACTORS FOR
e- TENDERING FORMING PART OF NI e-T AND TO BE SUBMITTED WITH THE
TENDER**

The **Registrar, Guru Ghasidas Vishwavidyalaya, Bilaspur** invites online **Percentage Rate e-Tender** from the approved and eligible contractors of CPWD and those in the valid approved list of any one of BSNL, M.E.S., Railways and C.G. State P.W.D. and other PSUs for (Name of Work) **"CIVIL REPAIRING & MAINTENANCE WORK"** at GGV, Bilaspur (C.G.).

Reference NIe-T No.	: NI e-T No. 55(R)/ENGG/GGV/CIVIL R&M Work/2022, BILASPUR, Dated: 30/08/2022
Name of Work	: "CIVIL REPAIRING & MAINTENANCE WORK", BILASPUR (C.G.).
Estimated Cost	: Rs. 20,00,000/-(Inclusive All)
Tender Cost	: Rs. 2,500/- (in form of D.D.)
Earnest Money Deposit	: Rs. 40,000/- (in form of D.D./FDR)
Period of Completion	: 03 months (Three Months)
Last date of submission of e-Tender	: 15/09/2022, Up to 3.00 PM
Technical Bid opening Date	: 16/09/2022, at 3.30 PM

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 The intending tender must read the terms and conditions of FORM-G1 carefully and should submit the tender only if eligible and in possession of all the documents required.
- 2 Information and Instructions for tender posted on website viz. www.eprocure.gov.in and www.ggu.ac.in shall form part of tender document.
- 3 The tender 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 the Tender document can be downloaded from the websites www.ggu.ac.in. Or www.eprocure.gov.in
- 4 Corrigendum of any kind related with the tender (if any), would appear only on the above web sites and will not be published anywhere else and neither informed in person. Tenderers are advised to visit the above websites regularly till the last date of the bid submission

- 5 **Tender Cost** (Non-refundable) of Rs. 2,500/-in the form of Demand Draft from any Nationalized Bank in favour of "**Registrar, Guru Ghasidas Vishwavidyalaya**" payable at Bilaspur (C.G.) must reach in original to GGV, on or before the last date of submission of the bid through registered post/speed post only to the prescribed address at GGV Also DD of the above tender cost must be uploaded as scanned documents in the e-tender, failing which the bidder/firm will be disqualified in the Bidding process.
- 6 EMD (Refundable with terms of the tender) of **Rs. 40,000/-in the form of Demand Draft (DD)or Fixed Deposit Receipt(FDR) from any Nationalized Bank in favour of "Registrar, Guru Ghasidas Vishwavidyalaya"** payable at Bilaspur (C.G.) must reach in original to GGV on or before the last date of submission of the bid, only through registered post/speed post only to the prescribed address at GGV, also the DD/FDR of the above EMD must be uploaded as scanned documents in the e-tender, failing which the bidder/firm will be disqualified in the Bidding process.
- 7 The Tender Cost (as detailed in serial no5 above) and the EMD (as detailed in serial no 6 above) in the form of DD/FDR must reach to GGV in original on or before the last date of submission of the bid through registered post/speed post only, to the following mailing address in a sealed envelope super scribed on the envelope mentioning name and address of the tenderer on the envelope as given below.

BID for;	
NI e-Tender No. 55(R)/ENGG/GGV/Civil R&M Work/2022, BILASPUR, dated: 30/08/2022	
From: Name of Bidder: _____ Address: _____ _____	To, <u>The University Engineer,</u> <u>Guru Ghasidas Vishwavidyalaya,</u> <u>Koni, Bilaspur (C.G.) – 495009</u>

If, in case of the Tenderer who claim to have been exempted or being exempted from submitting the specified Tender Cost/Bid Cost and/or EMD. The information of exemption if any should be submitted to the University with due certification and the same in original should reach the UE, GGV before the last date and time of Tender Submission same as in case of non-exempted bidders for Tender Cost/Bid Cost and/or EMD. Otherwise such bid shall be summarily rejected.

- 8 Bidder must register on the website www.eprocure.gov.in for uploading the soft copy of the bid. Those interested Bidders not registered on the website www.eprocure.gov.in 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 above website.
- 9 The intending bidder(s) must read the terms and conditions of this tender carefully, and should submit bid only if they are eligible and are in possession of all the required documents.
- 10 The intending bidder(s) must have a valid digital signature to submit the bid.

- 11 Bidders should upload documents in the form of PDF format or as per the format available on the website www.eprocure.gov.in
- 12 Bidder must upload on the e-Tendering website www.eprocure.gov.in the scanned copy of Demand Draft for Tender Cost (Non-refundable), and Demand Draft/FDR/BG of Earnest Money Deposit (EMD) in PDF format. The copies (Images) of the above two demand drafts should be combined, scanned and uploaded as a single file only with file name as "Tender_Cost_EMD_Name of Bidder.pdf" within the period of bid submission.
- 13 Bidders must upload on the e-Tendering website www.eprocure.gov.in, the scanned copy of the bid documents Technical (in PDF format) and Financial Bids (as per format available on the website (www.eprocure.gov.in)) within the period of bid submission.
- 14 First PDF file titled "Technical Bid Name of Bidder must have all required documents related to Technical Bid.
- 15 Second file (as per the format available on the website www.eprocure.gov.in) titled "Financial-Bid Name of Bidder" must have the Financial Bid.
- 16 The bidders are required to upload and submit the scanned page of Technical documents as per essential eligibility criteria for the bidders and other required documents as per this Tender.
- 17 The Technical bid file must contain the scanned copies of duly signed tender, certified copies of documents related to ESSENTIAL ELIGIBILITY CRITERIA i.e. all relevant information and documents of turnover, work experience certificates, Proof of Registration Certificate of Firm, OEM Authorization letter (as and where applicable), copy of the audited balance sheet of the vendor by the chartered accountant for the last three financial years, Details of Permanent Account Number, ITR (Income Tax Return) for last 3 financial years, ISO Certification, GST registration certificate, bank mandate for company, etc. relevant for evaluating the bidder technically, Declarations, Corrigendum / Addendum / Other documents, if any, etc.
- 18 The bidder shall quote the items (up to 2 Decimals)
- 19 The tenderer (s) is/are required to quote the rate strictly as per the terms and conditions, specifications, standards given in the Tender documents.
- 20 Power of Attorney of the person having digital signature for signing/submitted the tender. This should be supported by Board Resolution (in case of a company registered under the Companies Act).
- 21 In addition to this, 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 tenderer, rate of such item shall be treated as "0"(ZERO).
- 22 Information and Instructions for tenderers posted on websites shall form part of bid document.
- 23 The bidders are advised to submit complete details with their bids. The Technical Bid Evaluation will be done on the basis of documents uploaded on e-tendering web site(s) by the bidders with the bids. Bids with Incomplete/Ambiguous information will be rejected.

- 24 Before the last time and date of submission of bid as notified, the tenderer can submit revised bid any number of times.
- 25 On opening date, the Bidder can login and see the bid opening process
- 26 The tenderer(s) if required, may submit queries, if any, through E-mail (E-mail of University Engineer: ueggvbsp@gmail.com) and in writing to the University Engineer, Guru Ghasidas Vishwavidyalaya Bilaspur (C.G.) to seek clarifications within 07 days from the date of uploading of Tender on website. GGV will reply to only those queries which are essentially required for submission of bids. GGV will not reply to the queries which are not considered fit like replies of which can be implied /found in the NIT Documents or which are not relevant or in contravention to NIT Documents, queries received after 07 days from the date of uploading of Tender on website, extension of time for opening of technical bids, etc. Technical Bids are to be opened on the scheduled dates. Requests for extension of opening of Technical Bids will not be entertained.
- 27 Last date of submission of the bid online as well as original hard copies of DD for Tender Cost & EMD etc., for proposed works, etc. is up to **03:00 PM on 15/09/2022**
- 28 Online technical bid documents submitted by tenderers shall be opened only of those tenderers, whose Original Earnest Money Deposit and Original DD for Tender Cost of Bid Document are sent to the university in sealed envelope, and are found to be in order and valid.
- 29 Date and Time of opening of the online/sealed envelope **at 03.30 PM on 16/09/2022** (Venue: Engineering Section, Administrative Block, GGV).in case the bid couldn't be open on the scheduled date then the same will be opened online on the next working day.
- 30 Successful bidder shall have to submit the certified serially numbered hard copies of all the documents uploaded on the designated website and other relevant original documents for verification before award of the work.

FORM-G1 for e-TENDERING

- 1** The **Registrar, Guru Ghasidas Vishwavidyalaya, Bilaspur** invites online **Percentage Rate e-Tender** from the approved and eligible contractors of CPWD and those in the valid approved list of any one of BSNL, M.E.S., Railways and C.G. State P.W.D. and other PSUs under Govt. of India.

**"VARIOUS CIVIL REPAIRING AND MAINTENANCE WORK" AT GGV
CAMPUS, BILASPUR (C.G.).**

- 2** 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.
- 3** The work is estimated to cost **Rs. 20,00,000 /- (Rupees Twenty lakh Only)**. This estimate, however, is given merely as a rough guide.
- 4** Intending tenderer must have satisfactorily completed similar works of magnitude specified as below in any Government/ Semi-Government/ PSU/ Government funded organizations:-
- (i) Three similar works each of value not less than 40% of estimated cost or
 - (ii) Two similar works each of value not less than 50% of estimated cost or
 - (iii) One similar work of value not less than 80% of estimated cost in the period of last seven years ending 31.03.2022.
- **'Similar work'** means 'Building Works/ Road works'.
 - The value of executed works shall be brought to current costing level by enhancing the actual value of work at simple rate of 7% per annum, calculated from the date of completion to the last date of submission of the tender.
 - The experience shall be considered only if the tenderer submits a valid experience certificate issued by the competent authority of the concerned department/organization, in support of the completed work.
- 5** Agreement shall be drawn with the successful tenderers on prescribed FORM-G2. Tenderers shall quote his rates as per various terms and conditions of the said form which will form part of the agreement.
- 6** The time allowed for carrying out the work will be **3 months (Three Months)** (Note: May be extended by one more Months) from the date of start as defined in schedule 'For 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.
- 7** The site for the work is available.
- 8** Architectural drawings for work are available (if any)
- 9** The tender 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 on websites viz www.eprocure.gov.in or www.ggu.ac.in
- 10** After online submission of the tender the contractor can re-submit the revised tender any number of times (if required) online, but the same is allowed before the last date and time of submission of tender as notified.
- 11** **Tender Cost** (Non-refundable) of **Rs. 2,500/-in the form of Demand Draft from any Nationalized Bank in favour of "Registrar, Guru Ghasidas Vishwavidyalaya"** payable at **Bilaspur (C.G.)** must reach in original to GGV, on or before the last date of submission of the bid through registered post/speed post only to the prescribed address at GGV. Also DD of the above tender cost must be uploaded as scanned documents in the e-tender, failing

which the bidder/firm will be disqualified in the Bidding process.

- 12 EMD (Refundable with terms of the tender) of **Rs. 40,000/- in the form of Demand Draft (DD) or Fixed Deposit Receipt (FDR) from any Nationalized Bank in favour of "Registrar, Guru Ghasidas Vishwavidyalaya"** payable at Bilaspur (C.G.) must reach in original to GGV on or before the last date of submission of the bid, only through registered post/speed post only to the prescribed address at GGV Also DD/FDR of the above EMD must be uploaded as scanned documents in the e-tender, failing which the bidder/firm will be disqualified in the Bidding process.
- 13 The Tender Cost (as detailed in serial no 5 before in Instructions & Information) and the EMD (as detailed in serial no 6 before in Instructions & Information) in the form of DD/FDR must reach to GGV in original on or before the last date of submission of the bid through registered post/speed post only, to the following mailing address in a sealed envelope super scribed as given below with the detail name and address of the tenderer on the envelope.

BID for;	
NI e-T No. 55(R)/ENGG/GGV/Civil R&M Work/2022, BILASPUR, Dated: 30/08/2022	
From: Name of Bidder: _____ Address: _____ _____	To, <u>The University Engineer,</u> <u>Guru Ghasidas Vishwavidyalaya,</u> <u>Koni, Bilaspur (C.G.) – 495009</u>

- 14 Copy of Enlistment Order and certificate of work experience wherever applicable and other documents if required and specified in this tender document shall be scanned and uploaded to the e-Tendering website within the period of tender submission. However, certified copy of all the scanned and uploaded documents as specified in this tender document shall have to be submitted by the lowest tenderer only within a week physically in the office of tender opening authority. Online tender documents submitted by intending tenderers shall be opened only of those tenderers, whose original Demand Draft for Tender Cost/Bid Cost (Non-refundable) and EMD deposited with the University Engineer, GGV, Bilaspur and other documents scanned and uploaded are found in order/proper.
- 15 The tender submitted shall become invalid if
- The tenderer does not deposit original Tender Cost and EMD
 - The tenderer does not upload the certified scanned copy of all the relevant/ desired documents including Tender Cost, EMD, Enlistment order, Experience etc. as detailed and stipulated in this tender document.
 - If any discrepancy is noticed between the documents as uploaded at the time of submission of tender and hard copies as submitted physically by the lowest tenderer in the office of tender opening authority.
 - If a tenderer does not quote any percentage above/at-par/below, on the total amount of the tender or any section/sub head in percentage rate tender, the tender shall be treated as invalid and will not be considered as lowest tenderer.
- 16 The contractor whose tender is accepted will be required to furnish performance guarantee

of 5% (Five Percent) of the tendered amount within the period specified in Schedule F. Banker's cheque of any scheduled bank/Demand Draft of any scheduled bank/Pay order of any Scheduled Bank 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 tender shall be returned after receiving the aforesaid performance guarantee.

The earnest money deposited along with tender shall be returned after receiving the aforesaid performance guarantee. The Contractor whose tender 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 including provident fund code no. if applicable and also ensure the compliance of aforesaid provisions by the subcontractor, if engaged by the contractor for the said work and Programme Chart (Time and Progress) within the period specified in Schedule F.

- 17 Intending Tenderers are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their tenders as to the nature of the ground and sub-soil (so far as is practicable), the form and nature of the site, the means of access to the site, the accommodation they may require and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their tender. A tenderers 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 tenderers 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 tender by a tenderer implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and of conditions and rates at which stores, tools and plant, etc. will be issued to him by the Government and local conditions and other factors having a bearing on the execution of the work.
- 18 The GGV 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 tenderers shall be summarily rejected.
- 19 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 for rejection.
- 20 The, Guru Ghasidas Vishwavidyalaya, Bilaspur reserves the right of accepting the whole or any part of the tender and the tenderers shall be bound to perform the same at the rate quoted.
- 21 The contractor shall not be permitted to tender for works in the (Guru Ghasidas Vishwavidyalaya, Bilaspur) University responsible for award and execution of contracts, in which his near relative is posted as an officer in the university. 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 University. Any breach of this condition by the contractor would render him liable to be removed from the approved list of contractors of this University.

- 22 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 tender or engagement in the contractor's service
- 23 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 University shall, without prejudice to any other right or remedy, be at liberty to forfeit 50% of the said earnest money as aforesaid. Further the tenderers shall not be allowed to participate in the retendering process of the work.
- 24 This Notice Inviting Tender shall form a part of the contract document. The successful tenderers/ contractor, on acceptance of his tender by the Accepting Authority shall within 15 days (or as decided by the competent authority of GGV) 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 tender and acceptance thereof together with any correspondence leading thereto.
 - b) Standard **FORM-G2** or other **Standard C.P.W.D. Form** as applicable

25 For Tenders

The tender document will include following three components:

Part A:- NIT including schedule A to F for component of the work, Standard General Conditions of Contract (**CPWD-GCC 2016**) or latest edition as applicable with all amendments /modifications.

Part B:-General/specific conditions, specifications and schedule of quantities applicable to major component of the work.

Part C:- Price Bid, Special Instructions to Tenderer

The tenderer must associate with himself, agencies of the appropriate class eligible to tender for the minor components individually.

The eligible tenderers shall quote rates for all items of component of work. It will be obligatory on the part of the tenderer to sign the tender document for all the components (The schedule of quantities, conditions and special conditions etc.) in appropriate Price-bid/BoQ as % above/ at par/ below of SoR-2015.

After acceptance of the tender by competent authority, the Registrar GGV shall issue an

order on behalf of the Guru Ghasidas Vishwavidyalaya.

Entire work under the scope of composite tender including all components shall be executed under one agreement.

- 26 Deviation / Variation Extent and Pricing:** The Engineer In-charge with due approval of the university authority can (i) make alteration in omissions from, addition to or substitutions for the original specification, drawings. Designs and instruction that may appear to him to be necessary or advisable during the progress of the work and (ii) omit a part of the in case of non- availability of a portion of the site or for any other reasons and the contractor shall be bound to carry out the work in accordance with the instructions given to him in writing signed by the Engineer-in-charge and such originally. Omission, Addition or substitutions shall from part of the contractor as if originally provided therein and any altered, additional or substituted work which the contractor may be directed to do in the manner specified as part of the work, shall be carried out by the contractor on the same condition in all including price on which he agreed to do the main work except as hereafter provided.

The time for completion of the work shall, in the event of any deviations resulting in additional cost over the tendered value sum being order, be extended, if requested by contractor, as follows:

- i) In the proportion which the addition cost of the altered, additional or substituted work, bear to the original tendered value plus.
- ii) 25% of the time calculate in (i) above or such further additional time as may be considered reasonable by the Engineer-in-charge with due approval from the university authority.

Rate of such altered, additional or substituted work shall be determined by Engineer-in-charge as follows: with due approval from the university authority.

- i) In the rate for altered, additional or substituted item of work is specified in the schedule of rate, the contractor shall carry out the altered, addition or substituted item at the same rate. Accepted tender rate shall be applied for it.
- ii) If the rate for any altered, additional or substituted item of work is not specified in the schedule of rate, the rate for that items shall be derived from the rate the nearest similar item specified therein. Accepted tender rate shall be applicable for it.
- iii) If the rate for any altered, additional or substituted item of work cannot be determined in the manner specified in sub- paras (i) & (ii) above, the contractor shall within 15 days of the date or receipt of the order to carry out the said work, inform the Engineer-in-charge or the rate which he proposed to claim for such item of work, supported by analysis method thereafter, after giving due consideration to the rate claimed by contractor , determines the rate on the basis of market rates. In the event of the contractor failing to inform the Engineer-in-charge within the stipulated period of time, the rate which he propose to claim, the rate which he proposed to claim, the rate for such item shall be determined by the Engineer-in-charge on the basis of market rates. Tender percentage rate shall not be applicable on this determined rate. The university authority has right to accept finally the above said rates based on the rate analysis as given.

- 27 GST, labour Cess and all other tax as applicable, shall be payable by the contractor and the university will not entertain any claim whatsoever in respect of the same
- 28 *Note: - Intending Tenderer shall quote rate percentage below/at-par/above in the online Price bid/BoQ only in Percentage rate.*

Signature of

UNIVERSITY ENGINEER (I/C)
Guru Ghasidas Vishwavidyalaya,
Bilaspur (C.G.)

Signature of

REGISTRAR (Acting)
Guru Ghasidas Vishwavidyalaya,
Bilaspur (C.G.)

<p>गुरु घासीदास विश्वविद्यालय बिलासपुर (छ.ग.) (केंद्रीय विश्वविद्यालय) कोनी, बिलासपुर-495009 (छ.ग.) दूरभाष : 07752-260036, फ़ैक्स -07752-260154 वेबसाइट :www.ggu.ac.in</p>		<p>GURU GHASIDAS VISHWAVIDYALAYA BILASPUR (C.G.) (A Central University) Koni, Bilaspur-495009 (C.G.) Phone: 07752-260036, Fax : 07752-260154 Website : www.ggu.ac.in</p>
--	---	--

PERCENTAGE RATE e-TENDER & CONTRACT FOR WORKS

A	TENDER FOR THE WORK OF		: “VARIOUS CIVIL REPAIRING & MAINTENANCE WORK” AT GGV CAMPUS, BILASPUR (C.G.)		
	A1	Reference NIE-T No.	:	NIE-T No. 55(R)/ENGG/GGV/Civil R&M Work/2022, BILASPUR, Dated: 30/08/2022	
				(Time)	(Date)
	A2	To be Uploaded Online latest by	:	Up to 03.00 P.M. on	15/09/2022
	A3	To be opened by the authorized bid openers of the university	:	At 03.30 P.M. on	16/09/2022

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 **(Guru Ghasidas Vishwavidyalaya, Bilaspur)** university 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 in accordance with, such conditions so fares applicable.

We agree to keep the tender open for **Ninety (90) days** from the due date of its opening and not to make any modification in its terms and conditions.

A sum of **Rs. 40,000/-** is hereby forwarded as fixed deposit receipt of scheduled bank/demand draft of a scheduled bank as earnest money. If I/We, fail to furnish the prescribed performance guarantee within prescribed period. I/We agree that the said Guru Ghasidas Vishwavidyalaya, Bilaspur, (C.G.) 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 Guru Ghasidas

Seal & Signature of the Bidder

Vishwavidyalaya, Bilaspur, (C.G.) shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the said performance guarantee absolutely, Otherwise the said earnest money shall be retained by the university towards security deposit to execute all the works referred to in the tender documents upon the terms and conditions contained or referred to therein and to carry out such deviations as may be ordered, up to maximum of the percentage mentioned in Schedule 'F' and those in excess of that limit at the rates to be determined in accordance with the provision contained in Clause of the tender form. Further, I/ We agree that in case of forfeiture of Earnest Money or both Earnest money and Performance Guarantee as aforesaid, I/We shall be debarred for participation in the re-tendering 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 University, then I/We shall be debarred for tendering in the Guru Ghasidas Vishwavidyalaya (University) in future forever. Also, if such a violation comes to the notice of Department before date of start of work, the Engineer-in-Charge (University Engineer/Competent authority) shall be free to forfeit the entire amount of Earnest Money Deposit/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 University/State/Country.

I/we have done myself/ ourselves fully satisfied to read & examine the notice inviting, general conditions and various clauses of contract, all annexure, specials conditions & specifications, applicable specifications, drawings, designs, applicable schedule of rates, descriptions, of the items of work, all the rules in respect of contract and all other contents in the tender documents and here by agreed for execution of the said specified work for the University Authority within the above time period in accordance with that at the rate

(In figures) * _____

(In Words) * _____

Percent below/at par/above of Chhattisgarh PWD SoR 2015(Civil& Electrical)/attached schedule rates.

Note * the rate should be quoted in the online price bid only

Dated:

Signature of Contractor:

Postal Address:

Witness:

Address:

Occupation:

To be filled in by the contractor/witness as applicable

ACCEPTANCE

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

(Rupees _____)

The letters referred to below shall form part of this contract Agreement:-

- a)
- b)
- c)

Registrar (Acting)

Signature.....

Dated.....

**SCHEDULES
FOR MAJOR (CIVIL) COMPONENT OF "VARIOUS CIVIL WORK" AT GGV
CAMPUS, BILASPUR (C.G.)**

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	2	3	4	5
-----NIL-----				

SCHEDULE 'C'

Tools and plants to be hired to the contractor

S. No.	Description of item	Hire charges per day	Place of Issue
1	2	3	4
-----NIL-----			

SCHEDULE 'D'

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

-----NIL-----

SCHEDULE 'E'

Reference to General Conditions of contract: **Chhattisgarh PWD GCC-2016**

Name of work :

Estimated cost of work: **Rs. 20,00,000/- lakh**
Earnest money: **Rs. 40,000/-**
Performance guarantee: **5% of tendered value.**
Security Deposit: **5% of tendered value.**

SCHEDULE 'F'

General Rules & Directions:

Officer inviting tender: Registrar GGV

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. Not applicable

Note: There may be change in schedule items and in quantity (Excess or less) up to any extent. Extended items will be paid as per quoted percentage rate of schedule in tender.

Definitions:

- | | | |
|---------|--|---|
| 2(v) | Engineer-in-Charge | For Civil, Electrical: UE, GGV Bilaspur or his successor. |
| 2(viii) | Accepting Authority | Registrar, GGV, Bilaspur. |
| 2(x) | Percentage on cost of materials and labour to cover all overheads and profits. | 15% |
| 2(xi) | Standard Schedule of Rates | <p>For Civil:
Chhattisgarh PWD SoR 2015 (Civil) with correction slips issued up to date of receipt of tender</p> <p>For Electrical:
Chhattisgarh PWD SoR 2015(Electrical) for Internal Electrical works and External Electrical works</p> |
| 2(xii) | Department: | Guru Ghasidas Vishwavidyalaya, Bilaspur. |
| 9(ii) | University Standard Contract Form | GGV Standard Contract Form / (FORM G2) |

Clause -1

- | | | |
|----|---|----------------|
| i | Time allowed for submission of performance guarantee from the date of issue of letter of acceptance | 20 days |
| ii | Maximum allowable extension beyond the period as provided in (i) above | 10 days |

Clause -2

Authority for fixing Compensation under clause 2 **Registrar/Building Committee / Competent Authority (GGV)**

Clause -2A

Whether clause 2A shall be applicable **Yes**

Clause -5

No. of days from the date of issue of letter of acceptance for reckoning date of start **22 days**

Milestone(s) : -

Table of Milestone(s)

Payment terms:

- 1) The payment to the contractor shall be made in maximum three instalments, as first running bill (as 33% of total work order amount), 2nd running bill (as 33% of total work order amount) and final settlement (as the balance amount) as per the terms and conditions of the tender/agreement (to be executed between the GGV & the winning bidder called as contractor.).
- 2) The contractor may claim the first running bill only after successfully completing at least 1/3rd of the assigned work as per the scope of the work detailed in the tender.
- 3) The contractor may claim the second running bill only after successfully completing at least 2/3rd of the assigned work as per the scope of the work detailed in the tender.
- 4) The contractor will be entitled for releasing the balance final payment only after 100% completing the assigned work as per the scope of the work detailed in the tender.

The University has all the rights reserved to consider for part payment as claimed by the contractor or not to consider for such claim if the progress/quality of the work is not found satisfactory by the Engineering section of GGV.

Time allowed for execution of work		03 (Three-months)
Authority to decide	(i) Extension of Time	University Engineer, GGV, Bilaspur (C.G.) with permission of competent Authority
	(ii) Scheduling of mile-stones	University Engineer/ Competent Authority (GGV)
Clause 6, 6A	Clause applicable	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. 5.00 Lakhs (For Civil Component)
Clause10A	List of testing equipment to be provided by the contractor at site lab	See P 39 Para 11.0 (Part – B)
Clause10B(ii)	Whether clause 10B (ii) shall be applicable	Yes
Clause10C	Component of labour expressed as Percent of value of work	25% (Twenty five per cent)

Clause10CA

Material covered under this clause		Nearest materials (Other than cement, reinforcement bars and structural steel) for which All India Whole Sale Price Index is to be followed.	Base Price of all materials covered under clause 10 CA *	
1	Cement	NA	1	Rs. 5000/- per MT
2	Steel reinforcement	NA	2	Rs.31304/- per MT
3	Structural steel	NA	3	Rs. 31009/- per MT

Clause10CC

Not Applicable

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

27 months

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

Component of civil (Except materials covered under clause 10 CA) /Electrical construction materials expressed as percent of total value of work

“Xm” 30%

Component of labour expressed as percent of total value of work

‘Y’ 25%

Component of P.O.L. expressed as percent of total value of work.

‘Z’ Nil%

Note:-

No Escalation shall be given by GGV. Neither any claim for the escalation will be entertain.

Clause 10 CC --- This clause is not applicable.

Clause 11

Specifications to be followed for execution of work

For Civil: Chhattisgarh PWD SoR 2015(Civil), with correction slips up to date of receipt of tender.

For Electrical :Chhattisgarh PWD SoR 2015(Electrical)for Internal Electrical works and External Electrical works specification for electrical works Part-I (Internal) 2005 and Part-II (external) 1994– amended up to date of receipt of tender

Clause 12 **Not Applicable**

12.2 & 12.3

Deviation limit beyond which **30%**
clauses 12.2 & 12.3 shall apply for
building work

Deviation limit beyond which **100%**
clauses 12.2& 12.3 shall apply for
foundation work

Note: There may be change in schedule items as well as quantity up to any extent, as per the site condition & need of the university. Excess quantities will be adopted from the SOR and shall be paid as per quoted percentage rate of schedule in tender.

Clause 16

Competent Authority for deciding **Registrar, GGV/**
Reduced rates. **Building Committee, GGV.**

Clause 18 List of mandatory machines, tools **See P38 Para 9.0 (Part-B)**
and plants to be deployed by the
contractor at site.

Clause 36(i)

Requirement of Technical Representative(s) and Recovery Rate

S. No.	Minimum Qualification of Technical Representative	Discipline	Designation (Principal Technical /Technical representative)	Minimum experience	Number	Rate at which recovery shall be made from the contractor in the event of not fulfilling provision of Clause 36(i)	
						Figures	Words
1	Graduate Engineer or Diploma Engineer	CIVIL	Technical Representative <i>(Project Planning/Site/Billing Engineer)</i>	Two years (for Graduate) or 5 years(for Diploma)	(1) one No.	Rs.15,000/- PM.	Rupees Fifteen Thousand Per Month each

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

Clause 42

- I(a) Schedule/Statement for determining theoretical quantity of cement & bitumen **On the basis of Chhattisgarh PWD Schedule of Rates 2015 printed by Chhattisgarh P.W.D.**
- II Variations permissible on theoretical quantities.
- a) Cement for works with estimated cost put to tender not more than Rs. 5 lakhs **3% plus/minus**

- for works with estimated cost put to tender more than Rs. 5 lakhs **2% plus/minus**
- b) Bitumen for 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.N.	Description of item	Rates in figures and words at which recovery shall be made from the Contractor	
		Excess beyond the permissible variation	Less use beyond the permissible variation
1	Cement	Nil	Rs.6000.00 per MT
2	Reinforcement steel	Nil	Rs. 50000.00 per MT
-----Two items only-----			

PART-B

Particular Specification & Special Conditions (Civil)
List of Approved materials & Specialized Agencies(for civil works)
Schedule of quantities/Rate (Civil Work)

PARTICULAR SPECIFICATION
&
SPECIAL CONDITIONS (CIVIL)

1 GENERAL

- 1.1 The contractor shall work according to the programme of work as approved by the Engineer-in-charge/Registrar/Building committee for the purpose, the contractor shall submit a tentative programme of the work within 07 days from the stipulated date of start of the work
- 1.2 The contractor shall take instructions from the Engineer-in-charge for stacking of materials at site. No excavated earth or building materials shall be stacked on areas where the buildings, roads, services or compound walls are to be constructed
- 1.3 If as per municipal / GGV. rules the huts for labour are not to be erected at the site of work by the contractors, the contractors shall provide such accommodation at such locations as are acceptable to local bodies, for which nothing shall be payable
- 1.4 Unless otherwise provided in the Schedule of quantities, the rates tendered by the contractor shall be all inclusive and shall apply to all heights, lifts, leads and depths of the building and nothing shall be payable to him on this account. However, payment for centring, shuttering, if required to be done for floor heights greater than 3.5m, shall be admissible at rates arrived at, in accordance with clause 12 of the agreement, if not already specified otherwise
- 1.5 The working drawings appearing at para 8.1(iii) of conditions of contract in the form prescribed form shall mean to include both architectural and structural drawings respectively. The structural and architectural drawings shall be properly correlated before executing the work. In case of any difference noticed between architectural and structural drawings, final decision, in writing of the Engineer-in-charge shall be obtained by the contractor before proceeding further
- 1.6 Samples for particular items of work shall be prepared, for prior approval of the Engineer-in-charge before taking up the same on mass scale and nothing shall be payable on this account.
- 1.7 Some restrictions may be imposed by the security staff etc. on the working and for movement of labour, materials etc. The contractor shall be bound to follow all such restriction / instructions and nothing extra shall be payable on this account.
- 1.8 The contractor shall make his own arrangements for obtaining electric connections, if required, and make necessary payments directly to the University.
- 1.9 Other agencies may also be executing simultaneously on some other related works such as- electrical cable laying, street lighting and horticulture works for the same project. The contractor shall extend necessary co-operation to them without any claim on this account.
- 1.10 Cast iron pipes and fittings without ear shall be used. However, pipes and fittings with ears may be accepted without any extra payment. In such cases, clamps are not required and no extra payment shall be made for fixing the pipes in a different manner.
- 1.11 Any cement slurry added over base surface for bond or for continuation of concreting, its cost shall be deemed to have been included in the respective items, unless specified otherwise and nothing extra shall be payable nor extra cement shall be considered in the

cement consumption on this account.

- 1.12 Stacking of materials and excavated earth including its disposal shall be done as per the directions of the Engineer-in-Charge. Double handling of materials or excavated earth if required shall have to be done by the contractor at his own cost.
- 1.13 No claim for idle establishment & labour, machinery & equipments, tools & plants and the like, for any reason whatsoever, shall be admissible during the execution of work as well as after its completion.
- 1.14 **The items other than the schedule will be taken from SoR-2015 (Civil & Electrical) applicable in Chhattisgarh PWD with tender rate (percentage above/at par/below) if required.**
- 1.15 **There may be change in schedule items as well as quantity up to any extent, as per the need of the university. Excess quantities will be adopted from the SoR and shall be paid as per quoted percentage rate of schedule in tender.**

2.0 WATER PROOFING TREATMENT

The water proofing items shall be got done through the firms approved by University or otherwise as directed by University.

2.1 GUARANTEE FOR WATER PROOFING TREATMENT

The contractor shall give Ten years performance guarantee in the prescribed pro forma for the water proofing treatment. In addition 10% (Ten percent) of the cost of these items shall be retained as security, to watch the performance of the work executed. However, half of this amount (withheld) shall be released after five years, after the completion of the work, if no defect comes to notice. If any defect is noticed during the guarantee period, it shall be rectified by the contractor within Seven days and, if not attended to, the same shall be got done through other agency at the risk and cost of the contractor. In any case the guaranteeing firms during the guarantee period shall inspect and examine the treatment once every year and make good any defect observed. However, the 10 % security deposit referred above can be replaced with bank guarantee of equivalent amount for relevant period.

3.0 ACP CLADDING AND STRUCTURAL GLAZING.

3.1 SCOPE OF WORK :

The scope of work includes structural analysis and design, preparation of shop drawings, setting out, lubrication, supply, installation, aligning, fixing and protection of the curtain glazing and aluminium composite panel cladding etc. It also includes performance testing and guarantee for the works as described above, for the system, materials and performance requirements, for a period of **not less than** 10 years from the date of completion of the work.

The **rates of work under this section** includes cost of all inputs of labour, materials including wastages, T&P, equipments, cranes or cradles, scaffolding, other enabling temporary structures and services and all other incidental charges, if any, not specifically mentioned here, but as required for complete design, engineering, fabrication, assembling, delivery, anchorage, installation, protection of curtain glazing, aluminium composite panel cladding etc. and making the curtain glazing, aluminium

composite panel cladding etc. water tight, all complete, and all in accordance with the true intent and meaning of the specifications and the drawings taken together, regardless of whether the same may or may not be particularly shown in the drawings and/or described in the specifications provided that the same can be reasonably inferred there from.

The curtain glazing, aluminium composite panel cladding shall have framing which shall be structurally and mechanically designed to achieve the architectural elevations as well as performance parameters specified herein. Anchorage shall include all supporting bracket & anchor fasteners, as required to rigidly secure the structural framing to the RCC/Masonry/structural steel members of the building.

3.2 STANDARDS :

Materials and workmanship shall, in general, comply with the latest editions of the following standards as a minimum.

ANSI	Z97.1	Safety Glazing materials used in Buildings
ASTM	C1036	Specification for float glass
ASTM	C1172	Specification for Laminated Architectural Glass
ASTM	C864	Specification for compression Seal Gaskets
ASTM	C1115	Specification for Silicone Rubber Gaskets
ASTM	C920	Specification for Sealants
ASTM	C509	Specification for sealing material
CPSC16	CFR 1201	Specification for Safety Glass
BSCP 118		Structural use of Aluminium
AS 1664		Structural use of Aluminium

3.3 INTERNATIONAL STANDARDS

In general, the Contractor shall follow the latest Indian/International Standards issued by BIS. Other specification relevant to this item of work like ASTM, SAA, AAMA, BSS, and ISO& SSIR can also be adopted if particular standards are not available in BIS codes. The contractor shall also state reasons for adopting particular standards/codes. Nothing in this clause shall relieve the contractor of his obligations to provide high standard of quality and workmanship as required.

3.4 The contractor shall also submit guarantee in the enclosed format for replacement of glass during the guarantee period of not less than 10 years from the date of completion of work. **All the Guarantees shall be submitted before final payment is released after the date of the completion of work and shall not in any way limit any other rights, which the Engineer-in-Charge may have under the Contract.**

3.5 If any defect is noticed during the guarantee period, it shall be rectified by the contractor within seven days of issue of notice to the contractor, (at least temporarily if it requires specialized materials and equipment for such rectification works which may entail some more time), to the satisfaction of the Engineer-in-Charge, till the permanent rectification of the defects/replacement of defective materials is carried out by the contractor, in maximum four months period.

If not attended to, the same shall be got done by the Engineer-in-Charge through other agency at the risk and cost of the contractor and the cost, which shall be final and binding on the contractor, shall be recovered from the amount withheld towards the guarantee as mentioned above or any other amount due to the contractor.

3.6 SCOPE OF SHOP DRAWINGS

- a) Shop drawing shall incorporate scaled and dimensioned plans, elevations, sections and complete size details for all the works.
- b) The shop drawings shall indicate the required dimensional profiles and modules, function, design and performance standards and in general cover all dimensions and details required to fabricate and install the curtain wall at site.
- c) The contractor shall verify and co-ordinate the shop drawings with all applicable and inter-related trades, drawings and specifications.
- d) All dimensions/modules, etc. shall be field checked and the drawings shall be modified, if required, based on actual measurements at site.
- e) Details shall show and specify all metal sections, types of finishes, areas to be sealed and sealant materials, gaskets, applicable construction materials including fasteners and welds, all anchorage assemblies and components, fabrication and erection tolerances for the work.
- f) All details shall be subject to the approval of the Engineer-in-Charge, after incorporating all the modifications as suggested by the Engineer-in-Charge or otherwise.

4.0 STAINLESS STEEL RAILING/HANDRAILS

- 4.1 Supply and installation of satin finish stainless steel railing (Ozone or equivalent) having 50 mm dia OZBF-SS-ACC-HR-50-SS-P (PIPE) 1.6 mm thick tube handrail modular and component based system having unified stem keys as connector, centre rod 12 mm @ 300 c/c including a\end caps for railing ¢re rod, SS balustrade OZBF –WS-11 members to be fixed on top of stair steps or floor edge at a minimum distance of 3000 mm to be complete with all necessary bends and joints and erected with chemical grouts of approved make or equivalent as per drawing and instruction of Engineer-in-Charge (Height 3000 mm as per sketch)

4.2 GENERAL

The contractor shall apply all materials, labour, tools, ladders, scaffolding and other equipments necessary for the completion and protection of all stainless steel work.

4.3 MATERIAL

All stainless steel pipes and plates shall conform to AISI 304 in 18/8 composition 18 will be chromium and 8 will be Nickel and carbon content will be 0.03 maximum and the relevant clauses associated with this grade of steel to be followed.

4.4 SURFACE FINISH

Surface finish of all the stainless steel materials will be in 240 grit satin finish / matt finish.

4.5 ACCESSORIES

Fixing will be done by stainless steel expansion bolts of approved size and make as per Engineer-in-charge and welding to be done by using organ welding rods and the surface being duly finished and cleaned by K2 passivation, which is nitric acid plus fluoric acid solution treatment by which the chances of corrosion will be eliminated and any burn out makes on the metal will also be eliminated.

4.6 COATING MASS

All stainless steel material will have to be coated by a solution of inox to avoid finger in prints and avoidance of settlement of environment / atmospheric dust.

4.7 MEASUREMENT

All the stainless steel finished parts shall be weighed correct to a gram and paid on weight basis.

4.8 RATE

The rate shall include the cost of all the materials, machinery and labour involved in all the operations described above including cartage, lifts and all taxes like Sales Tax / VAT, Excise duty, Octroi etc. as applicable.

Any incidental additional requirements for execution of this item to the satisfaction of Engineer-in-charge shall also be treated as included in the item and shown in attached drawing and nothing extra will be paid for such extra work.

5.0 PAINT BROUGHT BY THE CONTRACTOR

5.1 The contractors shall bring sufficient quantity of paint of brand and shade, approved by Engineer-in-charge prior to the commencement of work and keep it in his stores at site of work under double lock & key.

5.2 The paint shall be issued to the contractor from time to time according to requirements for the work in the same manner as followed for issue of cement

5.3 Empty containers shall not be removed without the written permission of the Engineer-in-charge.

6.0 CONDITION FOR CEMENT:-

6.1 The Contractor shall procure 43 grade Ordinary Portland cement (conforming to IS : 8112) or Portland slag cement (conforming to IS : 455) or Portland Pozzolana Cement (PPC) (Fly ash based) – conforming to IS : 1489 (Part-I) as required in the work, from reputed manufactures of cement, having a production capacity of one million tonnes or more, such as ACC, L&T, JP REWA, Vikram, Shri Cement, Birla Jute, Prism, Ambuja, Lafarge and Cement corporation of India etc. i.e. agencies approved by Ministry of Industry, Government of India, and holding license to use ISI certification mark for their product. The tenderers may also submit a list of names of cement manufacturers which they propose to use in the work. The tender accepting authority reserves the right to accept or reject name(s) of cement manufacture(s) which the tenderer proposes to use in the work. No change in the tendered rates will be accepted if the tender accepting authority does not accept the list of cement manufactures, given by the tenderer, fully or partially. Supply of cement shall be taken in 50 Kg bags bearing manufacture's name and ISI marking. Samples of cement arranged by the contractor shall be taken by the Engineer-in-charge and got issue in accordance with provisions of relevant BIS codes. In case test results indicate that the cement arranged by the Contractor does not conform to the relevant BIS codes, the same shall stand rejected and shall be removed from the site by the Contractor at his own cost within a week's time of written order from the Engineer-in-charge to do so.

If Portland Pozzolana cement or Portland slag cement is used, suitable modification in de-shuttering time etc. shall be done if need be as per specifications and standards and as directed by Engineer – in – charge and nothing extra shall be payable on this account.

No extra payment / deduction shall be made from the payment to the contractor for using any of the above type of cement.

6.2 The cement shall be brought at site in bulk supply of approximately 50 tonnes or as decided by the Engineer-In-Charge.

6.3 For each grade / type, cement bags shall be stored in two separate godowns, one for tested cement and the other for fresh cement (under testing) constructed by the contractor at his own cost as per sketch shown in General conditions of contract for Vishwavidyalaya with weather proof roofs and walls. The size of the cement godown is indicated in the sketch for guidance only. The actual size of godown shall be as per site requirements and as per the direction of the Engineer in charge and nothing extra shall be paid for the same. The decision of the Engineer-in-charge regarding the capacity required/needed will be final. However, the capacity of each godown shall not be less than 30 tonnes. Each godown shall be provided with a single door with two locks. The keys of one lock shall remain with the Engineer-in-charge or his authorized person and that of other lock with the authorized agent of the contractor at the site of work so that the cement is issued from godown according to the daily requirement with the knowledge of both the parties. The account of daily receipt and issue of cement shall be maintained in a register in the prescribed Pro forma and signed daily by the contractor or his authorized agent in token of its correctness.

6.4 The cement shall be got tested by Engineer –in –charge and shall be used on the work only after satisfactory test results have been received. The contractor shall supply free of charge the cement required for testing including its transportation cost to testing laboratories. The cost of tests shall be borne by the contractor / Department

in the manner indicated below:-.

- (a) By the contractor, if the results show that the cement does not conform to relevant BIS codes.
 - (b) By the Department, if the results show that the cement conforms to relevant BIS codes.
- 6.4.1 All other charges of sampling, packing and transportation of sample shall also be borne by the contractors.
- 6.5 The actual issue and consumption of cement on work shall be regulated and proper accounts maintained separately for each type of cement, as provided in clause 10 of the contract. The theoretical consumption of cement shall be worked out as per procedure prescribed in Clause 42 of the contract and shall be governed by conditions laid therein. However, for consumption lesser beyond permissible theoretical variation recovery shall be made in accordance with conditions of contract at Schedule A to F, without prejudice to action for acceptance of work/item at reduced rate or rejection as the case may be.
- 6.6 For non-schedule items, the decision of the University Engineer regarding theoretical quantity of cement, which should have been actually used, shall be final and binding on the contractor.
- 6.7 Cement brought to site and cement remaining unused after completion of work shall not be removed from site without written permission of the Engineer-in-Charge.

7.0 CONDITIONS FOR REINFORCEMENT STEEL :-

- 7.1 The contractor shall procure TMT bars of Fe415 grade as per BIS 1786 – 2008 from primary producers such as SAIL or TISCO or RINL or Jindal or Msp or Steel shall be Procured form Original Producers who Manufacture Billets directly from iron ores and roll the billets to produce Steel conforming to IS: 1786, No re-rolled Steel shall be incorporated in the works. As approved by Ministry of Steel. In case of non-availability of steel from primary producers, University Engineer, GGV with approval of competent authority may permit use of TMT reinforcement bars procured from secondary producers.
- a) The secondary producers must have valid BIS license to produce HSD bars conforming to IS 1786: 2008. In addition to BIS license, the secondary producer must have valid license from either of the firms Tempcore, Thermex, Evcon Turbo & Turbo Quench to produce TMT Bars.
 - b) The TMT bars procured from primary producers shall conform to manufacture's specifications.
 - c) The TMT bars procured from secondary producers shall conform to the specifications as laid by Tempcore, Thermex, Evcon Turbo & Turbo Quench as the case may be.
 - d) TMT bars procured either from primary producers or secondary producers, the specifications shall meet the provisions of IS 1786:1985 pertaining to Fe 415 grade of steel as specified in the tender.

Samples shall also be taken and got tested by the Engineer-in-Charge as per the provisions in this regard in relevant BIS codes. In case the test results indicate that the steel arranged by the contractor does not conform to the specifications as defined

under para (c) & (d) above, the same shall stand rejected, and it shall be removed from the site of work by the contractor at his cost within a week time or written orders from the Engineer-in-Charge to do so.

In case contractor is permitted to use TMT reinforcement bars procured from secondary producers then:

- i) The base price of TMT reinforcement bars as stipulated under schedule 'F' shall be reduced by Rs. 6000/- MT.
- ii) The rate of providing & laying TMT reinforcement bars as quoted by the contractor in the tender shall also be reduced by Rs. 7.35 per kg.

7.2 The steel reinforcement shall be brought at site in bulk supply of 25 tonnes or more as decided by the Engineer in charge.

7.3 The steel reinforcement shall be stored by the contractor at site of work in such a way as to prevent distortion and corrosion and nothing extra shall be paid on this account. Bars of different sizes and lengths shall be stored separately to facilitate easy counting and checking.

7.4 For checking nominal mass tensile strength bend test re-bend test etc. specimen of sufficient length shall be cut from each size of the bar at random at frequency not less than that specified below:

Dia of bar	For consignment below 100tonnes	For consignment above 100tonnes
Under 10 mm	One sample for each 25 tonnes or part thereof	One sample for each 40tonnes or part thereof
10 mm to 16mm	One sample for each 35 tonnes or part thereof	One sample for each 45tonnes or part thereof
Over 16mm	One sample for each 45 tonnes or part thereof	One sample for each 50tonnes or part thereof

7.5 The contractor shall supply free of charge the steel required for testing including its transportation to testing laboratories. The cost of tests shall be borne by the contractor / Department in the manner indicated below :-

- a) By the contractor, if the results show that the steel does not conform to relevant BIS codes.
- b) By the Department, if the results show that the steel conforms to relevant BIS codes.

7.6 All other charges of sampling, packing and transportation of sample shall also be borne by the Contractor.

7.7 The actual issue and consumption of steel on work shall be regulated and proper accounts maintained as provided in clause 10 of the contract. The theoretical consumption of steel shall be worked out as per procedure prescribed in clause 42 of the contract and shall be governed by conditions laid therein.

7.8 Steel brought to site and remaining unused shall not be removed from site without the written permission of Engineer-in-Charge.

7.9

- (i) Reinforcement including authorized spacer bars and lappages shall be measured in length of different diameters as actually (not more than as specified in the drawings) used in the work nearest to a centimetre. Wastage and unauthorized overlaps shall

not be measured.

- (ii) The standard sectional weights referred to shall be as in Table 5.4 in para 5.3.4 in CPWD specifications 2009 will be considered for conversion of length of various sizes of TMT bars in to standard weight.
 - (iii) Record of actual sectional weights shall also be kept dia wise and lot wise. The average sectional weight for each diameter shall be arrived at from samples from each lot of steel received at site. The decision of the Engineer in charge shall be final for the procedure to be followed for determining the average sectional weight of each lot. Quantity of each diameter of steel received at site of work each day will constitute one single lot for the purpose. The weight of steel by conversion of length of various sizes of bars based on the actual weighted average sectional weight shall be termed as Derived Actual Weight.
 - (a) If the derived weight as in sub-para (iii) above is less than the standard weight as in sub-para (ii) above, then the Derived Actual Weight shall be taken for payment.
 - (b) If the derived actual weight is found more than the standard weight, than standard weight as worked out in sub para (ii) above shall be taken for payment nothing shall be paid extra for the difference in Derived/ Actual Weight and standard weight.
- 7.10 TMT bars of Fe 500 grade as per BIS: 1786: - 2008 from primary producer may also be permitted by Engineer –In –Charge for which neither deduction shall be made nor extra shall be paid to the contractor. However, every care should be taken to avoid mixing different types of grades of bars in the same structural members as main reinforcement to satisfy relevant clause of IS: 456. In case of buildings, wherever the situation necessitates, the change over shall be made only from any one level onwards. In case of foundations, all foundation elements (footings and grade beams) shall have the same kind of steel. In the case of columns, all structural elements up to the level of change, where the changeover is taking place should have the same kind of steel as those in columns.
- 7.11 The reinforcing steel brought to site of work shall be stored as per CPWD specification 2009.

8.0 REINFORCED CEMENT CONCRETE WORK

8.1 To ensure proper cover, only factory made round type cover blocks will be used to avoid displacement of bars in any direction.

8.2 For the execution of centring and shuttering, the contractor shall use propriety "Reebole" chemical mould release agent of "FOSROC" or equivalent as shuttering oil as recommended by the manufacture and nothing extra shall be paid on this account.

8.3 DESIGN MIX CONCRETE

8.3.1 The RCC work shall be done with Design Mix Concrete if specified in work.. In the nomenclature of items wherever letter M has been indicated, the same shall imply for the Design Mix Concrete. For the nominal mix in RCC, Chhattisgarh PWD Specifications shall be followed. The Design Mix Concrete will be designed based on the principles given in IS: 456-2000. The contractor shall design mixes for each grade of concrete indicating that the concrete ingredients and proportions will result in concrete mix meeting requirements specified. In case of use of admixture and or white cement, the mix shall be designed with these ingredients as well. The specification mentioned here-in-below shall be followed for Design Mix Concrete if required.

8.3.2 The concrete mix design will be carried out by the contractor through one of the following laboratories/ Test houses and ready mix concrete shall conform to accepted design mix.

- 1) NIT, Raipur.
- 2) G.E.C., Bilaspur.
- 3) MANIT Bhopal
- 4) G.E.C. Ujjain
- 5) MITS Gwalior.
- 6) National Council for Cement & Building materials, Ballabgarh.

8.3.3 In the event of all the above laboratories being unable to carry out the requisite design / testing the contractor shall have to get the same done from any other laboratory with prior approval of the Engineer-in-charge.

8.3.4 The contractor shall submit the mix design report from any of above approved laboratories for approval of Engineer-in-charge within 45 days from the date of issue of letter of acceptance of the tender. No concreting shall be done until the mix design is approved.

In case of white Portland cement and the likely use of admixtures where CC/RCC is done with concrete pumps in concrete with ordinary Portland/white Portland cement, the contractor shall design and test the concrete mix by using trial mixes with white cement and /or admixtures also, for which nothing extra shall be payable.

In case of change of source or characteristic properties of the ingredients used in the concrete mix during the work, a revised laboratory mix design report

conducted at laboratory established at site shall be submitted by the contractor as per the direction of the Engineer-in-Charge.

The Mix shall be designed to produce the grade of concrete having required workability and characteristic strength not less than as specified.

The mix design for a specified grade of concrete shall be done for a target mean compressive strength $f_m = f_{ck} + 1.65 \sigma$

Where,

f_{ck} = Characteristic compressive strength at 28 days.

σ = Standard deviation

The standard deviation for each grade of concrete shall be calculated separately.

The degree of quality control for this work is "Good" for which the standard deviation (s) obtained for different grades of concrete shall be as follows:-

Grade of Concrete	For "Good" quality of control
M 20	4.0
M 25	4.0
M 30	5.0
M 35	5.0

Out of the six specimen of each set, three shall be tested at seven days and remaining three at 28 days. The preliminary tests at seven days are intended only to indicate the strength to be attained at 28 days. All cost of mix designing and testing connected therewith including charges payable to laboratory shall be borne by the Contractor.

- 8.3.5 The samples of cement, aggregate (fine & coarse) to be sent to the laboratories shall be sealed in the presence of the Engineer in charge and shall have his signature and cost of packaging, sealing, transportation, loading, unloading, cost of samples and the testing charges for Mix design in all cases shall be borne by the contractor.
- 8.3.6 Notwithstanding the approval granted by engineer-in-charge in aforesaid manner, the contractor shall be fully responsible for quality of concrete including input control, transportation and placement etc.
- 8.3.7 The Engineer-in-charge reserves the right to exercise control over the : ingredients, water and admixtures, purchased, stored and to be used in the concrete including conducting of tests for checking quality of Materials fit or unfit for use in production of mix.
- 8.3.8 The Contractor shall submit the test data of the material used for concrete mix-design in the laboratories, so the material being used at site be compared with those data / size etc
- 8.3.9 In case of change of parameters of ingredients (sand, cement, coarse aggregate) fresh concrete mix-design to be done as mentioned in para 8.3.2 above and got approved from the Engineer-in-charge before execution.
- 8.3.10 The contractor shall make arrangement to install a mini laboratory at site for accelerated testing of design mix concrete as per IS: 9013. The department

reserves right to take samples of design mix concrete from the mass production of the concrete for testing and compare with the laboratory's results

- 8.3.11 Nothing shall be paid extra for installation and cost of batching plant and other arrangement for making necessary test of design mix concrete.
- 8.3.12 The rate for item of design mix cement concrete shall be inclusive of all the ingredients including admixtures if required, labour, machinery T & P etc. (except shuttering which will be measured & paid for separately) required for a design mix concrete of required strength and workability. The rate quoted by the agency shall be net & nothing extra shall be payable on account of change in quantities of concrete ingredients like cement and aggregates and admixtures etc. as per the approved mix design. **Cost adjustment at the rate of Rs. 600/- per quintal shall be made for less use of cement in design mix than specified in the item.**
- 8.3.13 Concrete shall be handled from the place of mixing to the place of final deposit / placement by methods, which prevent segregation, or loss of any ingredients and contamination.
- 8.3.14 Where concrete is conveyed by chutes, the chute shall be made of metal or fitted with metal lining. The approval of the Engineer-in-charge shall be obtained for the use of chutes in excess of 3 meters length and in such cases the concrete shall be remixed if so required by the Engineer-in-charge or closed bottom buckets shall be used. If concrete is placed by pumping, the conduit shall be primed properly. Once pumping is started, it shall not be interrupted as far as possible. Concrete shall not be dropped into place from a height more than 1.5m.
- 8.3.15 Concreting of any portion of the work shall be done in presence of the representative of the Engineer-in-charge and shall be done only after approval of the Engineer-in-charge.
- 8.3.16 Concreting shall be carried out continuously between constructions joints shown on the drawings or as agreed by the Engineer-in-charge. The contractor shall closely follow the sequence of concreting where it is specified in the drawings. If concreting is interrupted before reaching the predetermined joint an approved construction joint shall be provided. Construction joints shall be minimized as far as possible. These shall be set at right angles to the general direction of the member. The surface film of the first places concrete should preferably be removed while the concrete is still green to expose the aggregate and leave a sound irregular surface. However care shall be taken not to disturb the concrete already laid.
- 8.3.17 **Admixtures:** Wherever required, admixtures of approved quality shall be mixed with concrete as specified. The admixtures shall conform to IS: 9103. The chloride content in the admixture shall satisfy the requirements of BS: 5075. The total amount of chlorides in the admixture mixed concrete shall also satisfy the requirements of IS 456-2000.
- 8.3.18 Use of ready mixed concrete (RMC) may also be permitted, with prior approval of Engineer –in – charge, without any extra payment. Separate account of design mix concrete and RMC shall however be kept. The ready mixed concrete shall conform to the requirement of durability, workability and strength laid

down for design mix concrete.

9.0 EQUIPMENTS AND PLANTS (Refer Clause 18 of Schedule 'F') (Not applicable)

9.1 The contractor should be capable of deploying necessary tools & plants as when required in appropriate as below required numbers to ensure smooth & timely execution of work, at his own cost & risk as per the requirement of work at different stages. The decision of Engineer-in-Charge shall be final regarding use of particular T&P(s) at a particular time(s) & the contractor has to adhere the same strictly:

I.	Steel centring and shuttering.	500 Sqm.
II	Excavator Cum Loader.	1 No.
III	Builders Hoist / Tower crane	1 No.
IV	Concrete mixer with hopper. (Diesel + Elect.)	1 Nos.
V	Needle Vibrator. (Diesel / Petrol + Elect.)	3 Nos.
VI	Bar Bending Machine.	1 No.
VII	Bar Cutting Machine.	1 No.
VIII	Truck / Tipper	1 Nos.
IX	Floor grinding machine	2 Nos.
X	Welding machine	1 No.
XI	Chase cutter.	2 Nos.
XII	Water Pump	1 Nos.
XIII	DG set (Diesel)	1 No.
XIV	Pile rig for 300 mm dia pile	1 No.

9.2 To achieve the progress of work as per programme the contractor must bring at site the shuttering materials required for cement concrete and RCC work etc. within 7 days from the date of start of work. Work shop facilities for fabrication/addition and alterations, and other allied works shall be arranged by the contractor at his own cost.

9.3 In addition to these, machinery / equipment as required shall be arranged by the contractor in case the requirement at any stage exceeds as per the programme finalized at his own cost and nothing extra whatsoever on this account shall be paid.

9.4 All the equipment, T&P and machinery shall be kept in good condition.

10 SAFETY MEASURES AT CONSTRUCTION SITE

In order to ensure safe construction, following shall be adhered for strict compliance at the site:-

- (i) The work site shall be properly barricaded.
- (ii) Adequate signage indicating 'Work in Progress – Inconvenience caused is

Regretted' or Diversion Signs shall be put on the sites conspicuously visible to the public even during night hours. These are extremely essential where works are carried out at public places in use by the public.

- (iii) The construction malba (construction demolition waste) at site shall be regularly removed on daily basis
- (iv) All field officials and the workers must be provided with safety helmets, safety shoes and safety belts.
- (v) Proper MS pipe scaffoldings with work – platforms and easy-access ladders shall be provided at site to avoid accidents.
- (vi) Necessary First-Aid kit shall be available at the site.

The above provisions shall be followed in addition to the provisions of General Condition of Contract, CPWD safety code and CPWD specifications for which nothing extra shall be paid except otherwise provided.

11 LIST OF EQUIPMENT FOR SITE LABORATORY (Ref. Clause 10A of Sch.-'F')

A Laboratory testing instruments.

(1) Balances

- (i) 7 Kg. to 10 Kg. capacity, semi-self indicating type – accuracy 10 gm.-1 No.
- (ii) 500 gm. Capacity, semi-self indicating type – accuracy 1 gm.- 1 No.
- (iii) Pan balance – 5 Kg. capacity – accuracy 10 gms.-1 No.

(2) Sieves: as per IS 460 – 1962.

- i. I.S. sieves – 450 mm internal dia, of sizes 100 mm, 80 mm, 63 mm, 50 mm, 40 mm, 25 mm, 20 mm, 12.5 mm, 10 mm, 6.3 mm, 4.75 mm, complete with lid and pan. – 1 Set
- ii. I.S. sieves - 200 mm internal dia (brass frame) consisting of 2.36 mm, 1.18 mm, 600 microns, 425 microns, 300 microns, 212 microns, 150 microns, 90 microns, 75 microns with lid and pan. – 1 Set

- (3) Equipment for slump test – slump cone, steel plate, tamping rod, steel scale, scoop.- 2 Nos.
- (4) Graduated measuring cylinders 200 ml capacity – 2 Nos.

B Field testing instruments.

- (1) Steel tapes – 3 m. – 2 Nos
- (2) Vernier Callipers. - 1 Nos.
- (3) Micrometer screw 25 mm gauge. – 1 Nos.
- (4) A good quality plumb bob. – 2 Nos.
- (5) Spirit level, min. 30 cms long with 3 bubbles for horiz.Vert.- 2 Nos.
- (6) Wire gauge (circular type) disc. – 1 Nos.
- (7) Foot rule – 2 Nos.
- (8) Long nylon thread – 2 Nos.

- (9) Magnifying glass – 1 Nos.
- (10) Screw driver 30 cms long – 1 Nos.
- (11) Ball pin hammer, 100 gms. – 1 Nos.
- (12) Plastic bags for taking samples – 1 Nos.

12 SPECIFICATIONS FOR CEMENT BASED FLY ASH BRICKS

12.1 Quality of Raw Materials

- 12.1.1 **ASH: Fly ash** shall meet the requirement of Grade 2 of IS: 3812. Fly ash should preferably be collected from 1st / 2nd field of ESP
- 12.1.2 **Sand / Stone dust: Deleterious** materials such as clay and silt in sand / stone dust shall not be more than 5%.
- 12.1.3 **Cement:** Portland cement conforming to IS: 269, IS: 8112 or IS: 12269 (latest revision) shall be used.
- 12.1.4 **Storage: All** raw materials shall be stored in covered sheds and suitably protected from the rains.
- 12.1.5 **Proportioning of raw materials :**The following mix proportion shall be adopted for manufacturing fly ash, sand and cement bricks

Fly ash	50-60%
Sand / Stone dust	32-40%
Cement	8-10%

12.1.6 **ACCEPTANCE CRITERIA:**

- 12.1.6.1 **Compressive Strength:** Minimum average compressive strength of brick shall not be less than 7.5 N/sq.mm when tested as per IS -3495 (Part-I): 1976. The compressive strength of any individual brick shall not fall below the minimum average compressive strength by more than 20%. In case any test result of compressive strength exceeds 10.0 N/sq.mm, the same shall be limited to 10.0 N/sq.mm for the purpose of averaging.
- 12.1.6.2 **Water Absorption:** The bricks when tested in accordance with the procedure laid down in Is: 3495 (Part-2): 1976 after immersion in cold water for 24 hours, shall have water absorption not more than 20%.
- 12.1.6.3 **Drying Shrinkage:** The average drying shrinkage of the bricks, when tested by the method described in IS: 4139: 1989 being the average of the three units, shall not exceed 0.15 percent.
- 12.1.6.4 **Efflorescence Test:** The bricks when tested in accordance with the procedure laid down in IS: 3495 (Para-3): 1976 shall have the rating of efflorescence not more than 'Moderate'.
- 12.1.6.5 **Sampling and Criteria for conformity:** Sampling and criteria for conformity of the bricks shall be as given in IS: 5454: 1976.

13 No Escalation shall be given by the University neither any claim for the escalation will be entertained.

14 The intending Tenderer shall be required to submit the Bid of the e-tender in the following manner.

- 1) The Tenderer has to send the Original DD of the Tender Cost/Bid Cost and Original DD/FDR of Earnest Money Deposit (EMD), of any scheduled bank drawn in favour of the "REGISTRAR, GURU GHASIDAS VISHWAVIDYALAYA, BILASPUR (C.G.) in a sealed envelope to the University Engineer (UE), GGV, Bilaspur. It should be clearly super scribed on the top of envelope the e-Tender Notice No. "55(R)/ENGG/GGV/CIVIL R&M Work/2022, Dated: 30/08/2022". These Originals should reach the University Engineer, GGV before the last date and time of Tender Submission.
- 2) The tenderer has to submit the Bid online in the e-Tendering website (www.eprocure.gov.in) with the following details

a) Technical BID

- i. The Tenderer has to upload the e-tender and all related documents (including the corrigendum/ instructions/ notices till the last of submission if any) properly signed where ever required. (Scanned copies of, the DD of the **Tender Cost**, the DD/FDR of the Earnest Money Deposit (**EMD**), Registration Certificate in appropriate Category of the contractor as per the eligibility criteria, Experience Certificate of appropriate amount & works mentioned in the tender, Copy of Income Tax Return certificate of previous year with pan card., GST Registration Certificate, all the other documents in support of information furnished in the tender.)

b) Financial BID

- i. The Tenderer has to upload the Financial bid/BOQ properly signed where ever required in the following e-Tendering website (www.eprocure.gov.in)

15 The GGV reserves the right to award the work order to the 2nd lowest tenderer in case of the first lowest tenderer fails to execute monthly work progress report by cancelling the work order given to the 1st lowest tenderer.

- 16 The GGV reserves the right to place the order complete or part of work.
- 17 The GGV reserves the right to alter. Add or delete any term(s) & condition(s) in the interest of the University without any pre-notice and no suit shall lie on the University for the same.
- 18 Validity of accepted Quoted rates will be for **6 months** from the date of agreement. University will give separate order for separate works time to time for some specified time and specified works in the interest of the University.
- 19 The venue of arbitration shall be the court at Bilaspur (C.G.)
- 20 Any other information related to the tender may be obtained from office of the University Engineer, GGV, Bilaspur, during working hours.
- 21 As it is Tender by the University for the University, the university has all the rights to modify any clause/specification, or to delete any clause/specification, for the benefit of the university and these are always binding on the Tenderer.
- 22 The Quality of the work done by the Tenderer should be as per the specifications of the CPWD/CGPWD standards/Manuals/IS Codes where ever applicable and will be evaluated accordingly.
- 23 The university has at all times has all the rights to execute the work mentioned in the tender or to not execute the work mentioned in the tender without giving any reasons thereof for the same.
- 24 As per requirement and in the interest of the University, any other items which are not mentioned in Financial Bid/Technical Specification may be added for which the rate shall be decided on the basis of market rate analysis.
- 25 The items in the schedule can be increased or decreased in quantity up to any extent or any item which can be included which is not in the given schedule but is an item of the SOR and the percentage rate of the tender will be applied for the same and is binding on the tenderer.
- 26 Other than the terms and conditions laid down in this tender form, when required, the terms and conditions of CPWD manual will be followed.
- 27 **Inspection:** GGV or its representative shall have the right to inspect or to test the items to confirm their conformity to the ordered specification. In case any inspected or tested goods fail to conform to the specifications, GGV may reject them and supplier shall either replace the rejected goods or make all alterations necessary to meet specification required free of cost to GGV.
- 28 **Indemnification:** The Firm/Contractor shall indemnify the Client for any loss resulting from and as a consequence of errors, omissions arising out of gross negligence on the part of the Firm/Contractor or on the part of their employees/representatives/agents and shall take necessary action to remedy the loss, such as removal of defects, deficiencies and such other action as considered necessary by the client to remedy the loss arising from such negligence.
- 29 **Third Party Liability:** The Client shall not be liable for any injury/death, caused to any official, employee, representative or agent of the Firm/Contractor or their sub-Firm/Contractor s working at the site or damage to their properties for any reason whatsoever and Client shall not entertain any claim from any person on that behalf. It would be the responsibility of the Firm/Contractor to get their officials, employees, representatives, agents

or their sub-Firm/Contractor's insured against the possible risks involved in the discharge of their duties at the worksite.

- 30 Arbitration:** Any dispute arising out of this agreement shall be settled through mutual discussion and consultations among the parties. In case the parties would not come under fruitful conclusion on the disputes, the matter shall be referred to the Sole Arbitrator by either party. The Sole Arbitrator shall be the representative nominated by the Vice Chancellor of Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G.). The decision of the sole arbitrator shall be final and binding upon the parties to the disputes.
- 31** In case of any ambiguity /anything not contained in this document, GGV reserves the right to take discretionary decision without assigning any reason thereof and it will be binding on concerned/all bidders. The University also reserves the right to cancel/reject any bid due to any reason including human error in calculation incurred during process. The GGV shall be free to cancel the whole or part of tender without assigning any reason.
- 32 Court Jurisdiction:** The university shall not be bound to give justification for any aspect of the selection process and the decision of the university shall be final and binding on all without any right of appeal. Further, in case of any dispute, any suite or legal proceedings against the university, the jurisdiction shall be restricted to the courts at Bilaspur, Chhattisgarh.

LIST OF APPROVED MATERIALS & SPECIALIZED AGENCIES (FOR PAINTNG WORKS)

Note:

1	The Contractor shall obtain prior approval from the Engineer-in-charge before placing order for any specific material or engaging any of the specialized agencies.
2	Wherever applicable, the Engineer-in-charge may approve any material equivalent to that specified in the tender subject to proof being offered by the Contractor for equivalence to his satisfaction.
3	Unless otherwise specified, the brand/make of the material as specified in the item nomenclature, in the particular specifications and in the list of approved materials attached in the tender, shall be used in the work
4	In case of non availability of the brand specified in the contract or ISI marked materials, the Contractor shall be allowed to use alternate equivalent brand of the material subject to submission of documentary evidence of non-availability of the specified brand. Necessary cost adjustments on account of above change shall be made for the material, if required.

MATERIALS:		BRAND/MAKE
1.	White Cement	JK, Birla or equivalent.
2.	Super plasticizer	MC Baucheme, Sika, Fosroc OR equivalent
3.	Water Proofing Compound (Liquid)	Pidiproof Ltd., Cico, Impermo OR equivalent
4.	Stainless Steel	Jindal Stainless Steel, Salem Steel OR equivalent
5.	Galvanized/Stainless Steel Anchor Fasteners	Shakti, Arrow, Hilti, Fischer OR equivalent
6.	PVC Tiles	Arm Strong, LG or equivalent.
7.	Ceramic Tiles	Kajaria, Somany, Nitco, Orient, Bell Ceramic, Johnson OR equivalent
8.	Vitrified /Porcelain Tile	Marbonite, Euro, Somany, diamond of Naveen Granamite of Bell ceramic, Granito, Kajaria, Marbitto. OR equivalent
9.	Terrazzo tiles	Mehtab, Nitasha, Nitco, Raj-yesh, Bharat OR equivalent
10.	Chequered tiles	Mehtab, Nitasha, Nitco, Raj-yesh, Bharat OR equivalent
11.	Acid/Alkali Resistant Tile	Somany, Nitco, Kajariya, Bell Granamite Group, Johnson OR equivalent
12.	Polymer Modified Cementitious grout	BalEndura, Pidilite or equivalent.
13.	Glass Mosaic Tile	Bissazza, Saon or equivalent.
14.	Hardner	Hard crete of Snowcem India, MC Deritop F.H. OR equivalent
15.	Flush Doors	Kutty flush door, Anchor, Kanara, Kitlam, National, Swastic OR equivalent
16.	FRP Shutters	Fibre Glass Engineers, Raipur, Aashoo Model
17.	PVC Shutter	Rajshri, Sintex or equivalent.
18.	Ply Wood	Archid, Kitply, Green ply, Century OR equivalent
19.	Pre-laminated Particle Board	Novapan, Kitlam or equivalent.
20.	Melamine Polish	Melamine of Asian Paint, Wudfin of pidilite Industries Timbertone of ICI Dullex.
21.	Laminate	Marino, Greenlam, Decolam, Century, Formica OR equivalent
22.	Aluminium Composite Panel	Alpolic, Aluco Bond, Reynobond, Euro bond, Al-strong OR equivalent
23.	Stainless Steel Screws	Kundan, Arrow or equivalent.

e-TENDER FOR "CIVIL REPAIRING & MAINTENANCE WORK" AT GGV, BILASPUR**Vide No. 55(R)/ENGG/GGV/Civil R&M Work/2022, Dated: 01/09/2022**

24.	Anodized Aluminium Extrusions	Hindalco, Indalco, Jindal OR equivalent
25.	Hydraulic Floor spring	Hardwyn, Godrej or equivalent.
26.	Hydraulic Door Closer	Hardwyn, Godrej or equivalent.
27.	Annealed Float Glass	Saint Gobain, Modi Guard, Hindustan Pilkington OR equivalent
28.	Synthetic Enamel Paints	ICI (Dulux), Asian(Apcolite), Berger (Luxol), Nerolac (NST) OR any ISI equivalent
29.	Structural Silicon Sealant	Dow Corning, Wacker, GE, Du-pont OR equivalent
30.	Epoxy Primer & Paints	Berger, Pidilite or equivalent.
31.	GI Pipe	Tata, Zenith, Jindal OR equivalent any ISI
32.	GI fitting	Unik, ICS or equivalent Any ISI
33.	Centrifugally Cast Iron Pipe & Fittings	Neco, RIF, SKF OR equivalent Any ISI
34.	Polyester Powder Coating	Nerolac, Berger, J&N OR equivalent
35.	Gun Metal Gate Valve	Zoloto, Leader, SAINT OR equivalent
36.	PVC Rain Water Pipe & Fitting	Finolax, Classic of Kisan or equivalent any ISI
37.	Primer	Asian, ICI, Berger, Nerolac OR equivalent
38.	Oil Bound Distemper	Asian (Tractor), ICI (Maxi lite), Berger(Bison), Nerolac (NAD) OR any ISI equivalent
39.	Acrylic Emulsion Paint	Asian (Royale), ICI (Velvet), Berger (Luxol Silk), Nerolac (Allscapes) OR any ISI equivalent.
40.	Structural steel section	TATA, SAIL, RINL OR equivalent
41.	Curtain Carrier	Vista levlor or equivalent.
42.	Drapery Rod	Vista Levlor or equivalent.
43.	Vitreous China Wash Basin Rectangular without Pedestal	Hindware / Perryware or any ISI equivalent.
44.	Virtuosos China Wash Basin Oval	Hindware / Perryware or equivalent.
45.	Vitreous China Pedestal for Wash Basin	Pedestal of Perryware / Hindware
46.	Vitreous China Floor Mounted European W.C. without cistern	Perryware / Hindware or equivalent.
47.	Vitreous China Floor moulded European with Cistern Complete	Perryware / Hindware or equivalent.
48.	Vitreous China Wall hung W.C. without Cistern.	Perryware / Hindware or equivalent.
49.	Vitreous China Wall Hung W.C. with vitreous Cistern (component)	Perryware / Hindware or equivalent.
50.	Orissa Pan	Perryware / Hindware or equivalent.
51.	Vitreous China Low Level Cistern for European W.C.	Hindware / Perryware or equivalent.
52.	Low Level PVC Cistern Single flush	Sleek model Cistern of PVC of Hindware or Slimline deluxe model of Perryware JINDAL.
53.	Dual Flush	Sleek Dual flush PVC cistern of Hindware or Slimline dual of Perryware. OR equivalent
54.	Vitreous China Half stall Urinal	Model No. 6002 Urinal flat back large of Hindware or magnum of Perryware. OR equivalent
55.	Flush Valve	Aquel, Marc or equivalent.
56.	Solid Plastic Seat Cover for EWC	EWC standard seat cover white of Perryware/Hindware OR equivalent

e-TENDER FOR "CIVIL REPAIRING & MAINTENANCE WORK" AT GGV, BILASPUR**Vide No. 55(R)/ENGG/GGV/Civil R&M Work/2022, Dated: 01/09/2022**

57.	Jet Assembly for EWC	Perryware, Kamal (Mahendra) OR equivalent
58.	Float Glass	Modi Float, Saint Gobain, Asahi, Sejal OR equivalent
59.	CP Brass Bibcock, Pillar-cock, Stopcock, Angle Valve, Concealed Stop Cock.	Marc (oriental series) Jaquar (continental series), Parko, Nova OR equivalent
60.	Plastic Connection Pipe	Perryware/Kamal Delux or equivalent.
61.	CP Waste Coupling	Kamal/Jaquar/Mark/Nova/Parko
62.	CP Bottle Trap	Perryware / Hindware or equivalent.
63.	Waste Pipe	Kamal with brass checknut/Viking
64.	Stainless steel Sink with/without Draining board.	Nirali, Hindware, Frankee, Cobra or equivalent
65.	Towel Ring/Towel Rod/Towel Rack	Kamal, Marc or equivalent.
66.	Fibre Glass Shelf	Kamal, Bath King or equivalent.
67.	Vitreous China laboratory Sink	Hindware / Perryware or equivalent.
68.	Aluminum Sections	Jindal, Hindalco, Indalco or any ISI
69.	Textured Exterior wall	Berger, Unitile, Spectrum, Oikos
70	Non-asbestos high impact polypropylene reinforced cement sheet	Everest or equivalent
71	Water Tanks	Any ISI
72	Reinforcement Steel (TMT Bars)	SAIL, RINL, TISCO or Steel shall be procured from original producers who manufacture billets directly from iron ores & roll the billets to produce steel conforming to IS 1786. No re-rolled steel shall be incorporated in the works
73	Plastic Emulsion Paint	Asian, Berger, Nerolac, DULUX
74	Other Paints/Primers	Asian, Berger, Nerolac, DULUX, Shalimar
75	Gypsum Board System	Gyproc (Saint Gobain), USG, Boral
76	Epoxy/PU Paint	Fosroc, Nerolac, Pidilite, Cico, BASF, Sika, Berger, STP LTD
77	Texture Paints	Asian, Berger, Nerolac, DULUX
78	Wall Care Putty	JK, Birla, STP Ltd
79	Acrylic Exterior Paint	Asian, Berger, DULUX, Nerolac, J&N

SCHEDULE OF QUANTITIES/RATE FOR "VARIOUS CIVIL REPAIRING AND MAINTENANCE WORK" AT GGV CAMPUS, BILASPUR (C.G.)						
Name of Work:				Civil Repairing & Maintenance Work at GGV Campus.		
LOCATION:				GGV CAMPUS, BILASPUR		
CG PWD SOR				ESTIMSTE AS PER CG PWD SOR 2015(Civil)		
S.NO.	S.O.R ITEM NO	ITEM DESCRIPTION	QTY	UNIT	RATE	TOTAL AMOUNT (IN Rs.)
1	1.1	Excavation for all types and sizes of foundations, trenches and drains or for any other purpose including disposal of excavated stuff upto 1.5 m lift and lead upto 50m (at least 5m away from the excavated area), including dressing and leveling of pits.				
	1.1.1	In all types of soils.	400	CUM	185.00	74000
2	1.2	Surface dressing of the ground including removing vegetation and making up undulations and in-equalities not exceeding 15 cms in depth/ height including disposal of rubbish upto 1.5 m lift and lead upto 50m (at least 5m away from the dressed area)	3500	SQM	7.20	25200
3	1.4	Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth upto 30 cm measured at a height of 1 m above ground level and removal of rubbish upto a distance of 50 m outside the periphery of the area cleared.	3600	SQM	3.70	13320
4	1.26	Carriage by mechanical transport upto 5 km lead:				0
	1.26.1	Earth	5.66	CUM	111.00	628.26

2.1	Providing and fixing form work including centring, shuttering, strutting, staging, propping bracing etc. complete and including its removal at all levels, for:				0
2.1.1	Foundations, footings, bases of columns plinth beam, curtain wall in any shape and size and all type of wall below plinth level.	10.22	SQM	139.00	1420.58
2.1.2	Wall of any thickness including attached pilasters, buttresses etc. in super structure.	12.44	SQM	228.00	2836.32
2.1.3	Window sills, anchor blocks, string course, bends, copings, bed plates and like.	8.22	SQM	184.00	1512.48
2.1.5	Columns, Pillars, Piers and likes- rectangular or square in shape	10.22	SQM	297.00	3035.34
3.1	Providing and laying nominal mix plain cement concrete with crushed stone aggregate using concrete mixer in all works upto plinth level excluding cost of form work.				0
3.1.3	1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40mm nominal size). cum	19	CUM	2970.00	56430
3.1.4	1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 40mm nominal size).	17.2	CUM	3552.00	61094.4
3.1.5	1:1½:3 (1 cement : 1½ coarse sand : 3 graded stone aggregate 20mm nominal size).	7.33	CUM	4073.00	29855.09
3.3	Providing and laying design mix				0

	reinforced cement concrete with crushed graded stone aggregate 20mm nominal size using batching plant, transit mixer and concrete pump, in all works upto plinth level excluding cost of form work.				
3.3.1	M-20 Grade	10.33	CUM	4231.00	43706.23
3.3.2	M-25 Grade	12.54	CUM	4298.00	53896.92
3.8	Extra for providing and fixing expanded metal mesh of size 20mm x60mm and strands 3.0mm wide, 1.6 mm thick, weighting 2.64 kg. per sqm for encasing of rolled steel section in beams, columns and grillages but excluding cost of hangers. sqm 383.00	7.84	SQM	383.00	3002.72
3.12	Providing and placing in position reinforcement for R.C.C. work including straightening, cutting, bending, binding etc. complete as per drawings including cost of binding wire in foundation and plinth all complete:				0
3.12.1	Thermo-Mechanically treated bars FE 415	1000	KG	54.50	54500
3.12.2	Thermo-Mechanically treated bars FE 500D	1000	KG	54.50	54500
3.13	Providing and laying damp proof course (upto 50mm thick) with plain cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded crushed stone aggregate 20mm nominal size) including form work.	3.22	CUM	4237.00	13643.14
3.15	Applying a coat of hot bitumen VG-10 using @ 1.7kg/ sqm on damp proof course after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil.	5	SQM	93.50	467.5
3.16	Making 50mm thick plinth protection of plain cement	5	SQM	273.00	1365

	concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded crushed stone aggregate 20mm nominal size) over 75mm bed of dry brick ballast 40mm nominal size well rammed and consolidated and grouted with sand including finishing the top smooth.				
3.24	Providing and applying for hermetically water proof sealing of vertical / horizontal expansion joint with approved make Poly Sulphide Sealant compound (two component elastomeric sealant) having 80% tensile modulus elongation, proper bonding with building surface complete with cleaning and preparing of building surface, applying polymer solvent primer, providing and fixing PU back up rod of suitable dia in expansion joint for core making, filling with Poly Sulphide Sealant (Sealant filling depth should be minimum half of the joint gap), finishing and smoothing the surface etc complete. The application shall be got done through the authorised applicator of the manufacture of compound				0
3.24.1	For gap upto 25 mm wide	1	METER	520.00	520
3.24.3	For gap 50 mm wide	1	METER	1397.00	1397
7.2	Brick work with modular well burnt clay bricks of crushing strength not less than 25 kg/sqcm and water absorption not more than 20% in foundation and plinth in:				0
7.2.2	Cement Mortar 1:6 (1 Cement : 6 Coarse Sand)	3.22	CUM	3635.00	11704.7
7.5	Brick work with modular fly-ash lime bricks (FaLG Bricks) confirming to				0

	IS:12894-2002 of class designation 4.0 in foundation and plinth in:				
	Cement Mortar 1:6 (1 cement : 6 coarse sand)	10	CUM	3263.00	32630
7.6	Extra for brick work in superstructure above plinth level for every floor or part thereof in addition to rate for foundation and plinth:	10	CUM	121.00	1210
7.7	Extra for brick work in square and rectangular pillars. (size not more than 600mm in any direction)	10	CUM	185.00	1850
7.9	Half brick thick (9cm) brick masonry with modular well burnt clay bricks of crushing strength not less than 35 kg/sqcm and water absorption not more than 20% upto plinth level:				
7.9.2	Cement Mortar 1:4 (1 cement : 4 coarse sand)	12	SQM	435.00	5220
7.11	Half brick thick brick masonry with fly-ash lime bricks (FaLG Bricks) confirming to IS:12894-2002 of class designation 4.0 in superstructure above plinth level upto plinth level:				0
7.11.2	Cement Mortar 1:4 (1 cement : 4 coarse sand)	10	SQM	382.00	3820
7.16	Extra for half brick thick honey comb brick work in superstructure above plinth level for every story or part thereof in addition to rate for upto plinth level: sqm 12.00	10	SQM	12.00	120
7.17	Extra for cutting or chamfering of bricks to required shape in brick masonry work metre 14.50	20	METER	14.50	290
8.3	Providing 40x5mm iron hold fast 40cm long including fixing to frame with 10mm bolts nuts and wooden plug and embedding in Cement Concrete 1:2:4 in blocks of size 30x10x15cm.	22	EACH	72.50	1595
8.4	Providing and fixing Dash fastener (for fixing door/				0

	window frames) on C.C. / R.C.C./ Brick masonry surface backing including drilling necessary holes and the cost of bolt etc complete.				
8.4.1	Dash fastener 6x75mm	10	EACH	20.50	205
8.11	Providing and fixing glass panes in glazed or paneled and glazed shutters of doors and window, clearstory windows etc (Only area of glass panes to be measured).				0
8.11.1	4mm thick	12	SQM	415.00	4980
8.11.2	5mm thick	12	SQM	502.00	6024
8.13	Providing and fixing flush door shutters, conforming to IS : 2202 (Part-I), decorative type core of block board construction with frame of first class hard wood and well matched teak ply veneering with vertical grains or cross bands and face veneers on both faces of shutters excluding hinges.				0
8.13.2	35 mm. thick (single leaf)	15	SQM	1370.00	20550
8.13.3	30 mm. thick (single leaf)	10	SQM	1197.00	11970
8.13.4	25 mm. thick (single leaf)	18	SQM	1081.00	19458
8.17.	Providing and fixing PVC membrane foil coated (laminated) flush door shutters, made of partical board coated with 0.30mm membrane pasted with resin using vacuum treatment process complete all but excluding hinges.				
8.17.1	35 mm thick (single leaf)	10	SQM	1578.00	15780
817.2	30 mm thick (single leaf)	8	SQM	1370.00	10960
8.22.5	12mm thick pre-laminated particle board flat pressed with decorative lamination on one side and balancing lamination on other side exterior Grade - I MDF Board 12 mm thick confirming to IS:14587,	7	SQM	1012.00	7084
8.22.8	12 mm thick solid PVC sheet with decorative lamination one side and	8	SQM	964.00	7712

	other side balancing lamination of approved quality and make				
8.59	Providing and fixing bright finished brass parliamentary hinges with brass polished MS screws complete:				0
8.59.2	125x125x27x5 mm	10	EACH	352.00	3520
8.60	Providing and fixing bright finished brass sliding door bolt with nuts and brass polished MS screws complete:				0
8.60.2	250x16mm	10	EACH	344.00	3440
8.61	Providing and fixing brass door latch with brass polished MS screws complete:				0
8.61.2	300x16x5 mm	5	EACH	398.00	1990
8.62	Providing and fixing bright finished brass tower bolts (barrel type) with brass polished MS screws complete:				0
8.62.1	250x10mm	5	EACH	276.00	1380
8.62.2	200x10mm	5	EACH	231.00	1155
8.62.3	150x10mm	5	EACH	176.00	880
8.65	Providing and fixing bright finished brass door handles with brass polished MS screws complete:				
8.65.1	125 mm	8	EACH	55.50	444
8.65.2	100 mm	7	EACH	49.00	343
8.65.3	75 mm	5	EACH	42.50	212.5
8.67	Providing and fixing of bright finished brass mortise latch and lock 100x65mm with six levers and a pair of lever handles with brass polished MS screws etc. Complete	5	EACH	971.00	4855
8.77	Providing and fixing antique/ SS finished brass butt hinges with antique/ SS polished MS screw complete:				
8.77.1	125x85x5.50mm (Heavy Type)	5	EACH	256.00	1280
8.77.2	100x85x5.50 mm (Heavy Type)	5	EACH	205.00	1025
8.106	Providing and fixing MS bright finished single hanging door stopper with necessary MS steel screws complete.	5	EACH	12.50	62.5

8.119	Providing and fixing powder coated MS hanging door stopper with necessary powder coated MS steel screws complete.	5	EACH	15.00	75
8.148	Providing and fixing factory made UPVC door frame made of UPVC profile section having an overall dimension as below (tolerance ± 1 mm) with wall thickness 2.0mm ± 0.2 mm, corners of the door frame to be jointed with galvanized brackets and stainless steel screws, joints mitred and plastic welded. The hinge side vertical of the frames reinforced by galvanized M.S. tube of size 19 X 19mm and 1mm ± 0.1 mm wall thickness and 3 nos. stainless steel hinges fixed to the frame complete as per manufacturers specification and direction of Engineer-in-charge				
8.148.1	Extruded section Profile size 48x40 mm	5	METER	191.00	955
8.148.2	Extruded section Profile size 42x50 mm.	5	METER	196.00	980
8.149	Providing and fixing factory made PVC door shutters of specified thickness made of styles and rails of a UPVC hollowsection of specified size 59x24 mm and wall thickness 2 mm ± 0.2 mm withinbuilt edging on both sides. The styles and rails mitred and joined at the corners by means of M.S. galvanised/ plastic brackets of size 75x220 mm having wall thickness 1.0 mm and stainless steel screws.				
8.149.1	24 mm thick door shutters with styles and rails of size 59x24 mm	9.14	SQM	2399.00	21926.86
8.149.2	30 mm thick door shutters with styles and rails of size 60x30	5.67	SQM	2488.00	14106.96

	mm				
8.151	<p>Providing and fixing factory made P.V.C. door frame of size 50x47mm with a wall thickness of 5mm, made out of extruded 5mm rigid PVC foam sheet mitred at corners and joined with 2 Nos of 150mm long brackets of 15x15mm M.S. square tube, the vertical door profiles to be reinforced with 19x19mm M.S. square tube of 19 gauge, EPDM rubber gasket weather seal to be provided through out the frame. The doorframe to be fixed to the wall using M.S. screws of 65/100mm size complete as per manufacturers specification and direction of Engineer-in-Charge.</p>	10	METER	346.00	3460
8.152	<p>Providing and fixing 30mm thick factory made panel PVC door shutter consisting of frame made out of M.S. tubes of 19 gauge thickness and size of 19mm x 19mm for styles and 15x15mm for top & bottom rails. M.S. frame shall have a coat of steel primers of approved make and manufacture. M.S. frame covered with 5mm thick heatmoulded PVC 'C' channel of size 30mm thickness, 70mm width out of which 50mm shall be flat and 20mm shall be tapered in 45degree angle oneither side forming styles; and 5mm thick, 95mm wide PVC sheet out of which 75mm shall be flat and 20mm shall be tapered in 45 degree on the inner side to form top and bottom rail and 115mm wide PVC sheet out of which 75mm shall be</p>				

	<p>flat and 20mm shall be tapered on both sides to form lock rail. Top, bottom and lock rails shall be provided either side of the panel. 10mm (5mm x 2) thick, 20mm wide cross PVC sheet be provided as gap insert for top rail & bottom rail. paneling of 5mm thick both side PVC sheet to be fitted in the M.S. frame welded/ sealed to the styles & rails with 7mm (5mm+2mm) thick x 15mm wide PVC sheet beading on inner side, and joined together with solvent cement adhesive. An additional 5mm thick PVC strip of 20mm width is to be stuck on the interior side of the 'C' Channel using PVC solvent adhesive etc. complete as per Manufacturer's specification including 3 nos ISI marked stainless steel hinges of size 100x58x1.9 mm complete. (for W.C. and bathroom door shutter).</p>				
8.152.1	PVC door shutte	5.22	SQM	2318.00	12099.96
8.152.2	Both side Pre-laminated panel PVC door shutter	10	SQM	2832.00	28320
8.155	<p>Providing and fixing factory made Pre-laminated particle board flat pressed three layer or graded wood particle board shutter (25 mm thick) with one side decorative finish and other side balancing lamination conforming to IS: 12823 Grade I Type II, of approved design, and edges sealed with water resistant paint and lipped with aluminium 'U' type edge beading all-round the shutter, including fixing with angle cleat, grip strip, cadmium plated steel screws including fixing of stainless</p>	10	SQM	3483.00	34830

	steel hinges 100x1.7mm etc complete as per direction of Engineer-in- Charge				
8.156	Providing and fixing cupboard shutters 25mm thick, with Pre- laminated flat pressed with decorative lamination one side and other side balancing lamination exterior Grade - I MDF Board 25mm thick confirming to IS:14587 including IInd class teak wood lipping of 25mm wide x12 mm thick with necessary screws and bright finished stainless steel piano hinges complete as per direction of the Engineer-in- Charge.	5	SQM	1789.00	8945
8.158	Providing and fixing IS: 3564 marked aluminium die cast body tubular type universal hydraulic door closer with necessary accessories and screws etc complete. each 1450.00	5	EACH	1450.00	7250
9.1	Structural steel work in single section including cutting, hoisting, fixing in position and applying a priming coat of red oxide zinc chromate primer	150	KG	61.50	9225
9.2	Structural steel work riveted or bolted or welded in built- up sections, trusses and frames work upto a height of 5m above plinth level, including cutting, hoisting, fixing in position and applying a priming coat of red oxide zinc chromate primer.	150	KG	66.00	9900
9.3	Steel work in tubular (round, square or rectangular hollow tubes etc.) structure in built-up sections, trusses and frame work including cutting, hoisting, fixing in position upto a height of 5m above plinth level, consisting of columns trusses,				0

	roof and bottom purlins, base plate, holding down bolts, wind ties bracing (if required), bolts, nuts and washers for fastening etc. complete with applying a priming coat of red oxide zinc chromate primer.				
9.3.1	Electric resistance or induction butt welded tubes Grade-250	100	KG	88.50	8850
9.3.2	Electric resistance or induction butt welded tubes Grade-300	100	KG	93.50	9350
9.11	Providing and fixing in position collapsible steel shutters with vertical channels 20x10x2mm and braced with flat iron diagonals 20x5mm size with top and bottom rails of T-iron 40x40x6mm with 38mm steel pulleys complete with bolts, nuts, locking arrangement stoppers, handles including applying a priming coat of red oxide zincchromate primer.	5.22	SQM	3330	17382.6
9.12	Providing and fixing sliding shutter with M.S.sheet 1mm thick, frame and diagonal braces of 40x40x6mm angle iron, 3.0 mm thick M.S. gusset plates at junctions and corners, 25mm dia pulley, 40x40x6mm angle and T-iron guide at top and bottom respectively including applying a priming coat of red oxide zinc chromate primer.	100	KG	71.50	7150
9.13	Providing and fixing steel door/window with M.S. sheet 1mm thick, frame of angle iron, diagonal braces of angle/ flat iron of suitable size, 3.00 mm M.S. gusset plates at junctions and corners, all necessary fittings complete including applying a priming coat of red oxide zinc chromate primer. kg 75.00	50	KG	75.00	3750

9.14	Providing and fixing steel door made of angle iron of suitable sizes with M.S. grill of approved pattern made of M.S. flats or square or round bars coat of red oxide zinc chromate primer.	20	KG	79.50	1590
9.16	Providing and fixing M.S. frames of doors, windows, ventilators and cupboards joints mitred and welded with 15x3 mm lugs 10cm long embedded in cement concrete blocks 15x10x10cm of grade M-10 or with wooden plugs and screws or with dash fastener or rawl plugs and screws or with fixing clips or with bolts and nuts as required including fixing of necessary butt hinges and screws and applying a priming coat of approved steel primer.				0
9.16.2	Angle-iron frames	50	KG	73.50	3675
9.16.3	MS tubular frames	50	KG	80.50	4025
9.17	Providing and fixing factory made ISI marks steel doors, windows and ventilators side/ top/ centre hung made up of standard rolled steel section conforming to IS 1038:1968 (viz. F7D, F4B, K11 and K12B etc.), joints mitred and flash butt and sash bars tenoned and riveted/ welded with 10 cm long lugs of size 15x3mm embedded in cement concrete block 15x10x10 cms of 1:3:6 (1 cement :3 Coarse sand: 6 graded stone aggregate 20 mm nominal size) or rawl plugs and screws or with bolts and nuts as required including providing and fixing of hinges, pivots, handles, pegs, stays, rolling devices, locking arrangements,	50	KG	88.00	4400

	spring catch etc., as required complete including applying a priming coat of red oxide zinc chromate primer.				
9.22	Providing and fixing 3 mm fibre glass pane with steel glazing clips and special metal sash putty of approved make in steel doors, windows, ventilators	25	SQM	678.00	16950
9.35.1	M.S Pipe	50	KG	80.50	4025
9.36	Providing and fixing approved pipe hand rail to walls (ramps, stair cases) including cutting chases and repairing the same to original condition, applying a priming coat of red oxide zinc chromate primer.				
9.36.1	M.S Pipe	100	KG	71.00	7100
9.37	Providing and fixing M.S. fan clamp/hook for ceiling fan made out of 16 mm dia M.S. bar bent to shape with hooked ends in R.C.C. slabs, beams during laying including painting the exposed portion of loop.	10	EACH	97.00	970
9.39	Providing and fixing in position G.I. barbed wire (93.8gram/m) to concrete/ wooden/ angle iron posts (straight or diagonal) including securing and screwing with G.I. tying wire, G.I. staples, G.I.U-nails or steel pins etc., complete(Cost of posts, struts to be paid for separately)	10	METER	9.40	94
9.43.1	Aperture 50x50mm	25	SQM	331.00	8275
9.43.2	Aperture 75x75mm	10	SQM	291.00	2910
9.45	Providing and placing in position angle iron post and strut of required size including bottom to be split and bent at right angle in opposite direction for required length and drilling holes upto 10 mm dia as per requirement including priming coat with red oxide zinc chromate primer and	50	KG	69.50	3475

	placing the post/ strut in cement concrete block.				
9.47.1	For fixed portion	20	KG	331.00	6620
9.47.2	For shutter of doors, windows & ventilators including providing and making provision for fixing of fitting wherever required including the cost of PVC/ neoprene gasket required (Fittings shall be paid for separately).	25	KG	338.00	8450
9.48	Extra for powder coated (minimum 50 micron) aluminium sections instead of anodized.	15	KG	20.00	300
9.50.1	With decorative lamination on one side and balancing lamination on other side. Sqm 845.00	15.44	SQM	845.00	13046.8
9.51.1	With float glass panes of 4 mm thickness	10	SQM	611.00	6110
9.51.2	With float glass panes of 5 mm thickness	10	SQM	708.00	7080
9.57.1	SS Grade 204	10	KG	467.00	4670
10.1.3	0.63 mm thick sheet (weight 5.70 kg/m ²)	15	SQM	678.00	10170
10.1.4	0.5 mm thick sheet (weight 4.30 kg/m ²)	15	SQM	540.00	8100
10.11	Supply and fixing of pre-coated galvanized iron profile sheets (size, shape and pitch of corrugation as approved by Engineer-in-charge) 0.50 mm +/- 5% total coated thickness (TCT), Zinc coating 120gsm as per IS: 277 in 240mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns. Sheet should have protective guard film of 25 microns minimum to avoid scratches while transportation and should be supplied in single length upto 12 metre or as desired by Engineer-in-charge. The sheet shall be fixed using self drilling /self	15	SQM	636.00	9540

	tapping screws of size (5.5x 55mm) with EPDM seal or with polymer coated J or L hooks, bolts and nuts 8mm diameter with bitumen and G.I. limpet washers or with G.I. limpet washers filled with white lead complete upto any pitch in horizontal/ vertical or curved surfaces excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required				
10.16	Providing and fixing pre-coated galvanised steel sheet roofing accessories 0.50 mm +/- 5% total coated thickness (TCT), Zinc coating 120gsm as per IS: 277 in 240mpa 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 or with polymer coated J or L hooks, bolts and nuts and or G.I. seam bolts and nuts, G.I. plain and bitumen washers complete :				0
10.16.1	Ridges plain (500-600mm	15	METER	552.00	8280
10.24	Providing & fixing UV stabilized fibreglass reinforced plastic (FRP) sheet roofing upto any pitch including fixing with polymer coated 'J' or 'L' hooks, bolts & nuts 8mm dia. G.I plain/bitumen washers complete but excluding the cost of purlins, rafters, trusses etc. The sheets shall be manufactured out of 2400 TEX panel rovings incorporating minimum 0.3% Ultra-violet stabiliser in resin system under approximately 2400 psi and hot cured. They shall be of uniform pigmentation and				0

	thickness without air pockets and shall conform to IS 10192 and IS 12866. The sheets shall be opaque or translucent, clear or pigmented, textured or smooth as specified.				
10.24.1	2mm thick corrugated (2.5" or 4.2" or 6") or step-down (2" or 3" or 6") as specified. sqm 766.00	15	SQM	776.00	11640
10.63	Providing and fixing 97mm thick Gypsum board partition upto ceiling height consisting of frame work "W" / "U" / "L" sections made of G.I. sheet with zinc coating of grade 120, consisting of floor and ceiling channel 50mm wide having equal flanges of 32mm and 0.55mm thick fixed to the floor and ceiling at the spacing of 610mm centre to centre with dash fastener of 12.5mm diameter 40mm length and the studs 48mm wide having one flange of 34mm and other flange 36mm and 0.55mm thick fixed vertically within flanges of floor and ceiling channel and placed at a spacing of 610mm centre to centre by 6mm dia bolts and nuts at both ends of partition fixed flush to wall with rawl plugs at spacing of 450mm centre to centre and fixing of boards to either side of frame work by 25mm dry wall screws on studs, floor and ceiling channels at the spacing of 300mm centre to center and 97mm thick Gypsum board which includes one layer of tapered edge 12.5mm thick Gypsum plaster board (conforming I.S. 2095-1982) screw fixed with 25mm	22	SQM	758.00	16676

	<p>screws at 300mm centre to centre to either side, including jointing and finishing to a flush finish with recommended jointing compound, jointing tape, joint finisher and two coats of primer suitable for board as per manufacture's specification and Direction of Engineer-in-charge all complete. sqm 758.00</p> <p>10.64 Providing and fixing of aluminium panel false ceiling of approv</p>				
10.65	<p>Providing and fixing of aluminium tile false ceiling comprising of Tile of size 600 x 600mm x 0.7mm. The Tile ends will be raised with pips and stops to ensure positive engagement into the spring to enable for demounting of individual panels. The Tile sides will be sufficiently high to ensure a minimum deflection across the length of Tile. All Tiles will be bevel edged. The Tile shall be powder coated. The Tile shall be clipped into clip-in profile made of 0.5mm thick G.I sheet. The clip-in profile shall be supported from slab by means hold on clamp with clip and 4mm dia G.I. rod fixed to ceiling rigidly. Wall trim box of size 15x30x15mm made from 0.4mm thick aluminium alloy sheet to be provided all along the wall to hold panels (only surface area of false ceiling is to be measured and no deductions for lights, diffusers, columns etc shall be made)</p>				0
10.65.1	With Plain tiles	30	SQM	2863.00	85890
11.2	Providing and making 12mm thick cement plaster of mix:				0
11.2.2	In Cement Mortar 1:4 (1	100	SQM	103.00	10300

	cement : 4 fine sand)				
11.2.4	In Cement Mortar 1:6 (1 cement : 6 fine sand)	100	SQM	91.50	9150
11.3	Providing and making 15mm thick cement plaster on the rough side of single or half brick wall of mix:				
11.3.2	In Cement Mortar 1:4 (1 cement : 4 fine sand)	60	SQM	120.00	7200
11.3.4	In Cement Mortar 1:6 (1 cement : 6 fine sand)	60	SQM	107.00	6420
11.41	Providing and fixing chicken mesh weighting not less than 250 gms/ sqm as per IS : specification in the required width with 40mm long steel nails on vertical and horizontal surface near R.C.C. and brick walls junctions including scaffolding and all lead and lifts etc. complete before plastering upto 10mts in height.	50	SQM	86.00	4300
11.42	Providing sand faced plaster to concrete or brick masonry surface in all positions in two coats, base coat 13mm thick in C.M. 1:4, cleaning the surface by combing it and finishing coat 8mm thick in C.M. 1:3 and taking out grains on surface by hand operated mechanical arrangement with cost of all material labour, all leads & lifts, and scaffolding etc. complete. sqm 180.00	50	SQM	180.00	9000
12.3	ement concrete flooring with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm) finished with a floating coat of neat cement.				
12.3.1	40 mm thick	10	SQM	222.00	2220
12.3.2	50 mm thick	10	SQM	254.00	2540
12.4	52 mm thick cement concrete flooring with under layer of 40mm thick cement concrete 1:2:4 (1	10	SQM	441.00	4410

	<p>cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size) and top layer of 12 mm thick cement metallic hardener concrete mix 1:2 (1 cement hardener mix : 2 stone aggregate of 6 mm size by volume) with metallic hardening compound of approved quality mixed with cement in ratio of 4:1 (4 cement : 1 metallic floor hardening compound by weight) including finishing etc. complete.</p>				
12.6	<p>Cement plaster skirting upto 30 cm. height with cement mortar 1:3 (1 cement : 3 fine sand) finished with a floating coat of neat cement including rounding of junction with floor.</p>				
12.6.1	<p>8 mm thick in two layers of 12mm and 6mm</p>	50	SQM	200.00	10000
12.7	<p>Providing and fixing ceramic glazed wall tiles conforming to IS : 15622 of approved make, colours, shades and size on wall 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 matching pigment complete.</p>				
12.7.1	<p>Size upto 200x300mm</p>	40	SQM	587.00	23480
12.9	<p>Providing and laying ceramic glazed floor tiles conforming to IS : 15622 of approved size, make, colour, shade laid on 20 mm thick Cement Mortar 1:4 (1 cement : 4 coarse sand) including pointing the joints with white cement mixed with matching pigment etc., complete.</p>				

	300X300	48	SQM	692.00	33216
12.12	Providing and laying vitrified floor tiles with soluble salt printing, of size 600x600mm with water absorption less than 0.5% and conforming to IS : 15622 of approved make, laid on 20mm thick cementmortar 1:4 (1 cement : 4 coarse sand) including grouting the joints with white cement and matching pigments etc. complete.	50	SQM	963.00	48150
12.13	Providing and laying vitrified floor tiles with double charge/ multi charge printing with water absorption less than 0.5% and conforming to IS : 15622 of approved make in all colours and shades and size mentioned below (+/- 10mm), laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand) including grouting the joints with white cement and matching pigments etc. complete.				
12.13.1	Size 600x600mm	50	SQM	1151.00	57550
12.37	Chequerred precast cement concrete tiles 22mm thick in footpath & courtyard jointed with neat cement slurry mixed with pigment to match the shade of tile including cleaning of joint etc complete on 20 mm thick bed of cement mortar 1:4 (1 cement :4 coarse sand) :				
12.37.1	Medium shade using approximately. 50% white cement and 50% ordinary cement	20	SQM	591.00	11820
12.49	25 mm thick KOTA stone slab flooring over 20mm (Average) thick base of cement mortar 1:4 laid over and jointed with grey cement slurry	32	SQM	897.00	28704

	mixed with pigment to match the shade of the slab including grinding rubbing and polishing etc. complete (Area of slab to be over 0.20 sqm and upto 0.50 sqm) sqm 897.00				
14.9	Distemping with acrylic washable distemper to give an even shade.				
14.9.1	On new work (Two or more coats)	150	SQM	38.00	5700.00
14.16	Painting exterior surface with PREMIUM ACRYLIC SMOOTH exterior paint of required shade as per manufacturer's specification to give protective and decorative finish including cleaning washing of surface etc. complete with:				
14.16.1	On 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)	80	SQM	74.50	5960.00
17.1	Repairs to plaster in patches of area 2.5 sq. metres and under including cutting the patch in proper shape, raking out joints and preparing and plastering the surface of the walls with cement mortar 1:4 (1 cement : 4 fine sand) complete including disposal of rubbish to the dumping ground within 50metres lead :				0.00
17.1.1	Thickness upto 15mm	10	SQM	132.00	1320.00
17.1.2	Thickness more than 15mm and upto 20mm	10	SQM	148.00	1480.00
17.2	Providing and replacing broken floor tile with ceramic glazed floor tiles conforming to IS : 15622 of approved size, make, colour,				0.00

	shade laid on 20 mm thick Cement Mortar 1:4 (1 cement : 4 coarse sand) including removing the broken tile and mortar, pointing the joints with white cement mixed with matching pigment etc., complete.				
17.2.1	Size 300x300mm	8	SQM	1151.00	9208.00
17.2.2	Size above 300x300mm	6	SQM	1187.00	7122.00
17.3	Providing and replacing broken floor tile with rectified ceramic glazed floor tiles of size 300x300mm and above conforming to IS : 15622 of approved make, colour, shade laid on 20 mm thick Cement Mortar 1:4 (1 cement : 4 coarse sand) including removing the broken tile and mortar, pointing the joints with white cement mixed with matching pigment etc., complete.				0.00
17.3.1	In all colours except White, Ivory, Grey, Fume Red Brown,	7	SQM	1317.00	9219.00
17.5	Providing and replacing broken floor tile with vitrified floor tiles with soluble salt printing, of size 600x600mm with water absorption less than 0.5% and conforming to IS : 15622 of approved make, laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand) including removing the broken tile and mortar, grouting the joints with white cement and matching pigments etc. complete:	8	SQM	1422.00	11376.00
17.6	Providing and replacing broken floor tile with vitrified floor tiles with double charge/ multi charge printing with water absorption less than 0.5% and conforming to IS : 15622 of approved make in all colours and shades and size mentioned below (+/-				0.00

	10mm), laid on 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand) including removing the broken tile and mortar, grouting the joints with white cement and matching pigments etc. complete:				
17.6.1	Size 600x600mm	2.33	SQM	1611.00	3753.63
17.7	Providing and replacing broken vitreous china water closet squatting pan (Indian type) including removing the broken squatting pan and mortar, cutting and making good the walls and floors wherever required:				0.00
17.7.1	White Long pattern W.C. pan of size 580 mm	1	EACH	1448.00	1448.00
17.7.2	Coloured Long pattern W.C. pan of size 580 mm	1	EACH	1795.00	1795.00
17.7.3	White Orissa pattern W.C. pan of size 580x440 mm	1	EACH	1888.00	1888.00
17.7.4	Coloured Orissa pattern W.C. pan of size 580x440 mm	1	EACH	2535.00	2535.00
17.8	Providing and replacing broken vitreous china water closet (European type W.C. pan) including removing the broken water closet (European type W.C. pan) cutting and making good the walls and floors wherever required :				0.00
17.8.1	White pedestal type	1	EACH	1295.00	1295.00
17.8.3	White wall hung type	1	EACH	2943.00	2943.00
17.9	Fixing chowkhats in existing opening including embedding chowkhats in floors or walls cutting masonry for holdfasts embedding hold fasts in cement concrete blocks with cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) painting two coats of approved wood preservative to sides of chowkhats and making good				0.00

	the damages to walls and floors as required complete including disposal of rubbish to the dumping ground within 50 metres lead :				
17.9.1	Door chowkhats	1	EACH	441.00	441.00
17.9.2	Window chowkhats	1	EACH	317.00	317.00
17.10	Fixing chowkhat in existing opening in brick / RCC wall with dash fasteners/ chemical fastener of appropriate size (3nos on each vertical member of door chowkhat and 2 nos. on each vertical member of window chowkhats including cost of dash fasteners/ chemical fastener.	1	EACH	94.00	94.00
17.11	Making the opening in brick masonry for door/window/ clerestory window including dismantling in floor or walls by cutting masonry and making good the damages to walls, flooring and jambs complete to match existing surface i/c disposal of malba/ rubbish to the nearest municipal dumping ground.	2.33	SQM	272.00	633.76
17.12	Renewing glass panes, with putty and nails wherever necessary:				0.00
17.12.1	Float glass panes of thickness 4 mm	5.22	SQM	524.00	2735.28
17.12.2	Float glass panes of thickness 5.5 mm	2	SQM	620.00	1240.00
17.16	Renewal of old putty of glass panes (length)	5	METER	13.50	67.50
17.17	Refixing old glass panes with putty and nails	5.22	SQM	175.00	913.50
17.18	Fixing old glass panes with wooden fillets (excluding cost of fillets)	5.22	SQM	140.00	730.80
17.19	Providing and fixing 16 mm M.S. Fan clamps of standard shape and size in existing R.C.C. slab including cutting chase and making good and painting exposed portion of the clamps complete.	1	EACH	144.00	144.00

17.23	Renewing aluminium door/ window by replacing damaged member by anodised/ powder coated aluminium sections of same diamentions complete including depositng dismantalled section at departmental store.	15	KG	324.00	4860.00
17.26	Raking out joints in lime or cement mortar and preparing the surface for re-pointing or re-plastering including disposal of rubbish to the dumping ground within 50 metres lead.	10	SQM	14.50	145.00
17.29	Renewing bottom rail and/or top runner of collapsible gate including making good all damages and applying priming coat of zinc chromate yellow primer of approved brand and manufacturer.	20	KG	95.00	1900.00
17.30	Renewing wrought iron or M.S. Wheel or rollerof steel door or gate and fitting and fixing the same with necessary clamps,nuts and bolts/welding and erection etc. complete.				0.00
17.30.1	Wheel 50 mm dia. and below.	1	EACH	110.00	110.00
17.30.2	Wheel above 50 mm dia	1	EACH	179.00	179.00
18.1	Providing and fixing water closet squatting pan (Indian type W.C. pan), 100mm sand cast Iron P or S trap, 10 litre low level P.V.C. flushing cistern (same colour) conforming to IS : 7231, with flush bend and other fittings and fixtures complete including cutting and making good the walls and floors wherever required :				
18.1.1	White Long pattern W.C. pan of size 580 mm	1	EACH	2459.00	2459.00
18.1.3	White Orissa pattern W.C. pan of size 580x440 mm	1	EACH	2899.00	2899.00
18.2	Providing and fixing vitreous china water closet squatting pan (Indian				

	type) including cutting and making good the walls and floors wherever required:				
18.2.3	White Orissa pattern W.C. pan of size 580x440 mm	1	EACH	1440.00	1440.00
18.4	Providing and fixing vitreous china water closet (European type W.C. pan) with white ISI marked plastic seat and lid, 10litre low level white P.V.C. flushing cistern (same colour), conforming to IS : 7231, with all				
18.4.1	White pedestal type	1	EACH	2882.00	2882.00
18.7	Providing and fixing 10 litre capacity P.V.C. low level flushing cistern conforming to IS : 7231, with all fittings and fixtures complete.				
18.7.1	White	1	EACH	729.00	729.00
18.13	Providing and fixing white vitreous china urinal basin with waste fitting as per IS : 2556, and other couplings in C.P. brass complete:				
18.13.1	Flat back half stall urinal of size 460x380x250mm	1	EACH	1776.00	1776.00
18.14	Providing and fixing white vitreous china urinal basin as per IS : 2556 complete:				
18.14.2	Flat back type urinal of size 460x380x250mm	1	EACH	872.00	872.00
18.15	Providing and fixing one piece construction white vitreous china squatting plate urinal with an integral rim longitudinal flushing pipe, standard size G.I. flush pipe for back and front flush, C.P. brass coupling complete including cutting and making good the walls and floors etc. wherever required :	1	EACH	2014.00	2014.00
18.17	Providing and fixing vitreous china wash basin with C.I. brackets, 32 mm C.P. brass waste of				

	standard pattern, including painting of brackets, cutting and making good the walls wherever required :				
18.17.1	White Size 550x450 mm	5	EACH	1430.00	7150.00
18.18	Providing and fixing white vitreous china wash basin including making all connections but excluding the cost of fittings :				0.00
18.18.1	White Size 550x450 mm	10	EACH	936.00	9360.00
18.23	Providing and fixing white vitreous china laboratory sink with C.I. brackets, C.P. brass chain with rubber plug 40mm C.P brass waste and 40mm C.P. brass trap with necessary C.P. brass unions complete including painting of brackets, cutting and making good the wall wherever required :				
18.23.2	Size 600x450x200mm	2	EACH	4502.00	9004.00
18.25	Providing and fixing flexible P.V.C. waste pipe for sink or wash basin including P.V.C. waste fittings complete.				
18.25.1	32 mm dia	15	EACH	68.50	1027.50
18.25.2	40 mm dia	20	EACH	88.50	1770.00
18.26	Providing and fixing PVC waste coupling in wash basin/ sink.				
18.26.1	25 mm	20	EACH	49.50	990.00
18.26.2	40 mm	20	EACH	61.00	1220.00
18.30	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 :				
18.30.1	5mm thick mirror	5	EACH	2016.00	10080.00
18.76	Providing and fixing on wall face or under floor UV stabilized Unplasticised Rigid PVC pipes (single socketed) having 3.2mm wall thickness conforming to IS :				

	13592 (4kg/sqcm) including required couplers, jointing with seal ring conforming to IS : 5382 leaving 10 mm gap for thermal expansion etc complete.				
18.76.1	75 mm dia pipe.	30	METER	182.00	5460.00
18.76.2	110 mm dia pipe.	18	METER	267.00	4806.00
18.77.1	Tee/ Tee with door/ Bend 45°/ Bend 90°				
18.77.1.1	75 mm dia	60	EACH	113.00	6780.00
18.77.1.2	110 mm dia	50	EACH	154.00	7700.00
18.77.1.3	150 mm dia	10	EACH	273.00	2730.00
18.77.2	Double "Y" with or without door				
18.77.2.2	110 mm dia	15	EACH	224.00	3360.00
18.77.3	Vent covel				
18.77.3.1	75 mm dia	21	EACH	34.00	714.00
18.77.3.2	110 mm dia	20	EACH	44.00	880.00
18.77.4	Access door cap				
18.77.4.1	75 mm dia	9	EACH	49.50	445.50
18.77.4.2	110 mm dia	15	EACH	59.00	885.00
18.77.5	"P" trap 110mmx110mm long	5	EACH	227.00	1135.00
18.77.6	Nahani trap 110x75mm	5	EACH	90.50	452.50
18.77.7	Multi floor trap 110	5	EACH	122.00	610.00
18.77.8	Plain reducing Tee 110x75mm	10	EACH	129.00	1290.00
18.78	Providing and fixing UV stabilized Unplasticised -PVC pipe clips of approved design to Rigid PVC pipes by means of 50x50x50mm hard wood plugs, screwed with M.S. screws of required length including cutting brick work and fixing in cement mortar 1:4 (1 cement : 4 coarse sand) and making good the wall etc. complete.				
18.78.1	75 mm dia	30	EACH	57.00	1710.00
18.78.2	110 mm dia	50	EACH	61.00	3050.00
	INTERNAL WORK - EXPOSED ON WAL				
19.4.1	15 mm nominal outer dia .Pipes.	18	METER	110.00	1980
19.4.2	20 mm nominal outer dia .Pipes.	14	METER	151.00	2114
19.4.3	25 mm nominal outer dia .Pipes.	17	METER	199.00	3383
19.5	Providing and fixing				

	Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings i/c fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step CPVC solvent cement and the cost of cutting chases and making good the same including testing of joints complete as per direction of Engineer in Charge. CONCEALED WORK including cutting chases and making good the walls etc.,				
19.5.1	15 mm nominal outer dia .Pipes.	24	METER	133.00	3192
19.5.2	20 mm nominal outer dia .Pipes.	20	METER	167.00	3340
19.5.3	25 mm nominal outer dia .Pipes.	17	METER	213.00	3621
19.6	Providing and fixing Chlorinated Polyvinyl Chloride (CPVC) pipes, having thermal stability for hot & cold water supply including all CPVC plain & brass threaded fittings. This included jointing of pipes & fittings with one step CPVC solvent cement, trenching, refilling & testing of joints complete				
19.6.1	15 mm nominal outer dia .Pipes.	50.22	METER	91.50	4595.13
19.6.2	20 mm nominal outer dia .Pipes.	50.22	METER	121.00	6076.62
19.6.3	25 mm nominal outer dia .Pipes.	50.22	METER	165.00	8286.3
19.7	Providing and fixing on wall surface G.I. pipes medium class complete with G.I. fittings and clamps, including cutting, making good the walls etc. and testing of joints complete:				
19.7.1	15 mm nominal outer dia .Pipes.	20	METER	149.00	2980

19.7.2	20 mm nominal outer dia .Pipes.	20	METER	185.00	3700
19.7.3	25 mm nominal outer dia .Pipes.	24	METER	258.00	6192
19.8	Providing and fixing concealed in wall G.I. pipes medium class complete with G.I. fittings and clamps, including painting with anti corrosive bitumastic paint, cutting chases, making good the walls etc. and testing of joints complete:				
19.8.1	15 mm nominal outer dia .Pipes.	30	METER	188.00	5640
19.8.2	20 mm nominal outer dia .Pipes.	10	METER	221.00	2210
19.8.3	25 mm nominal outer dia .Pipes.	8	METER	297.00	2376
19.9	Providing and laying in trenches G.I. pipes medium class complete with G.I. fittings including excavation of trenches, refilling the same and testing of joints complete:				
19.9.1	15 mm nominal bore	25.33	METER	131.00	3318.23
19.9.2	20 mm nominal bore	25.33	METER	159.00	4027.47
19.9.3	25 mm nominal bore	25.33	METER	222.00	5623.26
19.10	Making connection of G.I. distribution branch in G.I. main of following sizes by providing and fixing tee, including cutting and threading the pipe etc. complete: (dia of main line to be measured)				
19.10.1	25 mm nominal bore	10	EACH	200.00	2000
19.10.2	32 mm nominal bore	10	EACH	224.00	2240
19.10.3	40 mm nominal bore.	10	EACH	278.00	2780
19.11	Providing and fixing G.I. Union in G.I. pipe (New work) including cutting and threading the pipe and making long screws etc. complete:				
19.11.1	15 mm nominal bore	10	EACH	85.00	850
19.11.2	20 mm nominal bore	10	EACH	98.00	980
19.11.3	25 mm nominal bore	10	EACH	117.00	1170
19.11.4	32 mm nominal bore	10	EACH	148.00	1480
19.11.5	40 mm nominal bore.	10	EACH	169.00	1690
19.12	Providing and fixing G.I.				

	Union in existing G.I. pipe line, cutting and threading the pipe and making long screws including excavation, refilling the earth or cutting of wall and making good the same complete wherever required :				
19.12.1	15 mm nominal bore	10	EACH	186.00	1860
19.12.2	20 mm nominal bore	10	EACH	199.00	1990
19.12.3	25 mm nominal bore	10	EACH	218.00	2180
19.12.4	32 mm nominal bore	10	EACH	248.00	2480
19.12.5	40 mm nominal bore.	10	EACH	270.00	2700
19.13	Providing and fixing 15 mm nominal bore Brass bib/stop cock of approved quality:				
19.13.1	Bib cock (250 grams)	35	EACH	185.00	6475
19.13.2	Bib cock (350 grams)	30	EACH	237.00	7110
19.14	Providing and fixing 15 mm nominal bore C.P. brass fittings of approved make and conforming to IS:8931 including C.P. brass extension if required:				
19.14.2	Long nose bib cock (500 grams)	5	EACH	455.00	2275
19.14.4	Pillar Cock (400 grams)	5	EACH	398.00	1990
19.14.6	Stop cock (concealed) (600 grams)	5	EACH	494.00	2470
19.14.7	ngle valve for basin mixer and geyser points (450 grams)	5	EACH	382.00	1910
19.14.8	Basin mixer pillar tap with spout (1000 grams)	10	EACH	1248.00	12480
19.14.12	Bottle trap set with extension pipes	5	EACH	473.00	2365
19.14.13	Toilet paper holder	5	EACH	248.00	1240
19.14.14	Soap dish plate	5	EACH	163.00	815
19.14.16	Towel rail (600mm long x 20mm dia)	5	EACH	338.00	1690
19.14.17	Towel ring (150 mm dia)	5	EACH	254.00	1270
19.14.19	Health foscet (hand jet) with flexible connection pipe (for WC)	10	EACH	774.00	7740
19.14.20	CP brass water jet to be fixed in seat cover of WC with flexible connection pipe	10	EACH	557.00	5570
19.15	Providing and fixing stainless steel drain jali of approved make/quality.	5	EACH	51.00	255
19.17	Providing and fixing ball				

	valve (brass) of approved quality, High or low pressure, with plastic floats complete :				
19.17.1	15 mm nominal bore	10	EACH	284.00	2840
19.17.2	20 mm nominal bore	10	EACH	394.00	3940
19.17.3	25 mm nominal bore	10	EACH	432.00	4320
19.18	Providing and fixing gun metal non- return valve (horizontal type) of approved quality (screwed end) :				
19.18.1	25 mm nominal bore	10	EACH	413.00	4130
19.18.2	32 mm nominal bore	10	EACH	556.00	5560
19.19	Providing and fixing gun metal non- return valve (vertical type) of approved quality (screwed end) :				
19.19.1	25 mm nominal bore	10	EACH	451.00	4510
19.19.2	32 mm nominal bore	10	EACH	608.00	6080
19.25	Providing and laying S&S centrifugally cast (spun) iron pipes (Class LA) conforming to IS - 1536 :				
19.25.1	100 MM	10	METER	1056.00	10560
19.25.2	150MM	5	METER	1586.00	7930
19.25.3	200MM	5	METER	2695.00	13475
19.42	Providing and placing on terrace (at all floor levels) polyethylene water storage tank ISI : 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 fortank	10000	LITER	7.30	73000
19.44	Cutting holes upto 15x15 cm in R.C.C. floors and roofs for passing drain pipe etc. and repairing the hole after insertion of drain pipe etc. with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) including finishing complete so as to make it leak proof. each 94.00	10	EACH	94.00	940
19.46	Making hole upto 20x20 cm	50	METER	67.50	3375

	and embedding pipes upto 150 mm diameter in masonry and filling with cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size) including disposal of malba. metre 67.50				
19.47	Constructing masonry Chamber 30x30x50 cm, inside with modular well burnt clay bricks of 35 kg/ cm ² in cement mortar 1:4 (1 cement : 4 coarse sand) for stop cock, with C. I. surface box 100x100x75 mm (inside) with hinged cover fixed in cement concrete slab 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) necessary excavation foundation concrete 1:5:10 (1 cement : 5 fine sand:10 graded stone aggregate 40mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12mm thick finished with a floating coat of neat cement complete as per standard design	10	EACH	754.00	7540
19.48	Constructing masonry Chamber 60x60x75 cm, inside with modular well burnt clay bricks of 35 kg/ cm ² in cement mortar 1:4 (1 cement : 4 coarse sand) for sluice valve, with C.I. surface box 100mm. top diameter, 160 mm bottom diameter and 180 mm deep (inside) with chained lid and RCC top slab 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate	5	EACH	4644.00	23220
19.49	Constructing masonry Chamber 90x90x100 cm, inside with modular well burnt clay bricks of 35 kg/ cm ² in cement mortar 1:4 (1	5	EACH	8013.00	40065

	<p>cement : 4 coarse sand) for sluice valve, with C.I. surface box 100 mm. top diameter, 160 mm bottom diameter and 180 mm deep (inside) with chained lid and RCC top slab 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) necessary excavation foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12 mm thick finished with a floating coat of neat cement complete as per standard design</p>					
19.50	<p>Constructing masonry Chamber 120x120x100 cm, inside with modular well burnt clay bricks of 35 kg/cm² in cement mortar 1:4 (1 cement : 4 coarse sand) for sluice valve, with C.I. surface box 100 mm. top diameter, 160 mm bottom diameter and 180 mm deep (inside) with chained lid and RCC top slab 1:2:4 mix (1 cement :2 coarse sand : 4 graded stone aggregate 20 mm nominal size) necessary excavation foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 gradedstone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12 mm thick finished with a floating coat of neat cement complete as per standard design : each 11021.00</p>	5	EACH	11021.00	55105	
		TOTAL-		Rs.	1999692.84	
					SAY Total Rs.	20,00,000.00

Note: (1) The items other than the schedule will be taken from SoR-2015 (Civil & Electrical) applicable in Chhattisgarh PWD with tender rate (percentage above/at par/below) if required.

Note: (2) There may be change in schedule items as well as quantity up to any extent, as per the need of the university. Excess quantities will be adopted from the SoR and shall be paid as per quoted percentage rate of schedule in tender.

PART-C

(PRICE BID(FORMAT))

Intending tenderer shall quote rate percentage Below/ At Par/ Above

Special Instructions To Tenderer

Percentage BoQ

Tender Inviting Authority: REGISTRAR, GURU GHASIDAS VISHWAVIDYALAYA, BILASPUR (C.G.)						
Name of Work: "CIVIL REPAIRING & MAINTENANCE WORK" AT GGV CAMPUS.						
Contract No: NI e-T No. 55(R)/ENGG/GGV/CIVIL R&M Work/2022, BILASPUR, Dated: 30/08/2022						
Name of the Bidder/ Bidding Firm / Company :						
PRICE SCHEDULE						
(This BOQ template must not be modified/ replaced by the bidder and the same should be uploaded after filling the relevant columns, else the bidder is liable to be rejected for this tender. Bidders are allowed to enter the Bidder Name and Values only)						
NUMBER #	TEXT #	NUMBER #	TEXT #	NUMBER	NUMBER #	TEXT #
Sl. No.	Item Description	Quantity	Units	Estimated Rate in Rs. P	Total Amount Inclusive of All (Taxes. etc.)in Rs. P	Total Amount In Words
1	2	4	5	6	53	55
1.0	Items & Quantities of the work of "CIVIL REPAIRING & MAINTENANCE WORK" as per Schedule of Quantities/Rates	1.000	Units as per the Given Schedule of Quantities	2000000.00	2000000.00	INR Twenty Lakh rupees only
Total in Figures					2000000.00	INR Twenty Lakh rupees only
Quoted Rate in Figures			Select		0.00	INR Zero Only
Quoted Rate in Words			INR Zero Only			

Note :

- 1) The bidder has to quote rates on percentage basis by selecting "Select" for Excess (+) or Less (-) or for at par i.e. 0% in Excess (+)/0% in Less (-) of the total estimated amount as per the Schedule of rates of work in S.L. No.1.0
- 2) The bidder is advised to mention the offer percentage only in the respective cell (Col. 6) next to the cell where the "Select" cell (Col. 5) is present. After selecting the select cell, two options i.e. Excess (+) or Less (-) will be popped up, after selecting the respective, enter the offer percentage in the cell next to "Select" cell. Then the total offer price of the Tender will be automatically appears in figures in Col. No. 53 and in words in the Column No. 55 of respective cells. Check the offer value in figures and in words also before submitting.
- 3) Percentage Rates are to be quoted by the Tenderer shall be inclusive of all (GST, Levies, and Taxes etc.)

SPECIAL INSTRUCTIONS TO TENDERER

REGARDING NI e-T No. 55(R)/ENGG/GGV/CIVIL R&M Work/2022, BILASPUR, Dated: 30/08/2022

The intending Tenderer shall be required to submit the Bid of the e-tender in the following manner.

- 1) The Tenderer has to send the Original DD of the Tender Cost/Bid Cost and Original DD/FDR of Earnest Money Deposit (EMD), of any scheduled bank drawn in favour of the **"REGISTRAR, GURU GHASIDAS VISHWAVIDYALAYA, BILASPUR (C.G.)** in a sealed envelope to the University Engineer (UE), GGV, Bilaspur. It should be clearly super scribed on the top of the envelope the e-Tender Notice No. **NI e-T No. 55(R)/ENGG/GGV/CIVIL R&M Work/2022, BILASPUR, Dated: 30/08/2022**. These DD & EMD should reach the UE, GGV before the last date and time of Tender Submission. if in case of the Tenderer who has been exempted or being exempted from submitting the specified Tender Cost/Bid Cost and/or EMD. The information of exemption if any should be duly certified to be submitted to the University and the same in original should reach the UE, GGV before the last date and time of Tender Submission. Otherwise such bid shall be summarily rejected.
- 2) The tenderer has to submit the Bid online in the e-Tendering website (www.eprocure.gov.in) with the following details
 - a) Technical BID
 - i. The Tenderer has to upload the e-tender and all related documents (including the corrigendum/ instructions/ notices till the last of submission if any) properly signed where ever required.
 - ii. The Tenderer has to upload file of the scanned copy of the Original DD of the **Tender Cost** in the required format
 - iii. The Tenderer has to upload file of the scanned copy of the Original DD of the Earnest Money Deposit (**EMD**) in the required format.
 - iv. The Tenderer has to upload file of the scanned Copy of Registration Certificate in appropriate Category of the contractor as per the eligibility criteria.
 - v. The Tenderer has to upload file of the scanned Copy of Experience Certificate of appropriate amount & works mentioned in the tender.
 - vi. The Tenderer has to upload file of the scanned Copy of Income Tax Return certificate of previous year with pan card.
 - vii. The Tenderer has to upload file of the scanned Copy of GST Registration Certificate.
 - viii. The Tenderer has to upload file of the scanned Copies of all the other documents in support of information furnished in the tender.
 - b) Financial BID
 - ii. The Tenderer has to upload the Financial bid/BOQ properly where ever required in the following e-Tendering website (www.eprocure.gov.in)

By Order
University Engineer (I/C)
Guru Ghasidas
Vishwavidyalaya

