



# GURU GHASIDAS VISHWAVIDYALAYA BILASPUR (CHHATTISGARH)

**(A Central University)**

Koni, Bilaspur-495009 (C.G.)

Phone: 07752-260036, Fax : 07752-260154

Website : [www.ggu.ac.in](http://www.ggu.ac.in)

## e-Tender for Percentage Rate Tender

Reference NIT No.	: NIE-T No. 32/ENGG/GGV/FABRICATION WORK /2019, BILASPUR, Date 08/11/2019
Name of Work	: FABRICATIONWORK /2019” AT GGV CAMPUS, BILASPUR (C.G.)
Estimated Cost	: Rs. 30 lakh (Inclusive All)
Tender Cost	: Rs. 2,500/- (in form of D.D.)
Earnest Money Deposit	: Rs. 60,000/- (in the form of D.D./FDR)
Period of Completion	: 12 months (One-year)(Note: May be extended by one more year)
Tender Document	: Available online through the websites <a href="http://www.ggu.ac.in">www.ggu.ac.in</a> and <a href="http://www.eprocure.gov.in">www.eprocure.gov.in</a>

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

## e-Tender Notice/(EOI) for Percentage Rate Tender

e-TENDER / EXPRESSION OF INTEREST/RFP

FOR “FABRICATION WORK /2019” AT GGV CAMPUS, BILASPUR (C.G.)

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Reference NIE-T No.	:	<b>NIE-T No. 32/ENGG/GGV/FABRICATION WORK /2019, BILASPUR, Date 08/11/2019</b>
Name of Work	:	<b>FABRICATION WORK /2019” AT GGV CAMPUS, BILASPUR (C.G.)</b>
Estimated Cost	:	<b>Rs. 30 lakh</b> (Inclusive All)
Earnest Money Deposit	:	<b>Rs. 60,000/-</b> (In form of D.D./FDR)
Tender Cost	:	<b>Rs. 2500/-</b> (In form of D.D.)
Period of Completion	:	<b>12months (One-year)</b> (Note: May be extended by one more year)
Tender Document	:	Available online through the websites <a href="http://www.ggu.ac.in">www.ggu.ac.in</a> and <a href="http://www.eprocure.gov.in">www.eprocure.gov.in</a>
Tender Document Download Start Date	:	<b>08/11/2019, at 10.00 AM</b>
Tender Document Download End Date	:	<b>21-11-2019 up to 03.00 PM</b>
Tender Cost	:	<b>Rs. 2500/- (in form of D.D.)</b>
Start date of submission of e-Tender /EoI	:	<b>08/11/2019, from 11.00 AM</b>
Last date of submission of e-Tender /EoI	:	<b>21/11/2019, upto 3.00 PM</b>
Technical Bid opening Date	:	<b>22/11/2019, at 3.30 PM</b>

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EOI / Nie-T Amounting to Rs. 30.00 Lakh containing Cover Page, Title Page, INDEX, PART-A from page No.04 to 24, PART-B from page No.25 to 54. And PART-C from page No.55 to 57.

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

# PART-A

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

## e-TENDERNOTICE / EOI

### GURU GHASIDAS VISHWAVIDYALAYA, BILASPUR

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
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Nie-T No. 32/ENGG/GGV/FABRICATION WORK/2019, BILASPUR, Date 08/11/2019

#### e-Tender Notice

### e-TENDER/EOI/RFP FOR FABRICATION WORK/2019” AT GGV CAMPUS, BILASPUR (C.G.)

Guru GhasidasVishwavidyalaya (a Central University), Bilaspur, (C.G.), invites online **percentage ratee-Tender/ Expression of Interest (EoI)/RFP** for the “**FABRICATION WORK/2019**” with following details

Reference Nie-T No.	:	<b>Nie-T No. 32/ENGG/GGV/FABRICATIONWORK /2019, BILASPUR, Date 08/11/2019</b>
Name of Work	:	<b>“FABRICATION WORK /2019” AT GGV CAMPUS, BILASPUR (C.G.)</b>
Estimated Cost	:	Rs. 30.00 lakh (Inclusive All)
Tender Cost	:	Rs. 2,500/-(in form of D.D.)
Earnest Money Deposit	:	Rs. 60,000/- (in form of D.D./FDR)
Period of Completion	:	12 months (One-year)(Note: May be extended by one more year)
Last date of submission of e-Tender	:	<b>21/11/2019, Up to 3.00 PM</b>
Technical Bid opening Date	:	<b>22/11/2019, at 3.30 PM</b>

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

**REGISTRAR** (Acting)  
Guru GhasidasVishwavidyalaya,  
Bilaspur (C.G.)

**INFORMATION AND INSTRUCTIONS FOR CONTRACTORS FOR  
e-TENDERING FORMING PART OF Nie-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 BSNL, M.E.S., Railways and C.G. State P.W.D. and other PSUs under Govt. of India for the Fabrication Work at GGV, Bilaspur(C.G.)

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Reference Nie-T No.	: <b>Nie-T No. 32/ENGG/GGV/FABRICATION WORK /2019, BILASPUR, Date 08/11/2019</b>
Name of Work	: <b>FABRICATION WORK /2019” AT GGV CAMPUS, BILASPUR (C.G.)</b>
Estimated Cost	: Rs. 30 lakh (Inclusive All)
Tender Cost	: Rs. 2,500/- (in form of D.D.)
Earnest Money Deposit	: Rs. 60,000/- (in form of D.D./FDR)
Period of Completion	: 12 months (One-year) (Note: May be extended by one more year)
Last date of submission of EoI/e-Tender	: <b>21/11/2019 Up to 3.00 PM</b>
Technical Bid opening Date	: <b>22/11/2019 at 3.30 PM</b>

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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.ggu.ac.in](http://www.ggu.ac.in) and [www.eprocure.gov.in](http://www.eprocure.gov.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 EoI/Tender document can be downloaded from the websites [www.eprocure.gov.in](http://www.eprocure.gov.in) or [www.ggu.ac.in](http://www.ggu.ac.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 favor of “**Registrar, Guru GhasidasVishwavidyalaya” 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/ courier service 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.60,000/ -in the form of Demand Draft (DD)or Fixed Deposit Receipt(FDR) from any Nationalized Bank in favor 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/ courier service 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/ courier service 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.

<b>BID for;</b> <b>Nie-T No. 32/ENGG/GGV/FABRICATION WORK /2019, BILASPUR, Dated:08/11/2019</b>	
<b>From:</b> <b>Name of Bidder:</b> _____ <b>Address:</b> _____ _____	<b>To,</b> <b><u>The University Engineer,</u></b> <b><u>Guru GhasidasVishwavidyalaya,</u></b> <b><u>Koni, Bilaspur (C.G.) – 495009”</u></b>

- 8 Bidder must register on the website [www.eprocure.gov.in](http://www.eprocure.gov.in) for uploading the soft copy of the bid. Those interested Bidders not registered on the website [www.eprocure.gov.in](http://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 EoI/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](http://www.eprocure.gov.in).
- 12 Bidder must upload on the e-Tendering website [www.eprocure.gov.in](http://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](http://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](http://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](http://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 EoI/Tender.
  - 17 The Technical bid file must contain the scanned copies of duly signed EoI/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 EoI/Tender documents.
  - 20 Power of Attorney of the person having digital signature for signing/submitting 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/ EOI Documents or which are not relevant or in contravention to NIT/EOI 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 21/11/2019.**
- 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 22/11/2019.** (Venue: Engineering Section, Administrative Block, GGV).
- 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 BSNL, M.E.S., Railways and C.G. State P.W.D. and other PSUs under Govt. of India for the Fabrication Work at GGV, Bilaspur(C.G.) i.e.  

**"FABRICATION WORK /2019"**  
**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.30,00,000/- (Rupees Thirty 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 costin the period of last seven years ending **31.03.2019**.
  - **'Similar work'** means 'Fabrication, Civil Repair & Maintenance 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 **12months (one year)**(Note: May be extended by **one more year**) 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.ggu.ac.in](http://www.ggu.ac.in) or [www.eprocure.gov.in](http://www.eprocure.gov.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 favor 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/courier service 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.60,000/-in the form of Demand Draft (DD)or Fixed Deposit Receipt(FDR) from any Nationalized Bank in favor 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/ courier service 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/ courier service 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.

<b>BID for;</b> <b>Nie-T No. 32/ENGG/GGV/FABRICATION WORK /2019, BILASPUR, Dated: 08/11/2019</b>	
<b>From:</b> <b>Name of Bidder:</b> _____ <b>Address:</b> _____ _____	<b>To,</b> <b><u>The University Engineer,</u></b> <b><u>Guru GhasidasVishwavidyalaya,</u></b> <b><u>Koni, Bilaspur (C.G.) – 495009</u></b>

- 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
- i) The tenderer does not deposit original Tender Cost and EMD
  - ii) 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.
  - iii) 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.

- iv) 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 tenderer 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 GhasidasVishwavidyalaya, 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 GhasidasVishwavidyalaya, 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 DSR-2014.

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 GhasidasVishwavidyalaya,  
Bilaspur (C.G.)

**Signature of**

**REGISTRAR (Acting)**  
Guru GhasidasVishwavidyalaya,  
Bilaspur (C.G.)

<p align="center"><b>गुरु घासीदास विश्वविद्यालय</b>  <b>बिलासपुर (छ.ग.)</b>  <b>(केंद्रीय विश्वविद्यालय)</b>  कोनी, बिलासपुर-495009 (छ.ग.)  दूरभाष : 07752-260036, फ़ैक्स -07752-260154  वेबसाइट :www.ggu.ac.in</p>		<p align="center"><b>GURU GHASIDAS VISHWAVIDYALAYA</b>  <b>BILASPUR (C.G.)</b>  <b>(A Central University)</b>  Koni, Bilaspur-495009 (C.G.)  Phone: 07752-260036, Fax : 07752-260154  Website : www.ggu.ac.in</p>
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**PERCENTAGE RATE e-TENDER & CONTRACT FOR WORKS**

<b>A</b>	TENDER FOR THE WORK OF		:	<b>FABRICATION WORK /2019” AT GGV CAMPUS, BILASPUR (C.G.)</b>		
	A1	Reference Nie-T No.	:	<b>Nie-T No. 32/ENGG/GGV/FABRICATION WORK /2019, BILASPUR, Date 08/11/2019</b>		
					(Time)	(Date)
	A2	To be Uploaded Online latest by	:	<b>upto3.00 P.M. on</b>	<b>21-11-2019</b>	
	A3	To be opened by the authorized bid openers of the university	:	<b>At 3.30 P.M. on</b>	<b>22-11-2019</b>	

**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 GhasidasVishwavidyalaya, 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. 60,000/-** 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 GhasidasVishwavidyalaya, 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 GhasidasVishwavidyalaya, 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 GhasidasVishwavidyalaya (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/our self 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 **Delhi Schedule of Rates 2016**/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 “FABRICATION WORK /2019” 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: **CPWD GCC-2016**

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**Name of work :**

Estimated cost of work: **Rs.30.00 lakh**  
Earnest money: **Rs. 60,000/-**  
Performance guarantee: **5% of tendered value.**  
Security Deposit: **5% of tendered value.**

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## 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 **For Civil:**  
**Delhi Schedule of Rates 2016(Civil)** with correction slips issued up to date of receipt of tender  
**For Electrical:**  
**Delhi Schedule of rate 2016 for** Internal Electrical works and schedule of rate 2016 for External Electrical works
- 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)**

**Work order will be given in parts as per the requirement with in the period of one year. The contractor has to complete the work within the time stipulation given in the concerned work orders**

Time allowed for execution of work	<b>12 (Twelve) month</b> (Note: May be extended by one more year)
Authority to decide	(i) Extension of Time <b>University Engineer, GGV, Bilaspur (C.G.)</b> 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	<b>Rs. 5.00 Lakhs</b> <b>(For Civil Component)</b>
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<b>Clause10A</b>	List of testing equipment to be provided by the contractor at site lab	<b>See P 39 Para 11.0 (Part – B)</b>
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<b>Clause10B(ii)</b>	Whether clause 10B (ii) shall be applicable	<b>Yes</b>
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<b>Clause10C</b>	Component of labour expressed as Percent of value of work	<b>25% (Twenty five per cent)</b>
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**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:**CPWD specification 2009, Volume-I & II with correction slips up to date of receipt of tender.

**For Electrical :**CPWD 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 need of the university. Excess quantities will be adopted from the DSR 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 P 38 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**

SNo	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 Delhi Schedule of Rates 2016 printed by C.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 15 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 centering, 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 **DSR-2016** applicable in CPWD 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 DSR 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 proforma 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 aluminum 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, aluminum composite panel cladding etc. and making the curtain glazing, aluminum 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, aluminum 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 Aluminum
AS 1664		Structural use of Aluminum

### 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, 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 &centre 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 deshuttering 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

Proforma 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 Zindal 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:

<b>Dia of bar</b>	<b>For consignment below 100tonnes</b>	<b>For consignment above 100tonnes</b>
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 lappings 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 centimeter. 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 centering 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, CPWD 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  $T_{ck} = f_{ck} + 1.65 s$

Where,

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

S= 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 metres 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 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 centering 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 signages 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 Calipers. - 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 form 1<sup>st</sup> / 2<sup>nd</sup> 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 EOI/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 infavor 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 envelopthe e-Tender Notice No. **“Nie-T No. 32/ENGG/GGV/FABRICATION WORK /2019, BILASPUR, Date 08/11/2019”**. 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](http://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](http://www.eprocure.gov.in) )

- 15 The GGV reserves the right to award the work order to the 2<sup>nd</sup> lowest tenderer incase of the first lowest tenderer fails to execute monthly work progress report by canceling the work order given the 1<sup>st</sup> 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 **27 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 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 upto any extent or any item which can be included which is not in the given schedule but is an item of the DSR 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.

<b>LIST OF APPROVED MATERIALS &amp; SPECIALIZED AGENCIES (FOR CIVIL WORKS)</b>		
<b>Note:</b>		
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.	
<b>MATERIALS:</b>		
		<b>BRAND/MAKE</b>
1.	White Cement	JK, Birla or equivalent.
2.	Super plasticizer	MC Baucheme, Sika, Fosroc
3.	Water Proofing Compound (Liquid)	Pidiproof Ltd., Cico, Impermo
4.	Stainless Steel	Jindal Stainless Steel, Salem Steel
5.	Galvanized/Stainless Steel Anchor Fasteners	Shakti, Arrow, Hilti, Fischer
6.	PVC Tiles	Arm Strong, LG or equivalent.
7.	Ceramic Tiles	Kajaria, Somany, Nitco, Orient, Bell Ceramic, Johnson
8.	Vitrified /Porcelain Tile	Marbonite, Euro, Somany, diamond of Naveen Granamite of Bell ceramic, Granito, Kajaria, Marbitto.
9.	Terrazzo tiles	Mehtab, Nitasha, Nitco, Raj-yesh, Bharat
10.	Chequered tiles	Mehtab, Nitasha, Nitco, Raj-yesh, Bharat
11.	Acid/Alkali Resistant Tile	Somany, Nitco, Kajariya, Bell Granamite Group, Johnson
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.
15.	Flush Doors	Kutty flush door, Anchor, Kanara, Kitlam, National, Swastic
16.	FRP Shutters	Fibre Glass Engineers, Raipur, Aashoo Model
17.	PVC Shutter	Rajshri, Sintex or equivalent.
18.	Ply Wood	Archid, Kitply, Green ply, Century
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
22.	Aluminium Composite Panel	Alpolic, Aluco Bond, Reynobond, Euro bond, Al-strong

23.	Stainless Steel Screws	Kundan, Arrow or equivalent.
24.	Anodised Aluminium Extrusions	Hindalco, Indalco, Jindal
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
28.	Synthetic Enamel Paints	ICI(Dulux),Asian (Apolite),Berger (Luxol),Nerolac (NST)
29.	Structural Silicon Sealant	Dow Corning, Wacker, GE, Du-pont
30.	Epoxy Primer & Paints	Berger, Pidilite or equivalent.
31.	GI Pipe	Tata, Zenith, Jindal
32.	GI fitting	Unik, ICS or equivalent.
33.	Centrifugally Cast Iron Pipe & Fittings	Neco, RIF, SKF
34.	Polyester Powder Coating	Nerolac, Berger, J&N
35.	Gun Metal Gate Valve	Zoloto, Leader, SAINT
36.	PVC Rain Water Pipe & Fitting	Finolax, Classic of Kisan or equivalent.
37.	Primer	Asian, ICI, Berger, Nerolac
38.	Oil Bound Distemper	Asian(Tractor), ICI (Maxi lite),Berger(Bison),Nerolac (NAD)
39.	Acrylic Emulsion Paint	Asian (Royale), ICI (Velvet), Berger (Luxol Silk), Nerolac (Allscapes)
40.	Structural steel section	TATA, SAIL, RINL
41.	Curtain Carrier	Vista levlor or equivalent.
42.	Drapery Rod	Vista Levlor or equivalent.
43.	VitreousChinaWashBasin Rectangular without Pedestal	Hindware / Perryware or equivalent.
44.	VirtuososChinaWashBasin Oval	Hindware / Perryware or equivalent.
45.	Vitreous China Pedestal for WashBasin	Pedstal 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 Compote	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.
54.	Vitreous China Half stall Urinal	Model No. 6002 Urinal flat back large of Hindware or

		magnum of Perryware.
55.	Flush Valve	Aquel, Marc or equivalent.
56.	Solid Plastic Seat Cover for EWC	EWC standard seat cover white of Perryware/Hindware
57.	Jet Assembly for EWC	Perryware, Kamal (Mahendra)
58.	Float Glass	Modi Float, Saint Gobain, Asahi, Sejal
59.	CP Brass Bibcock, Pillarcock, Stopcock, Angle Valve, Concealed Stop Cock.	Marc (oriental series) Jaquar (continental series), Parko, Nova
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 or without Draining board.	Nirali, Hindware, Frankee, Cobra
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
69.	Textured Exterior wall	Berger, Unitile, Spectrum, Oikos
70	Non asbestos high impact polypropelene reinforced Cement sheet	Everest or equivalent

**SCHEDULE OF QUANTITIES/RATE FOR  
" FABRICATION WORK /2019" AT GGV CAMPUS, BILASPUR (C.G.)**

<b>NAME OF WORK:</b>	<b>FABRICATION WORK /2019</b>
<b>LOCATION:</b>	<b>GGV CAMPUS, BILASPUR</b>
<b>DSR:</b>	<b>ESTIMATE AS PER CPWD DSR 2016</b>

DSR ITEM NO	ITEM DESCRIPTION	QTY.	UNITS	RATE	VALUE (inRs.)
2.8	Earth work in excavation by mechanical means (Hydraulic excavator)/ manual means in foundation trenches or drains (not exceeding 1.5m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50m.				
2.8.1	All kinds of soil.	30.00	Cum	166.40	4992.00
2.27	Supplying and filling in plinth with Jamuna sand under floors, including watering, ramming, consolidating and dressing complete.	10.00	Cum	917.75	9177.50
2.28	Surface dressing of the ground including removing vegetation and inequalities not exceeding 15 cm deep and disposal of rubbish, lead upto 50 m and lift upto 1.5m				
2.28.1	All kind of soil	100.00	Sqm	13.95	1395.00
4.1	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :				
4.1.2	1:1½:3 (1 Cement: 1½ coarse sand: 3 graded stone aggregate 20 mm nominal size)	3.66	Cum	5924.65	21684.22
4.1.5	1:3:6 (1 Cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size)	2.56	Cum	4927.00	12613.12
4.5	Providing and fixing up to floor five level precast cement concrete string or lacing courses, copings, bed plates, anchor blocks, plain window sills,shelves, louvers, steps, stair cases, etc., including hoisting and setting in position with cement mortar 1:3 (1 Cement : 3 coarse sand), cost of required centering complete.				
4.5.1	1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20mm nominal size)	1.50	Cum	6672.45	10008.68
6.1	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in:				
6.1.1	Cement mortar 1:4 (1 cement : 4 coarse sand)	5.36	Cum	4970.30	26640.81
6.1.2	Cement mortar 1:6 (1 cement : 6 coarse sand)	5.21	Cum	4751.65	24756.10
10.1	Structural steel work in single section, fixed with or without connecting plate, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.				
10.2	Structural steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	5000.00	Kg	67.60	338000.00

10.3	Providing and fixing in position collapsible steel shutters with vertical channels 20x10x2 mm and braced with flat iron diagonals 20x5 mm size,with top and bottom rail of T-iron 40x40x6 mm, with 40 mm dia steel pulleys, complete with bolts, nuts, locking arrangement, stoppers, handles, including applying a priming coat of approved steel primer.	21.33	Sqm	5360.65	114342.66
10.5	Providing and fixing 1mm thick M.S. sheet door with frame of 40x40x6 mm angle iron and 3 mm M.S. gusset plates at the junctions and corners, all necessary fittings complete, including applying a priming coat of approved steel primer.				
10.5.1	Using M.S. angels 40x40x6 mm for diagonal braces	50.44	Sqm	2870.25	144775.41
10.5.2	Using flats 30x6mm for diagonal braces and central cross piece	43.66	Sqm	2761.90	120584.55
10.6	Supplying and fixing rolling shutters of approved make, made of required size M.S. laths, interlocked together through their entire length and jointedtogether at the end by end locks, mounted on specially designed pipeshaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation complete, including the cost of providing and fixing necessary 27.5 cm long wire springs manufacturedfrom high tensile steel wire of adequate strength conforming to IS: 4454 -part 1 and M.S. top cover of required thickness for rolling shutters.				
10.6.1	80x1.25 mm M.S. laths with 1.25 mm thick top cover	20.23	sqm	2316.10	46854.70
10.6.2	80x1.20 mm M.S. laths with 1.20 mm thick top cover	14.96	Sqm	1841.40	27547.34
10.7	Providing and fixing ball bearing for rolling shutters.	09	each	379.30	3413.70
10.8	Extra for providing mechanical device chain and crank operation for operating rolling shutters.				
10.8.1	Exceeding 10.00 sqm and upto 16.80 sqm in the area	11.23	sqm	724.05	8131.08
10.8.2	Exceeding 16.80 sqm in area	10.45	sqm	724.05	7566.32
10.9	Extra for providing grilled rolling shutters manufactured out of 8 mm dia M.S. bar instead of laths as per design approved by Engineer-in-charge,(area of grill to be measure	22.14	sqm	313.60	6943.10
10.10	Fixing standard steel glazed doors, windows and ventilators in walls, including fixing of float glass panes with glazing clips and special metalsashputty of approved make, or metal beading with screws, (only steel windows, glass panes cut to size and glazing clips or metal beading with screws, shall be supplied by department free of cost.				
10.10.2	Fixing with carbon steel galvanised dash fastener of required dia and size (to be paid for separately)	5000.00	Kg	39.05	195250.00
10.14	Providing and fixing pressed steel door frames conforming to IS: 4351, manufactured from commercial mild steel sheet of 1.60 mm thickness, including hinges, jamb, lock jamb, bead and if required angle threshold of mild steel angle of section 50x25 mm, or base ties of 1.60 mm, pressed mild steel welded or rigidly fixed together by mechanical means, includingM.S. pressed butt hinges 2.5 mm thick with mortar guards, lock strike plate and shock absorbers as specified and applying a coat of approved steel primer after pre-treatment of the surface as directed by Engineer in-charge:				
10.14.1	Profile B				
10.14.1.1	Fixing with adjustable lugs with split end tail to each jamb	50.12	Meter	340.35	17058.34
10.14.1.2	Fixing with carbon steel galvanised dash fastener of required dia and size (to be paid for separately)	50.12	Meter	332.30	16654.88
10.15	Providing and fixing M.S. Tubular frames for doors, windows, ventilators and cupboard with rectangular/ L-Type sections, made of 1.60 mm thick M.S. Sheet, joints mitred, welded and grinded finish,				



**EOI/e-TENDER FOR“ FABRICATION WORK/2019” AT GGV, BILASPUR**  
**Nie-T No. 32/ENGG/GGV/FABRICATION WORK/2019, BILASPUR, Date 08/11/2019**

	with profiles of required size, including fixing of necessary butt hinges and screws and applying a priming coat of approved steel primer.				
10.15.1	Fixing with 15x3 mm lugs 10 cm long embedded in cementconcrete block 15x10x10 cm of C.C. 1:3:6 (1 Cement : 3 coarsesand : 6 graded stone aggregate 20 mm nominal size)	220.00	Kg	124.05	27291.00
10.15.2	Fixing with carbon steel galvanised dash fastener of required dia and size (to be paid for separately)	220.00	Kg	115.30	25366.00
10.16	Steel work in built up tubular ( round, square or rectangular hollow tubes etc.) trusses etc., including cutting, hoisting, fixing in position and applyinga priming coat of approved steel primer, including welding and bolted with special shaped washers etc. complete				
10.16.1	Hot finished welded type tubes	500.00	Kg	90.25	45125.00
10.22	Welding by gas or electric plant including transportation of plant at site etc. complete	200.00	Cm	2.85	570.00
10.25	Steel work welded in built up sections/ framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required.				0.00
10.25.1	In stringers, treads, landings etc. of stair cases, including use ofchequered plate wherever required, all complete	700.00	Kg	65.80	46060.00
10.25.2	In gratings, frames, guard bar, ladder, railings, brackets, gatesand similar works	900.00	Kg	85.95	77355.00
10.28	Providing and fixing stainless steel ( Grade 304) railing made of Hollow tubes, channels, plates etc., including welding, grinding, buffing, polishing and making curvature (wherever required) and fitting the same with necessary stainless steel nuts and bolts complete, i/c fixing the railing with necessary accessories & stainless steel dash fasteners , stainless steel bolts etc., of required size, on the top of the floor or the side of waist slab with suitable arrangement as per approval of Engineer-in-charge, (for payment purpose only weight of stainless steel members shall be considered excluding fixing accessories such as nuts, bolts, fasteners etc.).	500.00	Kg	472.40	236200.00
10.29	Providing & fixing fly proof wire gauze to windows, clerestory windows & doors with M.S. Flat 15x3 mm and nuts & bolts complete.				
10.29.1	Galvanised M.S. Wire gauze with 0.63 mm dia wire and 1.4 mm aperture on both sides	100.00	Sqm	544.45	54445.00
10.29.2	Stainless steel (grade 304) wire gauze of 0.5 mm dia wire and1.4 mm aperture on both sides	70.00	Sqm	1041.55	72908.50
10.30	Providing & fixing glass panes with putty and glazing clips in steel doors, windows, clerestory windows, all complete with :10.30.1 4.0 mm thick glass panes				
10.30.1	4.0 mm thick glass panes	100.00	sqm	689.05	68905.00
10.30.2	5.5 mm thick glass panes	70.00	Sqm	949.70	66479.00
12.15	Painting top of roofs with bitumen of approved quality @ 17kg per 10 sqm impregnated with a coat of coarse sand at 60 cudm per 10 sqm, including cleaning the slab surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil complete :				
12.15.1	With residual type petroleum bitumen of grade VG - 10	50.00	Sqm	102.50	5125.00
13.4	12 mm cement plaster of mix:				
13.4.1	1:4 (1 cement: 4 coarse sand)	50.00	Sqm	180.85	9042.50
13.4.2	1:6 (1 cement: 6 coarse sand)	50.00	Sqm	168.25	8412.50

13.5	15 mm cement plaster on rough side of single or half brick wall of mix :				
13.5.2	1:6 (1 cement: 6 coarse sand)	100.00	Sqm	194.60	19460.00
13.53	Painting on G.S. sheet with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade				
13.53.1	New work (two or more coats) including a coat of approved steel primer but excluding a coat of mordant solution	100.00	Sqm	84.00	8400.00
13.50	Applying priming coat				
13.50.3	With ready mixed red oxide zinc chromate primer of approved brand and manufacture on steel galvanised iron/ steel works	100.00	Sqm	29.10	2910.00
13.50.4	With ready mixed red oxide zinc chromate primer of approved brand and manufacture on steel work (second coat)	100.00	Sqm	15.60	1560.00
13.84	Painting with synthetic enamel paint, having VOC (Volatile Organic Compound) content less than 150 grams/ litre, of approved brand and manufacture, including applying additional coats wherever required to achieve even shade and colour.				
13.84.2	Two coats	100.00	Sqm	75.00	7500.00
14.1	Repairs to plaster of thickness 12 mm to 20 mm in patches of area 2.5 sq.meters and under, including cutting the patch in proper shape, raking out joints and preparing and plastering the surface of the walls complete, including disposal of rubbish to the dumping ground within 50 metres lead :				
14.1.2	With cement mortar 1:4 (1 cement: 4 coarse sand)	120.00	Sqm	274.80	32976.00
14.2	Fixing chowkhats in existing opening including embedding chowkhats in floors or walls cutting masonry for holdfasts, embedding hold fasts in cement concrete blocks of size 15 x 10 x 10 cm 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 the damages to walls and floors as required complete, including disposal of rubbish to the dumping ground within 50 meters lead :				
14.2.1	Door chowkhats	40.00	Each	852.70	34108.00
14.2.2	Window chowkhats	40.00	Each	529.50	21180.00
14.3	Fixing chowkhat in existing opening in brick / RCC wall with dash fasteners/Chemical fasteners of appropriate size (3 nos on each vertical member of door chowkhat and 2 nos on each vertical member of window chowkhats), including Cost of dash fasteners/ chemical fastener.				
14.4	Making the opening in brick masonry 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 mulba/ rubbish to the nearest municipal dumping ground				
14.4.1	For door/ window/ clerestory window	25.00	Sqm	546.25	13656.25
14.5	Renewing glass panes, with putty and nails wherever necessary including racking out the old putty				0.00
14.5.1	Float glass panes of thickness 4 mm	100.00	Sqm	637.90	63790.00
14.5.2	Float glass panes of thickness 5.5 mm	100.00	Sqm	898.55	89855.00
14.9	Renewal of old putty of glass panes (length)	100.00	Meter	25.45	2545.00
14.10	Refixing old glass panes with putty and nails	50.00	Sqm	330.75	16537.50
14.19	Taking out wind ties from roof including cutting out rusted bolts, nuts etc. and removing materials to any distance within compound and stacking.	250.0	Kg	2.25	562.50
14.21	Renewing bottom rail and/or top runner of collapsible gate including making good all damages and applying priming coat of zinc chromate	100.00	Kg	144.10	14410.00

	yellow primer of approved brand and manufacturer.				
14.22	Renewing Wrought iron or M.S. Wheel or roller of steel door or gate and fitting and fixing the same with necessary clamps, nuts and bolts/welding and erection etc. complete.				0.00
14.22.1	Wheel 50 mm dia and below	14.00	Per wheel	122.65	1717.10
14.22.2	Wheel above 50 mm dia	14.00	Per wheel	187.25	2621.50
14.29	Providing and fixing M.S. round or square bars with M.S. flats at required spacing in wooden frames of windows and clerestory windows.	50.00	Kg	61.80	3090.00
14.43	Removing white or colour wash by scrapping and sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete	50.00	Sqm	8.35	417.50
14.54	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade :	50.00	Sqm	51.30	2565.00
14.57	Painting with black anti-corrosive bitumastic paint of approved brand and manufacture to give an even shade :	50.00	Sqm	43.55	2177.50
14.73	Providing and fixing bright finished brass casement window fasteners or peg stays to windows/ ventilators with necessary welding and machine screws etc.	70.00	Kg	420.20	29414.00
14.74	Providing and fixing 14 mm bright finished brass spring catch to steel centre hung ventilators with necessary welding and machine screws etc. complete.	30.00	Each	49.20	1476.00
15.12	Dismantling doors, windows and clerestory windows (steel or wood) shutter including chowkhats, architrave, holdfasts etc. complete and stacking within 50 metres lead :				
15.12.1	Of area 3 sq. metres and below	30.00	Each	157.85	4735.50
15.12.2	Of area 3 sq. metres and below	30.00	Each	216.40	6492.00
15.13	Taking out doors, windows and clerestory window shutters (steel or wood) including stacking within 50 metres lead				
15.13.1	Of area 3 sq. metres and below	30.00	Each	61.25	1837.50
15.13.2	Of area 3 sq. metres and below	30.00	Each	81.00	2430.00
15.15	Extra for dismantling trusses, rafters, purlins etc. of wood work for every additional span of one metre or part thereof beyond 10 metres :				
15.15.1	Of sectional area 40 square centimetres and above	10.00	Cum per metre span	259.20	2592.00
15.15.2	Of sectional area below 40 square centimetres Metre per metre span 0.75	10.00	Cum per metre span	0.75	7.50
15.16	Extra for dismantling trusses, rafters, purlins etc. of wood work for every additional height of one metre or part thereof beyond 5 metres :				
15.16.1	Of sectional area 40 square centimetres and above	10.00	Cum per metre height	370.70	3707.00
15.16.2	Of sectional area below 40 square centimetres Metre per metre height 1.45	10.00	Metre per metre height	1.45	14.50
15.17	Dismantling steel work in single sections including dismembering and stacking within 50 metres lead in:				

15.17.1	R.S. Joists	50.00	Kg	1.40	70.00
15.17.2	Channels, angles, tees and flats	50.00	Kg	0.95	47.50
15.18	Dismantling steel work in built up sections in angles, tees, flats and channels including all gusset plates, bolts, nuts, cutting rivets, welding etc. including dismembering and stacking within 50 metres lead.	200.00	Kg	2.40	480.00
15.19	Dismantling steel work manually/ by mechanical means in built up sections without dismembering and stacking within 50 metres lead as per direction of Engineer-in-charge.	200.00	Kg	1.60	320.00
15.20	Extra for dismantling trusses, rafters, purlins etc. of steel work for Kg perevery additional span of one metre or part thereof beyond 10 metresmetrespan 0.35	200.00	Kg per meter span	0.35	70.00
15.21	Extra for dismantling trusses, rafters, purlins etc. of steel work for Kg per every additional height of one metre or part thereof beyond 5 metres.	200.00	Kg per meter high	0.35	70.00
15.22	Extra for marking of structural steel work required to be re-erected.	200.00	Kg	2.00	400.00
15.28	Dismantling roofing including ridges, hips, valleys and gutters etc., and stacking the material within 50 metres lead of:				
15.28.1	G .S. Sheet	100.00	Sqm	70.10	7010.00
15.28.2	Asbestos sheet	100.00	sqm	32.85	3285.00
16.18	Fencing with angle iron post placed at required distance embedded in cement concrete blocks, every 15th post, last but one end post and corner post shall be strutted on both sides and end post on oneside only and provided with horizontal lines and two diagonals interwoven with horizontal wires, of barbed wire weighing 9.38 kg per100 m (minimum), between the two posts fitted and fixed with G .I. staples, turn buckles etc. complete. (Cost of posts, struts, earth work and concrete work to be paid for separately). Payment to be made per metre cost of total length of barbed wire used.				
16.18.1	With G .I. barbed wire	1000.00	Meter	12.65	12650.00
16.19	Supplying at site Angle iron post & strut of required size includingbottom to be split and bent at right angle in opposite direction for 10cm length and drilling holes upto 10 mm dia. etc. complete.	1000.00	Kg	62.05	62050.00
16.20	Welded steel wire fabric fencing with posts of specified material and of standard design placed and embedded in cement concrete blocks 45x45x 60 cm of mix 1:5:10 (1 cement:5 fine sand : 10 graded stone aggregate 40 mm nominal size), every 15th post, last but one endpost and corner post shall be strutted on both sides and end post on one side only and struts embedded in cement concrete blocks 70x45x50 cm of the same mix, provided with welded steel wire fabricfixed between the posts fitted and fixed with G .I. staples on wooden plugs or tied to 6 mm bar nibs with G .I. binding wire (cost of posts, welded steel wire fabric, painting, earth work in excavation and concrete to be paid for separately). Sqm 30.65	1000.00	Sqm	30.65	30650.00
16.21	Engraving letters in hard stone	100.00	per cm height per letter	4.75	475.00
16.22	Providing and fixing 15x15x90 cm boundary stone of hard stonewith top 30 cm chisel dressed on all four sides including top (cost ofexcavation, refilling and concrete etc. to be paid for separately).	100.00	Each	140.95	14095.00

16.23	Providing and fixing 15 cm dia at top, 20 cm at bottom and 90 cm high precast reinforced cement concrete 1:1.5:3 (1 cement : 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size) boundary stone as per standard design, including finishing smooth with cement mortar 1:3 (1 cement : 3 fine sand) (cost of excavation, refilling and concreting to be paid for separately). each 459.10	100.00	Each	459.10	45910.00
16.48	Painting road surface marking with adequate nos of coats to give uniform finish with ready mixed road marking paint conforming to IS : 164, on bituminous surface in white/yellow shade, including cleaning the surface of all dirt, scales, oil, grease and foreign material etc				
16.48.1	New work (Two or more coats)	150.00	Sqm	133.10	19965.00
16.59	Manufacturing, supplying and fixing retro reflective sign boards made up of 2 mm thick aluminium sheet, face to be fully covered with high intensity encapsulated type heat activated retro reflective sheeting conforming to type - IV of ASTM-D 4956-01 in blue and silver white or other colour combination including subject matter, message (bilingual), symbols and borders etc. as per IRC ; 67:2001, pasted on substrate by an adhesive backing which shall be activated by applying heat and pressure conforming to class -2 of ASTM-D-4956-01 and fixing the same with suitable sized aluminium alloy rivets @ 20 cm c/c to back support frame of M.S. angle iron of size 25x25x3 mm along with theft resistant measures, mounted and fixed with 2 Nos. M.S. angles of size 35x35x5 mm to a vertical post made up to M.S. Tee section ISMT 50x50x6 mm welded with base plate of size 100x100x5 mm at the bottom end and including making holes in pipes, angles flats, providing & fixing M.S. message plate of required size, steel work to be painted with two or more coats of synthetic enamel paint of required shade and of approved brand & manufacture over priming coat of zinc chromate yellow primer (vertical MS-Tee support to be painted in black and white colours). Backside of aluminium sheet to be painted with two or more coats of epoxy paint over and including appropriate priming coat including all leads and lifts etc. complete as per drawing, specification and direction of Engineer--in-charge.				
16.59.1	Mandatory/ Regulatory sign boards of 900 mm diameter with support length of 3750 mm e	5.00	Each	4786.35	23931.75
16.59.2	Cautionary /warning sign boards of equilateral triangular shape having each side of 900 mm with support length of 3650 mm e	5.00	Each	3464.05	17320.25
16.60	Manufacturing, supplying and fixing retro reflective overhead signage boards made up of 2 mm thick aluminium sheet, face to be fully covered with high intensity and encapsulated lens type heat activated retro reflective sheeting conforming to type - III of ASTM-D-4956-01 as approved by Engineer-in-charge, letters, borders etc. as per IRC : 67-2001 in silver white with blue colour back ground and with high intensity grade, pasted on substrate by pressure sensitive adhesive backing which shall be activated by applying pressure conforming to class II of ASTM-D-4956-01 and fixing the same to the plate of structural frame work by means of suitable sized aluminium alloys, rivets or bolts & nuts @ 300 mm centre to centre all along the periphery as well as in two vertical rows along with theft resistant measures, including the cost of painting with two or more coats of epoxy paint in grey colour on the back side of aluminium sheet including appropriate priming coat. The rate includes the cost of rounding off the corners, lowering down the structural frame work from the gantry, fixing and erecting the same in position all complete as per drawings, specification and direction of the engineer-in-charge.(Structural frame work including M.S. plate to be provided				

	separately. Rectangular area of the sheet only shall be measured for regular)				
16.60.1	Overhead informatory road signage	5.00	Each	4722.20	23611.00
16.61	Providing Retro-reflective regulatory sign board of size 900 mm dia meter made out of 2 mm thick aluminium sheet, face to be fully covered with high intensity encapsulated lens type retro -reflective sheeting as approved by Engineer-in-charge . Letter, symbols, borders etc. will be as per IRC - 67 with required colour scheme on the boards and with the high intensity grade A. The aluminium sheet to be riveted to M.S. frame of angle iron of size 40x40x4 mm. The boards will be fixed to 1 No. 50x50 mm square post made of M.S. angle 50x50x4 mm, 4 m long welded to the frame with adequate anti-theft arrangement .Sheet work to be painted with two or more coats of synthetic enamel paint over an under coat (primer) and back side of aluminium sheet to be painted with two or more coats of epoxy paint including appropriate priming coat complete in all respects as per direction of Engineer-in-charge.	5.00	Each	5266.45	26332.25
16.62	Providing and applying 2.5 mm thick road marking strips (retroreflective) of specified shade/ colour using hot thermoplastic material by fully/ semi automatic thermoplastic paint applicator machine fitted with profile shoe, glass beads dispenser, propane tank heater and profile shoe heater, driven by experienced operator on road surface including cost of material, labour, T&P, cleaning the road surface of all dirt, seals, oil, grease and foreign material etc. complete as per direction of Engineer-in-charge and accordance with applicable specifications.	200.00	sqm	391.25	78250.00
16.65	Providing and fixing post delineators made of ABS round body fitted with 2 nos 100 mm dia high reflective reflectors and mounted on MS pipe of 65 mm dia duly powder coated anti-rust and anti theft steel to be installed as per direction of Engineer-in-charge.	100.00	Each	554.50	55450.00
16.70	Providing and fixing G.I. chain link fabric fencing of required width in mesh size 50x50 mm including strengthening with 2 mm dia wire or nuts, bolts and washers as required complete as per the direction of Engineer-in-charge.				
16.70.1	Made of G.I. wire of dia 4 mm s	500.00	sqm	561.70	280850.00
				Total Rs.	2999711.62
				Say, total Rs.	30,00,000.0

**SUB ENGINEER (CIVIL)**

**UNIVERSITY ENGINEER (I/C)**

# PART-C

(PRICE BID(FORMAT))

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

Special Instructions To Tenderer

**PRICE BID(FORMAT)**

**Percentage BoQ**

<b>Tender Inviting Authority: REGISTRAR, GURU GHASIDAS VISHWAVIDYALAYA, BILASPUR (C.G.)</b>						
<b>Name of Work: “FABRICATION WORK /2019”</b>						
<b>Contract No: Nle-T No. 32/ENGG/GGV/FABRICATION WORK /2019, BILASPUR, Date 08/11/2019</b>						
<b>Name of the Bidder/ Bidding Firm / Company :</b>						
<b>PRICE SCHEDULE</b>						
<b>(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 )</b>						
<b>NUMBER #</b>	<b>TEXT #</b>	<b>NUMBER #</b>	<b>TEXT #</b>	<b>NUMBER</b>	<b>NUMBER #</b>	<b>TEXT #</b>
<b>Sl. No.</b>	<b>Item Description</b>	<b>Quantity</b>	<b>Units</b>	<b>Estimated Rate in Rs. P</b>	<b>Total Amount Inclusive of All (Taxes.Etc.)in Rs. P</b>	<b>Total Amount In Words</b>
<b>1</b>	<b>2</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>53</b>	<b>55</b>
1.0	<b>Items &amp; Quantities of the work of “FABRICATION WORK /2019”as per Schedule of Quantities/Rates</b>	1.000	Units as per the Given Schedule of Quantities	3000000.00	<b>3000000.00</b>	INR Thirty Lakh Only
<b>Total in Figures</b>					<b>3000000.00</b>	INR Thirty Lakh Only
<b>Quoted Rate in Figures</b>			<b>Select</b>		<b>0.00</b>	INR Zero Only
<b>Quoted Rate in Words</b>			<b>INR Zero Only</b>			

- Note :
- 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
  - 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.
  - Percentage Rates are to be quoted by the Tenderer shall be inclusive of all (GST, Levies, and Taxes etc.)



**SPECIAL INSTRUCTIONS TO TENDERER**

**REGARDING EOI/Nie-T No. 32/ENGG/GGV/FABRICATION WORK /2019, BILASPUR,  
Date:08/11/2019**

The intending Tenderer shall be required to submit the EOI/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. **Nie-T No. 32/ENGG/GGV/FABRICATION WORK /2019, BILASPUR, Date 08/11/2019.** These DD & EMD should reach the UE, 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](http://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](http://www.eprocure.gov.in))

By Order

**University Engineer (I/C)**