

INTER-UNIVERSITY ACCELERATOR CENTRE

(An Autonomous Centre of UGC)
Aruna Asaf Ali Marg, New Delhi-110 067

NOTICE INVITING E-TENDER

TENDER NO: IUAC/NIT/09/HAR/ 2020-21

Dated: 02/09/2020

Instructions for Online Bid Submission:

Inter-University Accelerator Centre (IUAC), invites online bids through e-Procurement Portal under two bid system, viz., Technical and Financial bids, from eligible and experienced parties SITC of Organic Waste Converter (OWC) machine including Civil work in IUAC Campus in various locations at IUAC Campus .

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

Aspiring Bidders who have not enrolled/registered in e-Procurement Portal should enroll/ register before participating through the website <http://eprocure.gov.in/eprocure/app>.

Bids shall be submitted online only at CPPP website: <http://eprocure.gov.in/eprocure/app>. Tenderers /Contractors are advised to follow the instructions provided in the e-procurement portal. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document. IUAC reserves the right to accept / reject any/all tenders in part/full without assigning any reasons thereof. Bidder has to select the payment option as “online” to pay the tender fee and EMD as applicable by going to link: <https://services.sabpaisa.in/pages/iuac.html>. The Earnest Money Deposit and tender fee shall be in the form of online payment and it should be deposited before the bid opening. Bidders registered with MSME/NSIC are exempted from payments of EMD & tender fee. Copy of valid registration certificate should be uploaded in the website with technical bid.

Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. If the price bid has been given as a standard BOQ format with the tender document, then the same is to be downloaded and to be filled and submit it online without modifying the format. If the BOQ file is found to be modified by the bidder, the bid will be rejected.

Any Corrigendum/Amendments in respect of above tender shall be issued on IUAC website www.iuac.res.in and website <https://eprocure.gov.in> only. Bidders should take into account any corrigendum published on the tender document before submitting their bids.

E-TENDER DOCUMENT

Name of Work	<u>SITC of Organic Waste Converter (OWC) machine including Civil work in IUAC Campus</u>
Tender No.	TENDER NO: IUAC/NIT/09/HAR/2020-21
Tender Value/Estimate	Rs. 1175000- (Rupees Eleven lacs Seventy five thousand)
Earnest Money Deposit	Rs 23500 /-(Rupees Twenty three thousand five hundred) only in the form of D.D.
Tender Fee	500 .00 (Five hundred only)
Bid Submission End Date	24/09/2020 at 3.00 p.m.
Technical Bid Opening Date	25/09/2020 at 3.30 p.m.
Price Bid Opening Date	To be intimated later.
Contact Person	Administrative Officer (S&P) e-mail: iuacstores@gmail.com Phone: 011-24126018 & 24126022

SCOPE OF WORK

Scope of work will includes (as per item details given in BOQ)

- (a) SITC (Supply, installation, testing & commissioning) of Organic waste converter machine (OWC) for waste conversion capacity of minimum 100 Kg/day as per detailed technical specifications given in tender /BOQ
- (b) SITC (Supply, installation, testing & commissioning) of Portable Garden Shredder for garden waste shredding capacity of minimum 100 Kg/Hour as per detailed technical specifications given in tender /BOQ
- (c) SITC (Supply, installation, testing & commissioning) of Single Curing System for OWC smooth operation to store /convert organic waste into proper manure as per detailed technical specifications given in tender /BOQ
- (d) Civil structure (a semi open shed of 6x10 meter) for installation /setup of above all machinery in IUAC campus at designated location

Supply, installation, testing & commissioning of above mentioned equipment /machine shall be executed at IUAC Delhi campus. The Tenderers are required to visit the site to understand and estimate the work to be carried out and to evaluate all equipment's, tools and tackles, safety equipment etc. required for execution of the work. All temporary arrangements required to be made for the movements of equipment/vehicles shall be considered and included in the scope of the work.

GENERAL TERMS & CONDITIONS

1. **Submission of Tender:** Tenders should be uploaded on CPP portal in two parts separately, i.e. "Technical Bid" (Part-A) and "Price Bid / BOQ)" (Part-B). No other mode of submission will be accepted.

Any clarifications/amendments/corrigenda etc., to NIT before last date of submission of bid will only be available on our website: www.iuac.res.in. Therefore bidders are advised to keep visiting our website.

2. **Technical Bid (Part-A)** : In this bid, the bidder shall upload the scan copies of the following:
 - i. Covering letter on Company's Letter Head
 - ii. Bio data of company (Company profile, organizational setup, credentials, list of plant, machinery & tools in his possession).
 - iii. Copies of PAN no., GST Reg. no.
 - iv. Copies of work orders and completion certificates of similar type of works (similar type means **Organic Waste Converter (OWC) machine / Portable Garden Shredder**) executed successfully during the last 7 yrs. in Govt., Public sector, Autonomous body or reputed Public Ltd. Company, with at least one work of value not less than Rs. 9.40 lakh or two similar works, each of value not less than Rs. 5.87 lakh or three similar works, each of value not less than Rs. 4.70 lakh.

- v. **Tender acceptance letter (as per annexure - I of tender document) on bidder's letter head** duly signed & stamped by the bidder as acceptance of all terms & condition of tender.
- vi. Undertaking for Site Visit has to be submitted as per Annexure – II

IUAC reserves the right to visit the working sites mentioned by bidders as proof of experience to ascertain the quality of service rendered. The bidder will have to arrange for such visit.

3. **Price Bid (Part-B):** In this bid, the bidder is required to quote his item rates in the BOQ formed in accordance with the scope of work, terms & conditions & technical specifications enclosed. The rates/price quoted by contractor should be all inclusive i.e. should include all material cost, labour, services, plant/machinery/tools & tackles, ladders & scaffolding required for work, freight, Insurance, and all applicable Govt. Duties, **excluding GST (payable separately as/if applicable)** , levies & taxes, transport/cartage of materials/labour and all other expenses not specifically mentioned but reasonably implied. Nothing over and above these rates shall be payable to contractor. Further, nothing extra in rates will be considered due to any site difficulties. It is mandatory for bidder to quote all items rate as asked for in the BOQ/ PRICE schedule. Failure in not filling some item rates will lead to rejection of tender. The bidders should quote unconditional rates, IUAC is exempted from GST. Necessary Exemption certificate shall be provided by IUAC wherever applicable.
4. **Earnest Money:** An earnest money deposit (EMD) of Rs 23500 /-(Rupees Twenty three thousand five hundred) has to be submitted before opening of the technical bid (Part-A). Bidder has to select the payment option as “online” to pay the tender fee and EMD as applicable by going to link: <https://services.sabpaisa.in/pages/iuac.html>. The Earnest Money Deposit and tender fee shall be in the form of online payment and it should be deposited before the bid opening. No Cheque/Cash shall be accepted as EMD. The refund of EMD to the technically disqualified & lowest 4th bidders onwards shall be made within 15 days from the date of opening of price bid. The refund of EMD of the 2nd & 3rd lowest bidders shall be made after award of work and site mobilization by the successful bidder. The EMD of the successful lowest bidder (L1) shall be held back as security deposit and will be released after submission of S.D in form of Bank Guarantee.

Exemption from EMD: Unit registered with National Small Scale Industries Corporation (NSIC)/ Micro Small & Medium Enterprises (MSME) is exempted from payment of EMD, subjected to:

- i The unit being registered with NSIC for the items/work tendered.
- ii Self Attested copy of valid NSIC/MSME registration Certificate.
- iii Photocopy of application for registration at NSIC or for renewal of NSIC will not be acceptable. Such offers will be treated as offers received without EMD.

5. **Validity of Tender:** Tender shall be valid for our acceptance without any change in rates and NIT conditions for a period of 90 days from the date of opening of Technical bid.
6. **Escalation:** No escalation over and above items rates quoted by the bidder shall be paid during the execution of contract.
7. **Performance Bank Guarantee:** The successful bidder has to submit a performance bank guarantee /FDR of an amount equal to 5% of total contract value valid for 5 months within a period of 10 days from

the date of issue of LOI/Purchase Order, failing which LOI/Purchase Order shall be deemed to be cancelled and EMD of the bidder shall be forfeited. The same shall be released back after successful completion of work to contractor.

8. **Completion time:** The time shall be the essence of this contract and entire work as titled above is to be completed in all respects within a period of 90 days. **The time allowed for the completion of work to be reckoned from the 10th day after the date of issuance of award letter/purchase order.** Any delay in completing the work for reasons attributable to the Contractor is liable for liquidated damages as per clause 15 of NIT. Under the force-majeure conditions, IUAC may grant suitable time extension without penalty for which the contractor has to request along with the justification/ reasons well in advance to IUAC for approval without any prejudice to price escalation. No time extension request shall be considered after the expiry of completion period/contract. The decision of the Director, IUAC regarding Time extension will be final and binding on the contractor.
9. **Deviations:** No deviation from the stipulated terms and conditions will be allowed. Tender will be unconditional.
10. **Site Conditions:** Contractor shall acquaint himself fully with the site conditions and the working environment of IUAC before quoting his rates. No Compensation on account of any site difficulties will be entertained, at a later date, after award of the work. (The bidder should signed undertaking as per Annexure –II enclosed in tender)
11. **Correspondence:** All the correspondence in respect of tender/award of work shall be made to A.O.(S&P), IUAC, Aruna Asaf Ali Marg, New Delhi-110067.
12. **Terms of Payment:** The payment shall be made on submission of the bills in proper format by the contractor after due certification by the IUAC engineer responsible for supervision of the work. Contractor can submit two interim or running bills and one final bill after completion of work for claiming payment based on actual quantities of items of work executed as per BOQ, drawings and Engineer's site instructions.
13. **Labour Laws:** The contractor will abide by all the rules and regulations related to labour laws, accident, workmen compensation act, workmen insurance etc. This will be the sole responsibility of the contractor. IUAC will not be a party at any stage in any of the disputes relating to the above. In case, IUAC has to bear any expenditure due to non-conformance of the above provisions by the contractor, the same will be recovered from contractor's bills.
14. **Rules governing the Contractor's employees working in the IUAC Premises:**
The contractor's employees working inside the IUAC campus will abide by the Centre's rules & regulations for works inside the campus. Any damage to the IUAC property due to mishandling, carelessness on the contractor's or his workmen's part will be recoverable from the contractor's bills.
15. **Liquidated damages:** In case the work is delayed beyond the specified completion period for reasons attributable to the contractor, deductions on account of Liquidated damages @1 % of the contract value per week or part thereof will be deducted subject to a maximum of 10 % of the contract value. However, during the delayed period, IUAC also reserves the right to get balance portion of work done by any other contractor at the risk and cost of the existing contractor and amount to that effect along with 10% overhead charges will be deductible from his bills/dues.
16. **Extra or substituted item-** If any extra or substituted item appears in the work, contractor shall

submit its rate analysis supported with documents which shall be approved by IUAC. If required, IUAC can make its own analysis based on DSR document of CPWD or based on market rates for determining item rate and pay to contractor accordingly.

17. Defect Liability period: Defect liability period shall be one year from the date of completion of work. Any defect arising in this period due to contractor's fault will be rectified by him at his own cost. Failure to do so shall lead to forfeiture of security deposit.

18. Security Deposit

A security deposit equal to ten (10) % of the value of work will be deducted from Contractor's bills and shall be refunded after the completion of defect liability period of one year after ensuring successful performance of the system executed by the contractor.

19. Contractor should depute a technically qualified supervisor dedicated for this work, who will monitor and coordinate work from contractor's side and interact with the IUAC Engineers, responsible for supervision of work, on regular basis.
20. Contractor will take due permission for entry of all his workmen in IUAC. No unauthorized person will be allowed to work inside IUAC campus.
21. The contractor will arrange all necessary materials, tools, equipment, access ladders & scaffolding, measuring instruments and working consumables etc. needed for execution of the works. Safe custody of all such material will be contractor's sole responsibility. No extra charges will be paid for the same. Watch and ward of all material till the system is taken over by IUAC shall be the sole responsibility of the contractor and pilferage etc. shall be entirely to his account.
22. During execution of work, Engineer can make minor changes in the scope of work as per site conditions or other reasons. Contractor will have no extra claim in his rates for the same.
23. If during the execution of works, any damage is caused to IUAC property by contractor's workers, contractor will duly make good the loss. IUAC has the right to make suitable deduction from contractor's bills along with penalty, if contractor fails to make good the loss.
24. During execution of work, the contractor should follow all standard norms of safety measures/precautions as per relevant IS codes and CPWD specifications to avoid accidents/damages to man, machines and buildings, at his own cost. Contractor will have his own arrangement to escort the labour to the nearest hospital for treatment in case any injury happens to any worker during execution of work.
25. Manpower deployed by the contractor at site for carrying out contract work is strictly prohibited being associated with any other works on the campus.
26. No material belonging to the contractor whether consumable or non-consumable should be brought inside the IUAC campus without proper entry at the Main Gate nor any material should be taken out without proper gate pass issued by the authorized representatives of the Centre.
27. During execution of the work, contractor should dispose-off waste material on regular basis and should keep the area of work properly cordoned off and neat and clean as far as possible. After completion of work, contractor should clear the site completely of all unwanted and junk material before submitting his final bill.
28. IUAC will provide free water and electricity during execution of work at one point. The

contractor has to make his own arrangements for supplying power and water from that point onwards as per his requirements.

29. Tender once submitted will remain with the Centre and will not be returned to the bidders.

30. Termination of Contract:- The Director, IUAC reserve the right to terminate the contract on account of poor workmanship, failure to mobilize site within 15days, non-compliance of specifications for the works, abnormal delay in progress of work, violation of any contract provisions by the contractor. In such case, contractor's EMD and security deposit deducted so far will be forfeited.

The contract can also be terminated on the request of contractor. In such cases the contractor is liable to pay Liquidated damages @ 5% of tendered value besides forfeiture of Performance Guarantee & security deposit recovered so far.

31. Any dispute arising out of this contract will be subjected to jurisdiction of New Delhi/Delhi.

32. Tenders not complying with any of the provisions stated in this tender document are liable to be rejected. **Director, IUAC also reserves the right to accept or reject any or all the tenders without assigning any reason and does not bind him to accept the lowest tender.**

Accepted

(Signature of bidder)

TECHNICAL SPECIFICATIONS & SPECIAL CONDITIONS (for BOQ item No 1-25 Execution)

- (i) Contractor will use only approved makes of materials as listed below and will get the samples of these materials approved by IUAC Engineer before incorporating in the work.
- (ii) Payment for executed work will be made to contractor based on actual measurement only.
- (iii) Detailed specification of various items of work with respect to materials and workmanship and method of measurements shall conform to relevant IS codes, CPWD specifications UNO.

TECHNICAL SPECIFICATIONS & SPECIAL CONDITIONS FOR ITEM NO. 24-26 (Organic waste converter machine (OWC), Portable Garden Shredder & Single Curing System for OWC)

1. Organic Waste Converter (OWC):

- 1.1 Organic Waste Converter (OWC) set comprising of composting machine and curing system. Composting machine should be of capacity of processing 10 Kg of organic waste per batch (batch duration, 15 min) catering to kitchen waste and horticulture waste like dry leaves.
- 1.2 The Motor of the OWC shall be of minimum 2.5 HP main motor and 2.5 HP chopper motor. All the contact part and the external protective main body of the OWC shall be made of Stainless Steel (Grade-304). The OWC shall be provided with mobility arrangement.

2. Portable Garden Shredder

2.1 The feed volume shall be of adequate capacity and the motor capacity of shredder shall be 2 HP. The cutters of the shredder should have MS contact parts, shall be carburized, and hardened. The cutters shall be capable of operating at speeds to facilitate self-cleaning. The body cover of the shredder shall be made of Stainless steel (Grade-304) and should have mobility arrangement.

3. Single Curing System for OWC smooth operation

3.1 The Compost Curing facility shall have capacity of 100 Kg of Organic Waste per day with 30 No. of HDPE crates of size minimum 54x36x26 cm, laminated with aerating net, one number of four shelf folding storage rack of size minimum 365x120x255 cm, two Number of Leach ate collection Tray of G.I of Size minimum 150X55X7cm, 1 No. of Leachate collection tray of G.I. of size minimum 150x55x7c and a Single fogger having Moisture control fogging system consisting of 70 foggers, Disc Filter, Ball Valve, 1 No of Pump, Time Control unit for spray and frequency control, One number of pressure gauge, and other accessories like piping, valves etc.

3.2 Supply of required quantities of consumables (**for 3 months period as a trial**) chemicals, Additives and Special Micro-organism to break down the organic waste or the composting culture, dour control agent etc. required for operation of the OWC so as to treat 50-70 Kg per day (1500-2100 kg in month) of organic waste. The types and quantities of consumables shall be as per the requirement of the OWC machine. The rate is inclusive of cost of all consumables and chemicals.

2.1.7 The quoted rate should include the cost of all equipment etc. complete as per specification and direction of Engineer-in-Charge.

Inspection and Testing: - The purchaser and/or its nominated representative(s) may, without any extra cost to the purchaser, inspect and/or test the ordered goods and the related services to confirm their conformity to the contract specifications and other quality control details incorporated in the contract. The purchaser shall inform the contractor / supplier in advance, in writing, the purchaser's Programme for such inspection and, also the identity of the officials to be deputed for this purpose. The cost towards the transportation, boarding & lodging will be borne by the purchaser/client and/or its nominated representative(s).

- a) The Technical Specification incorporated in the contract shall specify what inspections and tests are to be carried out and, also, where and how they are to be conducted. If such inspections and tests are conducted in the premises of the contractor /supplier or its subcontractor(s), all reasonable facilities and assistance, including access to relevant drawings, design details and production data, shall be furnished by the supplier to the purchaser's inspector at no charge to the purchaser.
- b) If during such inspections and tests the contracted goods fail to conform to the required specifications and standards, the purchaser's inspector may reject them and the supplier shall either replace the rejected goods or make all alterations necessary to meet the specifications and standards, as required, free of cost to the purchaser and resubmit the same to the purchaser's inspector for conducting the inspections and tests again.
- c) In case the contract stipulates pre-dispatch inspection of the ordered goods at supplier's premises, the supplier shall put up the goods for such inspection to the purchaser's inspector well ahead of the contractual delivery period, so that the purchaser's inspector is able to complete the inspection within the contractual delivery period.
- d) If the supplier tenders the goods to the purchaser's inspector for inspection at the last moment without providing reasonable time to the inspector for completing the inspection within the contractual delivery period, the inspector may carry out the inspection and complete the formality beyond the contractual delivery period at the risk and expense of the supplier. The fact that the goods have been inspected after the contractual delivery period will not have the effect of keeping the contract alive and this will be without any prejudice to the legal rights and remedies available to the purchaser under the terms & conditions of the contract.
- e) The purchaser's/consignee's contractual right to inspect, test and, if necessary, reject the goods after the goods' arrival at the final destination shall have no bearing of the fact that the goods have previously been inspected and cleared by purchaser's inspector during pre-dispatch inspection mentioned above.
- f) Goods accepted by the purchaser/consignee and/or its inspector at initial inspection and in final inspection in terms of the contract shall in no way dilute purchaser's/consignee's right to reject the same later, if found deficient in terms of the warranty clause of the contract, as incorporated.

9. Guarantee/Warranty Terms:

- a) The contractor / successful Bidder has to warrant that the Goods supplied under this Contract are new, unused, of the most recent or current models and incorporate all recent improvements in design and materials unless provided otherwise in the Contract.
- b) The contractor /successful Bidder further have to warrant that the Goods supplied under this Contract shall have no defect arising from design, materials or workmanship (except when the design and/or material is required by the Tender Inviting Authority's specifications) or from any act or omission of the successful Bidder, that may develop under normal use of the supplied goods.
- c) All the equipments including the accessories supplied as per the technical specification as mentioned in the bidding document should carry comprehensive warranty (including all spares, accessories and consumables) for a period of one year after completion of work . During this period, the successful Bidder shall replace all defective parts / accessories / consumables and attend to all repairs/break downs and undertake stipulated number of preventive maintenance visits to every user installation site. The cost of spare parts for all replacements has to be borne by the successful Bidder during the period of comprehensive

warranty. The items which are not covered under warranty should be clearly mentioned along with rate of the items.

LIST OF APPROVED MAKES

1. **Acrylic / Oil bound distemper** : Asian, Jenson & Nicholson, Berger
2. **Premium Acrylic Emulsion Paint** : Shalimar, Asian, Jenson & Nicholson, Berger, ICI, Nerolac
3. **Enamel paint:** : Do
4. **Adhesive** (for mixing in whitewash) : DDL(M/S Pidlite), SDL(M/S Chemisol)
Mastercreeet(M/S Choksey)
5. **Cement Primer** : same as item 1
6. **Wall Putty** (cement based) : Birla, JK, Sakrani ,Asian
7. **Admixture for bonding** : Pidilite , Parex , Chemisol , Choksey
8. **Ceramic tiles and Glazed tiles (all sizes)** : Varmora , Johnson, Kajaria, OASIS, Somany,& RAK
9. **Structural Extruded Sections viz. Tee Iron, Angle iron, Flats etc.** : SAIL, Tisco, Rana ,Mahaveer & Capital with ISI mark
10. **Hot finished welded , seamless and ERW type Tubes** : TATA , Jindal (Hisar), Wellspun, TTT
11. **Cement : O.P.C./P.P.C. confirming to IS : 1489** – ACC, Birla, Ambuja, Jaypee & J.K. Cement.

ANNEXURE 1

TENDER ACCEPTANCE LETTER (To be given on Bidders/ Company Letter Head)

Date: _____

To
The Administrative Officer (S&P)
Inter-University Accelerator Centre
Aruna Asaf Ali Marg
New Delhi-110 067.

Sub: Acceptance of Terms & Conditions of Tender.

Tender Reference No: _____

Name of Tender / Work: _____

Dear Sir,

1. We have downloaded / obtained the tender document(s) for the above mentioned 'Tender/Work' from the web site(s) namely: as per your advertisement, given in the above mentioned website(s).
2. We hereby certify that we have read the entire terms and conditions of the tender documents from Page No. _____ to _____ (including all documents like annexure(s), schedule(s), etc .), which form part of the contract agreement and we shall abide hereby by the terms / conditions / clauses Contained therein.
3. The corrigendum(s) issued from time to time by your department/ organizations too have also been taken into consideration, while submitting this acceptance letter.
4. We hereby unconditionally accept the tender conditions of above mentioned tender document(s) / corrigendum(s) in its totality / entirety.
5. We do hereby declare that our Firm has not been blacklisted/ debarred by any Govt. Department/ Public sector undertaking.
6. We certify that all information furnished by the our Firm is true & correct and in the event that the information is found to be incorrect/untrue or found violated, then your department/ organization shall without giving any notice or reason therefore or summarily reject the bid or terminate the contract, without prejudice to any other rights or remedy including the forfeiture of the full said earnest money deposit absolutely.

Yours Faithfully,

(Signature of the Bidder, with
Official Seal)

This certificate shall be furnished duly signed & stamped with **Techno-commercial Bid.**
Annexure - II

Certificate/ Undertaking

This is to certify that we have visited the site where SITC of Organic Waste Converter (OWC) machine including civil work in IUAC Campus works have to be done in IUAC lab complex on and assessed the actual situation & nature of site. We have also assessed the amount of work involved at site for tendered work before submitting our offer. We will be able to complete the above work within stipulated time as per site conditions.

We further undertake that no extra cost will be claimed by us later-on for any difficulties/ modifications involved during the execution of tendered works. We understand that work is to be executed in an already operational/ functional institute.

(Signature of the Bidder, with Official Seal)

Part-B**BOQ/PRICE BID**

(Price should be quoted in the standard BOQ format of this tender, Incomplete price bid will be rejected)

Tender Inviting Authority : INTER UNIVERSITY ACCELERATOR CENTRE

Name of Work/Supply : SITC of Organic Waste Converter (OWC) machine including Civil work in IUAC Campus

ITEM NO	DESCRIPTION OF ITEM	UNIT	QUANTITY
1	Clearing the area of existing site, remove off all vegetation (if any) ,dust , and minor malba ,including disposal of rubbish and malba within 100 mtr lead as instructed by Engineer.	Sqm	160
2	Earth work (All kinds of soil) in excavation by mechanical means (Hydraulic excavator)/manual means over areas including getting out and disposal of excavated earth lead upto 50 m and lift upto 1.5 m, as directed by Engineer-in-charge.	Cum	10
3	Providing and laying in position cement concrete of 1:4:8 (1 cement: 4 fine sand: 8 graded stone aggregate 40 mm nominal size) including the cost of centering and shuttering.	Cum	7
4	Providing and laying in position cement concrete of 1:2:4 (1 cement: 4 fine sand: 8 graded stone aggregate 40 mm nominal size) including the cost of centering and shuttering.	Cum	8
5	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in cement mortar 1:6 (1 cement :6 coarse sand) in foundation and plinth	Cum	7
6	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 with Cement mortar 1:6 (1 cement: 6 coarse sand) in superstructure above plinth level up height of 6 mtr.	Cum	8
7	Providing and laying Steel reinforcement (Thermo-Mechanically Treated bars) for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete above plinth level.	kg	100
8	Reinforced cement concrete work with 1:1.5:3 (1 cement: 1.5 coarse sand: 4 graded stone aggregate 20 mm nominal size) in foundation for machine ,roof ,lintels, bands above plinth level , including the cost of centering, shuttering, finishing but excluding the cost of reinforcement .	Cum	5
9	Supply and stacking of available earth / malba boulders /stones ,concrete debris (excluding rock) at site, within available in lead of 800 mtr including carriage, loading , unloading & stacking up to any lead (measured stacks will be reduced by 20% for payment).	Cum	50

10	Filling available earth /boulders/stones, concrete debris (excluding rock) below plinth, the concrete floor, C.C pavements etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering.	Cum	50
11	P/F 15 mm cement plaster of 1:4 (1 cement: 4 coarse sand) on brick work	Sqm	60
12	Excavation holes up to .50 cum including getting out the excavated soil as specified in DSR.	Each	12
13	Providing and fixing Ist quality ceramic glazed wall tiles conforming to IS: 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer-in-Charge, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and jointing with grey cement slurry @ 3.3kg per sqm, including pointing in white cement mixed with pigment of matching shade complete.	Sqm	35
14	Wall tile work with 8mm thick wall cladding tile (GRC permanent finish concrete tile) upto .5 m height with special adhesive over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand), including pointing in white cement mixed with pigment of appropriate colour to match the tile shade.	Sqm	35
15	Providing and laying Heavy duty Vitrified tiles Size of Tile 600x600 mm (thickness to be specified by manufacturer), with water absorption less than 0.08 % and conforming to I.S. 15622, of approved make, in all colours & shade, in skirting, riser of steps, over 12 mm thick bed of cement mortar 1:3 (1 cement: 3 coarse sand), jointing with grey cement slurry @ 3.3 kg/ sqm including grouting the joint with white cement & matching pigments etc. complete.	Sqm	70
16	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.	Kg	1250
17	Providing and fixing welded MS wire mesh size 75 X 25 mm ,of weight not less than 7.5 kg/sqm, including strengthening with welding or nuts, bolts and washers as required including 2 or more coat of enamel paint over primer coat , complete as per the direction of Engineer-in- charge.	Sqm	70
18	Providing and fixing ISI marked oxidized M.S. sliding door bolts of size 300x16 mm with nuts and bolts/welding etc. complete	Each	4.00
19	Providing and fixing ISI mark oxidized M.S. D-Type handles (125 mm size) conforming to IS:4992 including nuts, bolts/welding etc. complete	Each	4.00

20	P/F tubular (round /square/rectangular hollow tubes) pipes , including cutting, welding ,hoisting, fixing in position after making them oval/half round shape as per drawing and site instruction including applying a priming coat of approved steel primer and two coats of PU enamel paint of approved make and colour .	KG	850
21	Providing and fixing precoated galvanized iron profile sheets (size, shape and pitch of corrugation as approved by Engineer-in-charge) 0.50 mm (+ 0.05 %) total coated thickness with zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns. Sheet should have protective guard film of 25 microns minimum to avoid scratches during transportation and should be supplied in single length upto 12 meter or as desired by Engineer in- charge. The sheet shall be fixed using self drilling /self tapping screws of size (5.5x 55 mm) with EPDM seal, complete upto any pitch in horizontal/ vertical or curved surfaces, excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required.	Sqm	80
22	Providing and fixing precoated galvanized steel sheet Gutter (600 mm over all girth), 0.50 mm (+ 0.05 %) total coated thickness, Zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns using self drilling/ self tapping screws complete	Rmtr	12
23	Providing and fixing on wall face unplasticised Rigid PVC rain water pipes (110 mm diameter conforming to IS : 13592 Type A, including jointing with seal ring conforming to IS : 5382, leaving 10 mm gap for thermal expansion, Single socketed pipes including required moulded UPVC fitting such as coupler ,door bend , bend etc	Rmtr	15
24	SITC of Organic waste converter machine (OWC) for waste conversion capacity of minimum 100 Kg/day, with minimum batch capacity of 10 kg per batch with facility of semi-automatic /fully automatic operation .The OWC should be operated with electric motor and compatible with local resource / electric connection with complete installation on site including one year maintenance period / and basic training to client staff (for minimum 7 days) for successful day to day operation. The following modal /brand or equivalent is recommended /approved: Excel Industries Ltd. Modal No. OWC-30 / NETEL INDIA -NETEKECO BIOMALI Modal no. BIOMALI NE-100 S / ALPHATHERM Semi-Automatic series Modal Eco 100 -with capacity of 100 kg /per day minimum / SMART Xpress 100 Composter -Modal No. SX100 /Nachiket Modal No. NAC 100 Note: All the equipments including the accessories supplied as per the above mentioned item should carry comprehensive warranty (including all spares, accessories and consumables) for maintenance period mentioned in this item. During this period, the successful Bidder shall replace all defective parts / accessories, consumables and attend to all repairs/break downs and undertake stipulated number of preventive maintenance visits to every user installation site. The cost of spare parts for all replacements has to be borne by the successful	Each	1

	Bidder during the period of comprehensive warranty.		
25	<p>SITC of <u>Portable Garden Shredder</u> for garden waste shredding capacity of minimum 100 Kg/Hour , with semi automatic /fully automatic operation .The shredder should be operated with electric motor and compatible with local resource / electric connection with complete installation on site including one year maintenance contract and basic training (for minimum 7 days) to client staff for successful day to day operation .The following brand or equivalent is recommended /approved : Excel Industries Ltd. / NETEL INDIA -NETEKECO BIOMALI / ALPHATHERM Semi-/ SMART Xpress /Nachiket</p> <p>Note: All the equipments including the accessories supplied as per the above mentioned item should carry comprehensive warranty (including all spares, accessories and consumables) for maintenance period mentioned in this item. During this period, the successful Bidder shall replace all defective parts / accessories, consumables and attend to all repairs/break downs and undertake stipulated number of preventive maintenance visits to every user installation site. The cost of spare parts for all replacements has to be borne by the successful Bidder during the period of comprehensive warranty.</p>	Each	1
26	<p>SITC of <u>Single Curing System for OWC smooth operation with 30 no. of HDPE crates of minimum size 54x36x26 cm, laminated with aerating net, One no. of four shelf folding storage racks, 2no. of leach ate collection tray (of G.I) ,Double fogger ,disc filler ,ball valve ,pump ,time control unit for spray ,pressure gauge and other accessories such as piping ,valves etc complete</u> installation on site including one year maintenance contract and basic training to client staff (for minimum 7 days) for successful day to day operation .The following brand or equivalent is recommended /approved : Excel Industries Ltd. / NETEL INDIA -NETEKECO BIOMALI / ALPHATHERM Semi-/ SMART Xpress /Nachiket</p> <p>Note: All the equipments including the accessories supplied as per the above mentioned item should carry comprehensive warranty (including all spares, accessories and consumables) for maintenance period mentioned in this item. During this period, the successful Bidder shall replace all defective parts / accessories, consumables and attend to all repairs/break downs and undertake stipulated number of preventive maintenance visits to every user installation site. The cost of spare parts for all replacements has to be borne by the successful Bidder during the period of comprehensive warranty.</p>	Each	1
27	Supply and laying in cable trench 4Cx10 sq mm aluminium armoured LT cable XLPE insulated, 1100 V grade including cable end terminations of make: CCI, Havells, Gloster, Polycab, Capital	Rmtr	150
28	Supply of 8 SWG GI wire and lying in cable trench with tying on LT cable including connections on both ends as required. CCI, Havells, Gloster, Polycab, Capital	Rmtr	300