

**SCHOOL OF PLANNING AND ARCHITECTURE:: VIJAYAWADA**  
(An Institute of National Importance, Ministry of HRD, Govt. of India)  
S.No.71/1, NH-5, Nidamanuru, Vijayawada – 521 104  
Ph: 0866 2469-446,447, Fax: 0866 2469451; website: [www.spav.ac.in](http://www.spav.ac.in)

# **TENDER DOCUMENT FOR KITCHEN EQUIPMENT WORKS**

# INDEX

NIT No. 01 /Reg /SPAV/tender/2017-18

Name of work:

**Supply, Installation, Testing and Commissioning (SITC) of Kitchen Equipment for SPAV Campus, ITI Road, Vijayawada**

<i>Sl.No</i>	<i>Content</i>	<i>Page</i>
	<b>Part A</b>	
1.	Press Notice	0-1
2.	Information and instructions for contractors/agencies for tendering	2-5
3.	FORMS 'A' to 'E'	6-10
4.	Tender Form	11-12
5.	Schedules A to F	13-17
6.	Form of Performance Guarantee [ Annexure I]	18
7.	Integrity Pact and Integrity Agreement	19-25
	<b>Part B</b>	27
8.	General terms & conditions applicable for E & M Section-1	28-37
9.	Technical Specifications for Kitchen Equipment	37-44
10.	Technical Bid	45-47
	<b>Part C</b>	
11.	Financial Bid & Schedule of Quantities (Kitchen Equipment)	49-78

*Certified that this draft N.I.T contains 78 pages only*

**Sd/-  
Registrar**

# **PART - A**

**NOTICE INVITING TENDER**

Sealed tenders are invited from the specialized firms /agencies for “**Supply, Installation, Testing and Commissioning (SITC) of Kitchen Equipment for SPAV Campus, ITI road, Vijayawada**”. The last date for receipt of sealed tenders is **30<sup>th</sup> June 2017**. The tender document and bill of quantities can be downloaded from [www.spav.ac.in](http://www.spav.ac.in).

Sd/-  
Registrar

**INFORMATION AND INSTRUCTIONS FOR BIDDERS FOR TENDERING**  
**FORMING PART OF BID DOCUMENT AND TO BE POSTED ON WEBSITE**

(Applicable for inviting open bids)

The Registrar, SPAV ,Vijayawada, Andhra Pradesh [phone (office): 0866- 2469446, e-mail IDs: [registrar@spav.ac.in](mailto:registrar@spav.ac.in) on behalf of SPAV invites **item rate bids in two bid system** from specialised agencies of repute for the following work:-

Sl. No.	Description	Details
1	NIT No.	01/Reg/SPAV/tender/2017-18
2	Name of work and Location	Supply, Installation, Testing and Commissioning (SITC) of Kitchen Equipment for SPAV Campus, ITI Road, Vijayawada
3	Estimated Cost Put to Tender	Rs. 24,49,144 /-
4	Earnest Money (EMD)	Rs.49,000/-
5	Period of Completion	45days
6	Last time &date of submission of bid, <b>original EMD</b> and other documents as specified in the press notice.	Up to 1300 Hours on30.06.2017
7	Time & date of opening of Mandatory documents	Up to 1500 Hours on on30.06.2017
8	Time & date of opening of financial bids.	Up to 1700Hours on on30.06.2017
9	Last date & time of submission of hard copies of Experience Certificates if any, Registration Certificates, Affidavit if any, Undertaking and other Documents as specified in the press notice to Division Office by the <b>Lowest Tenderer Only</b> .	Along with tender document Up to 1300 Hours on30.06.2017

10. **The intending bidder must read the terms and conditions carefully. He should only submit his bid if he considers himself eligible and he is in possession of all the documents required.**
11. Information and Instructions for bidders posted on website shall form part of bid document.
12. The contractor/agency shall deposit EMD along with tender document..The bid document as uploaded can be viewed and downloaded by anyone including intending bidder. The bid document consisting of plans, specifications, the schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents can be seen and downloaded from website **[www.spav.ac.in](http://www.spav.ac.in)**
13. Applicants are advised to keep visiting the above mentioned web-site from time to time (till the deadline for bid submission) for any updates in respect of the tender documents, if any. Failure to do so shall not absolve the applicant of his liabilities to submit the applications complete in all respects including updates thereof, if any. An incomplete application may be liable for rejection.
14. But the bid can only be submitted **after submission of tender document fee of Rs 1000/- and deposit the original EMD in the office of Registrar inviting the bids at the time of submission.** Demand Draft towards EMD shall be in favour of **School of Planning and Architecture, Vijayawada payable at Vijayawada.**

15. **If a tenderer quotes nil rates against each item in item rate tender or does not quote any percentage above/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 entertained as lowest tenderer.**
16. The rates of each item must be quoted in words as well as in figures. The contractor/agency has to work out the total amount as well in words and figures both.
17. The successful tenderer shall be required to submit a Performance Guarantee of 5% (Five Percent) of the agreement amount within 5 days of issue of letter of intent. by way of Demand Draft or Bank Guarantee for the amount. This period can be further extended by Registrar up to a maximum period of 2 days on the written request of the contractor/agency.
18. Tenders with any condition including that of conditional rebates shall be rejected forthwith. Rates of such tenders shall neither be read out, nor entered in tender opening register at the time of opening of tenders.
19. The main contractor/agency shall stand guarantee for AMC of E&M components (wherever applicable) to be carried out by the manufacturer/Associate Agency after the defect liability period for the entire specified period of AMC. For this purpose, 2.5% of the amount tendered and accepted value of the respective E & M component work shall be retained from Performance Guarantee as Security Deposit. The same shall be returned year wise proportionately. The validity period of Performance Guarantee shall have to be extended accordingly
20. **THE MINIMUM ELIGIBILITY CRITERIA:**
  1. Contractors/agencies who fulfill the following requirements shall be eligible to apply.
    - (a) Should have satisfactorily completed the works as mentioned below during the last seven years ending up to previous day of last date of submission of tenders.
      - (i) Three similar works each costing not less than Rs. 10 lakhs  
or
      - (ii) Two similar works each costing not less than Rs.15 lakhs  
or
      - (iii) One similar work costing not less than Rs. 30 lakhs.

The value of executed works shall be brought to the 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 previous day of the last date of submission of online tender.

Similar work shall mean “Supply, Installation, Testing and Commissioning of kitchen equipment in similar Government / private organisations of repute.

Components of work executed other than those included in definition of similar work shall be deducted while calculating cost of similar work. Bidder shall submit abstract of cost of work in support of this.

- (b) The bidder should have had average annual financial turn over (gross) of at least 50% of estimated cost i.e. Rs. 13.00 lakhs, on kitchen equipment during the immediate last three consecutive years. Balance sheets (may range from six to eighteen months) duly audited by Chartered Accountant. (Hard original copy of certificate from CA/ Audited Balanced Sheet to be submitted). Year in which no turnover is shown would also be considered for working out the average. The multiplication factor of 7% per annum is not applicable on the Annual Turnover Figures.

- (c) The bidder should not have incurred any loss (profit after tax should be positive) in more than two years during last five consecutive years ending 31st March 2017. Balance sheets duly certified and audited by the Chartered Accountant to be submitted.
- (d) The bidder should have a solvency certificate of Rs.24.49 lakhs issued by Bank during the last six months (hard copy of original solvency certificate to be submitted).
- (e) The Subject work is targeted for compliance with international rating standards. In order to achieve these ratings, a high degree of responsibility and cooperation is necessary from the contractor/agencies. All materials and systems used in the project are intended to maximize energy efficiency for operation of Project throughout service life with an emphasis on top quality Materials and systems are to maximize environmentally-benign techniques, including waste recycle, reusable delivery packaging, and reusability of selected materials. All vendors / contractors/agencies must adhere to best practices related to Green Buildings. Other than the general guidelines outlined here, all vendors/contractor/agencies will be furnished with a supplementary set of guidelines more specific to their nature of service/product. Nothing extra shall be paid for the same, unless specifically provided in any item.
21. The Department reserves the right to reject any prospective application without assigning any reason and to restrict the list of qualified contractor/agencies to any number deemed suitable by it, if too many bids are received satisfying the laid down criteria.
22. Contractor/agency shall not divert any advance payments or part thereof for any other purpose other than needed for completion of the contracted work. All advance payments received as per terms of the contract (i.e. mobilization, secured against materials brought at site, secured against plant & machinery and / or for work done during interim stages, etc.) are required to be re-invested in the contracted work to ensure advance availability resources in terms of materials, labour, plant & machinery needed for required pace of progress for timely completion of work.
23. The Eligibility bid shall be opened first on due date and time as mentioned above. The time and date of opening of financial bid of contractors/agencies qualifying the eligibility bid shall be communicated to them at a later date. However, the bidders are advised to fill up both their eligibility and financial bids.
- 24. List of Mandatory Documents to be submitted within the period of bid submission:**
- I) Demand draft of any Scheduled Nationalised Bank
  - II) Certificate of Financial Turnover from Chartered Accountant (Form 'A').
  - III) Bank Solvency Certificate (Form 'B').
  - IV) Certificates of Works Experience (Form 'C' & 'D').
  - V) Certificate of Registration for Sales tax/VAT / GST
  - VI) Certificate of Registration for Service tax.
  - VII) Affidavit for Non- black listing (**Form- E**).

*Note: All affidavits shall be made in current date after the date of invitation of tender.*

*Works executed outside India shall not be considered as eligible works*

**Sd/-  
Registrar**

- 25) Site of SPAV Campus is located at ITI road, Vijayawada Andhra Pradesh and will be made available on “**as is where is**” basis.
- 26) Intending Bidders are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their bids, the form and nature of the site, the means of access to the site, and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their bid. A bidder shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charge consequent on any misunderstanding or otherwise shall be allowed. The bidder shall be responsible for arranging and maintaining all materials, tools & plants, water, electricity access, facilities for workers and all other services required for executing the work at his own cost unless otherwise specifically provided for in the contract documents. Submission of a bid by a bidder implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and of conditions and rates at which stores, tools and plant, etc. will be issued to him by the Government and local conditions and other factors having a bearing on the execution of the work.
- 27) The competent authority, SPAV does not bind itself to accept the lowest or any other bid and reserves to itself the authority to reject any or all the bids received without the assignment of any reason. All bids in which any of the prescribed condition is not fulfilled or any condition including that of conditional rebate is put forth by the bidders shall be summarily rejected.
- 28) Canvassing whether directly or indirectly, in connection with bidders is strictly prohibited and the bids submitted by the contractor/agencies who resort to canvassing will be liable for rejection.
- 29) The competent authority reserves to himself the right of accepting the whole or any part of the bid and the bidders shall be bound to perform the same at the rate quoted.
- 30) ***The bid for the work shall remain open for acceptance for a period of Sixty (60) days from the date of opening of bid.***
- If any bidder withdraws his bid before the said period or issue of letter of acceptance, whichever is earlier, or makes any modifications in the terms and conditions of the bid which are not acceptable to the School, then the School shall, without prejudice to any other right or remedy, be at liberty to forfeit 50% of the said earnest money as aforesaid. Further the bidder shall not be allowed to participate in the rebidding process of the work.
- 31) This notice inviting Bid shall form part of the contract document. The successful bidders/contractors/agency, on acceptance of his bid by the Accepting Authority shall within 7 days from the stipulated date of start of the work, sign the contract consisting of:-
- (a) All the documents including additional conditions, specifications and drawings, if any, forming part of the bid as uploaded at the time of invitation of bid and the rates quoted at the time of submission of bid and acceptance thereof together with any correspondence leading thereto.

Sd/-  
**Registrar**



## FORM 'A'

### FINANCIAL INFORMATION

- I. Financial Analysis - Details to be furnished duly supported by figures in balance sheet/profit & loss account for the last five years duly certified by the Chartered Accountant, as submitted by the applicant to the Income Tax Department (Copies to be attached).

		YEARS				
		<i>(Fig. in Lakhs)</i>				
S.N.	Particulars	2011-12	2012-13	2013-14	2014-15	2015-16
1	Gross Annual Turn Over on Construction Works					
2	Profit/Loss					

- II. Financial arrangements for carrying out the proposed work.  
III. Solvency Certificate(s) from bankers of the bidder in the prescribed form "B" are enclosed.

SIGNATURE OF BIDDER(S)

Signature of Chartered Accountant with Seal Note:

**This form —A of financial information regarding the bidder must be signed by both bidder as well as Chartered Accountant.**

## FORM —B

### FORM OF BANKER'S SOLVENCY CERTIFICATE FROM A SCHEDULED BANK

This is to certify that to the best of our knowledge and information that M/s. / Shri.  
..... having marginally noted address, a  
customer of our bank are/ is respectable and can be treated as good for any engagement upto a limit of  
..... (Rupees .....).

This certificate is issued without any guarantee or responsibility on the bank or any of the officers.

(Signature) For the bank

**NOTE :**

- (1) The bank solvency certificate should be scanned and uploaded at the time of bid submission. The same should be on the letter head of the bank addressed to the tendering authority, i.e “Registrar, School of Planning and Architecture, Vijayawada A.P.” sealed in cover and to be submitted along with the documents.
- (2) In case of partnership firm , certificate should include names of all partners as recorded with the bank.
- (3) The certificate should not be more than 6 months old with reference to the last date of submission of the bid.

## Form C

### DETAILS OF ALL WORKS OF SIMILAR CLASS COMPLETED DURING THE LAST SEVEN YEARS ENDING UP TO PREVIOUS DAY OF LAST DATE OF SUBMISSION OF TENDERS

S.No.	Name of the work / Project & Location	Owner or Sponsoring organization	Cost of Work in Lakhs	Date of Commencement as per contract	Stipulated Date of completion	Actual date of Completion	Litigation / Arbitration / pending / in progress with details #	Name & Postal address / telephone number / email id of officer to whom reference may be made for verification	Remarks indicating the type of work (Kitchen equipment)	Whether the work was done on back to back basis
1	2	3	4	5	6	7	8	9	10	11

*# Indicate gross amount claimed and amount awarded by the Arbitrator*

Certified that the above list of works is complete and no work has been left out and the information given is correct to my/our knowledge and belief.

**SIGNATURE OF BIDDER(S)**

*Note: The bidder is required to submit the information in the above proforma only.*

## FORM 'D'

### PERFORMANCE REPORT OF WORKS REFERRED TO IN FORM "C"

1.	Name of Work/ Project & Location	
2.	Agreement No.	
3.	Estimated Cost	
4.	Tendered Cost	
5.	Date of Start	
6.	Date of Completion	
	(i) Stipulated date of completion (As mentioned in Work Order)	
	(ii) Actual date of completion	
7.	(i) Status of compensation (Not levied/levied/Not decided) (ii) Amount of compensation levied for delayed completion, if any	
8.	Performance Report	
	1. Quality of Work	Outstanding/Very Good / Good / Poor
	2. Financial Soundness	Outstanding/Very Good / Good / Poor
	3. Technical Proficiency	Outstanding/Very Good / Good / Poor
	4. Resourcefulness	Outstanding/Very Good / Good / Poor
	5. General Behavior	Outstanding/Very Good / Good / Poor
9.	Details of arbitration / court cases if any including amount of claim amount of award and present position.	
10.	Remarks ( if any):	

Dated:  
Place :

(Authorized Signatory)  
Registrar or Equivalent Rank

## **(FORM-E)**

### **PROFORMA OF AFFIDAVIT FOR NON - BLACK LISTING**

I/we undertake and confirm that our firm/partnership firm has not been blacklisted by any state/Central Departments/PSUs/Autonomous bodies during the last 7 years of its operations. Further that, if such information comes to the notice of the department then I/we shall be debarred for bidding in SPAV in future forever. Also, if such information comes to the notice of department on any day before date of start of work, the Registrar shall be free to cancel the agreement and to forfeit the entire amount of Earnest Money Deposit/Performance Guarantee (Scanned copy of this notarized affidavit to be uploaded at the time of submission of bid)

Signature of Bidder(s) or an authorized  
Officer of the firm with stamp

Signature of Notary with seal

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- Note:**
- 1. The affidavit shall be made in current date after the date of invitation of the tender.***
  - 2. Affidavit shall be furnished on a 'Non-Judicial' stamp paper worth Rs.100/-***

# TENDER FORM

I / We have read and examined the notice inviting tender, schedule, A, B, C, D, & E, 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 SPAV within the time specified in Schedule 'F', viz., schedule of quantities and in accordance in all respects with the specifications, designs, drawings and instructions in writing referred to in Rule-1 of General Rules and Directions and in Clause 11 of the Conditions of contract and with such materials as are provided for, by, and in respects in accordance with, such conditions so far as applicable.

**We agree to keep the tender open for Sixty (60) days from the date of opening of bid.**

A sum of **Rs.49000/-** is hereby forwarded in the form of Demand draft of a scheduled bank as **earnest money**.

A copy of earnest money in receipt as demand draft of a scheduled bank/bank guarantee issued by a scheduled bank is to be submitted. If I/We, fail to furnish the prescribed performance guarantee within prescribed period, I/We agree that the said Director or his successors, in office shall without prejudice to any other right or remedy, be at liberty to forfeit the said earnest money absolutely. Further, if I/We fail to commence work as specified, I/ We agree that ,SPAV or the successors in office shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the said performance guarantee absolutely. The said Performance Guarantee shall be a guarantee to execute all the works referred to in the tender documents upon the terms and conditions contained or referred to those in excess of that limit at the rates to be determined in accordance with the provision contained in Clause 12.2 and 12.3 of the tender form.

Further, I/We agree that in case of forfeiture of Earnest Money or 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/agency on back to back basis. Further that, if such a violation comes to the notice of Department, then I/We shall be debarred for tendering in SPAV in future forever. Also, if such a violation comes to the notice of Department before date of start of work, the Engineer-in-Charge shall be free to forfeit the entire amount of 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 State.

Dated \_\_\_\_\_

Signatures of Contractor/agency  
Postal Address

Witness:  
Address :  
Occupation :

## 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 SPAV for a sum of

Rs.....

(Rupees .....)

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

(a)

(b)

(c)

For & on behalf of SPAV

Signatures: .....

Dated: \*

Designation : \*

\* To be filled by the Registrar SPAV, Vijayawada.

## **PROFORMA OF SCHEDULES A to F (MAJOR COMPONENT)**

### **SCHEDULE 'A'**

Schedule of Quantities: Enclosed.

Estimated Cost Put to Tender : **Rs.24,49,144 /-**

### **SCHEDULE 'B'**

Schedule of materials to be issued to the contractor/agency--

S.No.	Description of Item	Quantity	Rates in figures & words at which the material will be charged to the contractor/agency	Place of Issue
1	2	3	4	5

-N I L-

### **SCHEDULE 'C'**

Tools and plants to be hired to the contractor/agency--

Sl.No.	Description	Hire charges per day	Place of Issue
1	2	3	4

-N I L-

### **SCHEDULE 'D'**

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

- a. Special & Additional Conditions : -N I L-
- b. Particular specifications : -N I L-

### **SCHEDULE 'E'**

Reference to General Conditions of contract:

**GCC for CPWD Works 2014** as amended/  
modified up to last date of submission of  
tender (The full text documents are available  
at [www.cpwd.gov.in](http://www.cpwd.gov.in) for reference).



**Name of work:**Estimated Cost Put to Tender : **Rs.24,49, 144 /-**

- (i) Earnest money : **Rs.49000/-** (To be returned after receiving Performance Guarantee).
- (ii) Performance Guarantee : 5% of tendered/accepted value.
- (iii) Security Deposit : 2.5% of tendered / accepted value.

**SCHEDULE 'F'- General Rules & Directions:**

Officer inviting tender:		<b>Registrar , SPAV, Vijayawada</b>
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	:	<b>See below under Clause 12.</b>
<b>Definitions</b>		
Officer-in-Charge/Office Incharge		<b>Registrar , SPAV/Warden/Technical committee , : Vijayawada or successor thereof.</b>
Accepting Authority	:	Registrar,SPAV,Vijayawada
Percentage on cost of materials and labour to cover all overheads and profits.	:	15%
Standard schedule of Rates	:	Delhi Schedule of Rates 2016 with up to date correction slips + Effective Cost Index as on 01-04-2016. (The full text documents are available at <a href="http://www.cpwd.gov.in">www.cpwd.gov.in</a> for reference).
Department	:	SPAV.
Standard CPWD contract Form GCC 2014, CPWD-8 as modified & corrected up to	:	<b>GCC 2014 &amp; CPWD - 8 as amended/ modified up to last date of submission of bids.</b> (The full text documents are available at <a href="http://www.cpwd.gov.in">www.cpwd.gov.in</a> for reference).
<b>Clause I</b>		
(i) Time allowed for submission of performance Guarantee, Programme Chart (Time and Progress) and applicable licenses	:	5 days.
(ii) Maximum allowable extension with late fee at 0.1% per day of performance Guarantee amount beyond the period as provided in (i) above	:	2 days.
<b>Clause 2</b>		
Authority for fixing compensation under clause-2.	:	<b>Registrar, SPAV or successor thereof.</b>
<b>Clause 2A</b> Whether clause 2A shall be applicable	:	Not Applicable
<b>Clause 5</b>		
Number of days from the date of issue of letter of acceptance for reckoning date of start	:	5 days

**MILE STONE(S) AS PER TABLE GIVEN BELOW**

<b>SITC of Kitchen Equipment</b>			
<b>Sl. No.</b>	<b>Milestone Programme</b>	<b>Time Allowed (from date of start)</b>	<b>Amount to be withheld in case of non-achievement of milestone</b>
1	Supply of all Kitchen equipment at site	30 days	1.0 % of total tendered amount..
2	Installation of fittings and cabling/wiring, etc	40days	1.0 % of total tendered amount .
3	Testing commissioning of all equipment obtaining approvals etc. as required	45 days	1.0 % of total tendered amount .

**Time Period allowed for execution of Work: - 45 days**

Withheld amount shall be released as and when subsequent milestone is achieved within respective time specified. The main contractor/agency will ensure that electrical components of the work are executed in time without giving any chance for slippage of milestone an account of delay in execution of associated electrical works by him. However, in case milestones are not achieved by the contractor/agency for the work, the amount shown against milestone shall be withheld by the Officer-In-Charge of the respective components.

**Note 1:** Intending tenderer may submit phasing of activities / milestones on the basis of their resources and methodology at the time of tendering corresponding to physical milestones / stages indicated in the above table. These shall be formed part of the agreement after approval of the accepting authority.

**Note 2:** Samples of all the materials shall be got it approved by the Officer in charge before procurement of full quantity required for work and the necessary purchase orders may be placed well in advance keeping the target period of mile stones.

**Authority to decide:**

- i) Extension of Time : Registrar  
SPAV, Vijayawada  
or successor thereof.
- ii) Rescheduling of Mile stones : Registrar  
SPAV, Vijayawada or successor thereof
- iii) Shifting the date of start in case of delay in handing over of site : Registrar  
SPAV, Vijayawada  
or successor thereof.

**Clause 6A**

Clause applicable- 6 or 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

**Clause 7A**

Yes.

**Whether clause 7A shall be applicable:****Clause 10A**

: As per requirement.

**List of testing equipments to be provided by the contractor/agency****Clause 11****Specifications to be followed for execution of work**: CPWD Specifications for electrical works amended upto date Part I Internal 2013 ; Part-II external 1994 ; with correction slips issued upto last date of submission of tender  
Original work.**Clause 12****Type of work****12.2& 12.3**

Deviation limit beyond which clauses 12.2&amp; 12.3 shall apply.

: 30% (Thirty percent)

**Clause 16**

Competent authority for deciding the reduced rates in case of the work is of substandard

: Registrar  
SPAV, Vijayawada  
or successor thereof**Clause 18**

List of mandatory machinery, tools &amp; plants to be deployed by the contractor/agency at site

: As required for timely execution of work  
& planning to be deployed by the contractor/agency at site as required**Clause -19L:- The ESI and EPF contributions on the part of employer in respect of this contract shall be paid by the agency.****Clause: 25 Constitution of Dispute Redressal Committee (DRC)**

FOR TOTAL CLAIMS				
Name of the Office	Chairman	Member-I	Member-II	Presenting Officer
Registrar SPAV, Vijayawada or successor thereof..	Registrar SPAV, Vijayawada or successor thereof.	BWAC members	Dean, Planning	Registrar in-charge of the work or successor thereof.

**Clause 36 (i): Requirement of Technical Representative(s) and recovery rates**

For Major & Minor Components: No	Requirement of Technical Staff		Minimum experience (Years)	Designation of Technical staff	Rate at which recovery shall be made from the contractor in the event of not fulfilling provision of clause 36(i)
	Qualification	Number ( of Major + Minor Component)			
1	Graduate Engineer Or	<b>1</b>	2 years	Project site Engineer	Rs. 15,000/- per month per person.
	Diploma Engineer.	<b>1</b>	5 years	And Engineer	Rs. 15,000/- per month per person.

Assistant Engineers retired from Government service those holding Diploma will be treated at par with Graduate Engineers.

Diploma holders with minimum 10 year relevant experience with a reputed construction co. can be treated at par with Graduate Engineers for the purpose of such deployment

**Sd/-  
Registrar**

**Form of Performance Security (Guarantee)  
Bank Guarantee Bond**

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

1. We, ..... (hereinafter referred to as "the Bank") hereby undertake to pay to the Government an amount not exceeding Rs. .... (Rupees..... Only) on demand by the Government.
2. We, .....(indicate the name of the Bank) do hereby undertake to pay the amounts due and payable under this guarantee without any demure, merely on a demand from the Government stating that the amount claimed as required to meet the recoveries due or likely to be due from the said contractor/agency(s). Any such demand made on the bank shall be conclusive as regards the amount due and payable by the bank under this Guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs. .... (Rupees .....only).
3. We, the said bank further undertake to pay the Government any money so demanded notwithstanding any dispute or disputes raised by the contractor/agency(s) in any suit or proceeding pending before any court or Tribunal relating thereto, our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment thereunder and the Contractor/agency(s) shall have no claim against us for making such payment.
4. We, ..... (indicate the name of the Bank) further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said agreement and that it shall continue to be enforceable till all the dues of the Government under or by virtue of the said agreement have been fully paid and its claims satisfied or discharged or till Registrar on behalf of the SPAV certified that the terms and conditions of the said agreement have been fully and properly carried out by the said Contractor/agency(s) and accordingly discharges this guarantee.
5. We, ..... (indicate the name of the Bank) further agree with the Government that the Government shall have the fullest liberty without our consent and without affecting in any manner our obligation hereunder to vary any of the terms and conditions of the said agreement or to extend time of performance by the said Contractor/agency(s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the Government against the said contractor/agency(s) and to forbear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said Contractor/agency(s) or for any forbearance, act of omission on the part of the Government or any indulgence by the Government to the said Contractor/agency(s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.
6. This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor/agency(s).
7. We, ..... (indicate the name of the Bank) lastly undertake not to revoke this guarantee except with the previous consent of the Government in writing.
8. This guarantee shall be valid up to .....unless extended on demand by the Government. Notwithstanding anything mentioned above, our liability against this guarantee is restricted to Rs. .... (Rupees .....) and unless a claim in writing is lodged with us within six months of the date of expiry or the extended date of expiry of this guarantee all our liabilities under this guarantee shall stand discharged.

Dated the .....day of .....for.....(indicate the name of the Bank)

**GUIDELINES REGARDING SIGNING OF INTEGRITY PACT BY THE BIDDER  
AT THE TIME OF SUBMISSION OF BID**

**Sub: Clarification regarding Introduction of Integrity Pact introduced vide OM No. CON 255 dated 23.05.2011**

A new provision of Integrity Pact (IP) was introduced in GCC-2010 vide OM No. CON/255 dt. 23.05.2011. In the OM it is mentioned that at the time of submission of bid, it shall be mandatory to sign the pact by the bidder failing which the bidder will stand disqualified from the tendering process and such bid would be summarily rejected.

Some field Units have raised their doubts regarding submission of duly signed Integrity Pact by the bidder at the time of submission of bid. In this regard it is clarified that :-

1. Submission of duly signed Integrity Pact by the bidder is applicable in case of manual tendering where e-tendering is not followed.
2. In case of manual tendering Registrar should sign the first page addressed to the intending bidder at the time of issue of tender form and before submission of the bid, each bidder shall sign IP at respective places and submit the bid. If duly signed IP is not submitted by the bidder, such bid shall not be considered.
3. In case of e-tendering, Integrity Pact shall be treated in the same manner as other components of the bid document. In e-tendering, the intending bidder does not sign any document physically and entire bid document is submitted through digital signature. Since IP is a part of bid document no separate physical submission is required with other documents to be submitted in the office of tender opening authority. In addition to other component of bid document, the Integrity Pact along shall also be signed between Registrar and successful bidder after acceptance of bid.

**INTEGRITY PACT**

**SPAV**

To,

.....,  
.....,  
.....

**Sub: NIT No. 01 /Reg/SPAV/tender/2017-18 for the work: Supply, Installation, Testing and Commissioning (SITC) of Kitchen Equipment for SPAV Campus, ITI Road, Vijayawada**

Dear Sir,

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

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

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

**Yours faithfully**

**Registrar**

To,

**Registrar,  
SPAV**

.....  
.....

Sub: Submission of Tender for the work of **Supply, Installation, Testing and Commissioning (SITC) of Kitchen Equipment for SPAV Campus, ITI Road, Vijayawada**

Dear Sir,

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

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

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

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

**Yours faithfully**

**(Duly authorized signatory of the Bidder)**



**To be signed by the bidder and same signatory competent / authorized to sign the relevant contract on behalf of SPAV.**  
**INTEGRITY AGREEMENT**

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

BETWEEN

SPAV represented through Registrar, SPAV .....,

(Name of Division)

SPAV, ....., (Hereinafter referred as the  
(Address )

‘Principal/Owner’, which expression shall unless repugnant to the meaning or context hereof include its successors and permitted assigns)

AND

.....  
(Name and Address of the Individual/firm/Company)

through..... (Hereinafter referred to as the  
(Details of duly authorized signatory)

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

**Preamble**

WHEREAS the Principal / Owner has floated the Tender (NIT No. ....) (herein after referred to as “Tender/Bid”) and intends to award, under laid down organizational procedure, contract for

.....  
(Name of work) :

**Supply, Installation, Testing and Commissioning (SITC) of Kitchen Equipment for SPAV Campus, ITI Road, Vijayawada** herein after referred to as the “Contract”.

AND WHEREAS the Principal/Owner values full compliance with all relevant laws of the land, rules, regulations, economic use of resources and of fairness/transparency in its relation with its Bidder(s) and Contractor/agency(s).

AND WHEREAS to meet the purpose aforesaid both the parties have agreed to enter into this Integrity Agreement (hereinafter referred to as “Integrity Pact” or “Pact”), the terms and conditions of which shall also be read as integral part and parcel of the Tender/Bid documents and Contract between the parties.

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

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

- 1) The Principal/Owner commits itself to take all measures necessary to prevent corruption and to observe the following principles:
  - (a) No employee of the Principal/Owner, personally or through any of his/her family members, will in connection with the Tender, or the execution of the Contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.
  - (b) The Principal/Owner will, during the Tender process, treat all Bidder(s) with equity and reason. The Principal/Owner will, in particular, before and during the Tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential / additional information through which the Bidder(s) could obtain an advantage in relation to the Tender process or the Contract execution.
  - (c) The Principal/Owner shall endeavor to exclude from the Tender process any person, whose conduct in the past has been of biased nature.

- 2) If the Principal/Owner obtains information on the conduct of any of its employees which is a criminal offence under the Indian Penal code (IPC)/Prevention of Corruption Act, 1988 (PC Act) or is in violation of the principles herein mentioned or if there be a substantive suspicion in this regard, the Principal/Owner will inform the Chief Vigilance Officer and in addition can also initiate disciplinary actions as per its internal laid down policies and procedures.

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

- 1) It is required that each Bidder/Contractor/agency (including their respective officers, employees and agents) adhere to the highest ethical standards, and report to the Government / Department all suspected acts of fraud or corruption or Coercion or Collusion of which it has knowledge or becomes aware, during the tendering process and throughout the negotiation or award of a contract.
- 2) The Bidder(s)/Contractor/agency(s) commits himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the Tender process and during the Contract execution:
  - a) The Bidder(s)/Contractor/agency(s) will not, directly or through any other person or firm, offer, promise or give to any of the Principal/Owner's employees involved in the Tender process or execution of the Contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind what so ever during the Tender process or during the execution of the Contract.
  - b) The Bidder(s)/Contractor/agency(s) will not enter with other Bidder(s) into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to cartelize in the bidding process.
  - c) The Bidder(s)/Contractor/agency(s) will not commit any offence under the relevant IPC/PC Act. Further the Bidder(s)/Contract(s) will not use improperly, (for the purpose of competition or personal gain), or pass on to others, any information or documents provided by the Principal/Owner as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
  - d) The Bidder(s)/Contractor/agency(s) of foreign origin shall disclose the names and addresses of agents/representatives in India, if any. Similarly Bidder(s)/Contractor/agency(s) of Indian Nationality shall disclose names and addresses of foreign agents/representatives, if any. Either the Indian agent on behalf of the foreign principal or the foreign principal directly could bid in a tender but not both. Further, in cases where an agent participate in a tender on behalf of one manufacturer, he shall not be allowed to quote on behalf of another manufacturer along with the first manufacturer in a subsequent/parallel tender for the same item.
  - e) The Bidder(s)/Contractor/agency(s) will, when presenting his bid, disclose (with each tender as per proforma enclosed) any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the Contract.
- 3) The Bidder(s)/Contractor/agency(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.
- 4) The Bidder(s)/Contractor/agency(s) will not, directly or through any other person or firm indulge in fraudulent practice means a willful misrepresentation or omission of facts or submission of fake/forged documents in order to induce public official to act in reliance thereof, with the purpose of obtaining unjust advantage by or causing damage to justified interest of others and/or to influence the procurement process to the detriment of the Government interests.
- 5) The Bidder(s)/Contractor/agency(s) will not, directly or through any other person or firm use Coercive Practices (means the act of obtaining something, compelling an action or influencing a decision through intimidation, threat or the use of force directly or indirectly, where potential or actual injury may befall upon a person, his/ her reputation or property to influence their participation in the tendering process).

### **Article 3: Consequences of Breach**

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

- 1) If the Bidder(s)/Contractor/agency(s), either before award or during execution of Contract has committed a transgression through a violation of Article 2 above or in any other form, such as to put his reliability or credibility in question, the Principal/Owner after giving 14 days notice to the contractor/agency shall have powers to disqualify the Bidder(s)/Contractor/agency(s) from the Tender process or terminate/determine the Contract, if already executed or exclude the Bidder/Contractor/agency from future contract award processes. The imposition and duration of the exclusion will be determined by the severity of transgression and determined by the Principal/Owner. Such exclusion may be forever or for a limited period as decided by the Principal/Owner.
- 2) Forfeiture of EMD/Performance Guarantee/Security Deposit: If the Principal/Owner has disqualified the Bidder(s) from the Tender process prior to the award of the Contract or terminated/determined the Contract or has accrued the right to terminate/determine the Contract according to Article 3(1), the Principal/Owner apart from exercising any legal rights that may have accrued to the Principal/Owner, may in its considered opinion forfeit the entire amount of Earnest Money Deposit, Performance Guarantee and Security Deposit of the Bidder/Contractor/agency.
- 3) Criminal Liability: If the Principal/Owner obtains knowledge of conduct of a Bidder or Contractor/agency, or of an employee or a representative or an associate of a Bidder or Contractor/agency which constitutes corruption within the meaning of IPC Act, or if the Principal/Owner has substantive suspicion in this regard, the Principal/Owner will inform the same to law enforcing agencies for further investigation.

### **Article 4: Previous Transgression**

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

### **Article 5: Equal Treatment of all Bidders/Contractors/agencies**

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

**Article 6- Duration of the Pact**

This Pact begins when both the parties have legally signed it. It expires for the Contractor/agency/Vendor 12 months after the completion of work under the contract or till the continuation of defect liability period, whichever is more and for all other bidders, till the Contract has been awarded.

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

**Article 7- Other Provisions**

- 1) This Pact is subject to Indian Law, place of performance and jurisdiction is the Head quarters of the Division of the Principal/Owner, who has floated the Tender.
- 2) Changes and supplements need to be made in writing. Side agreements have not been made.
- 3) If the Contractor/agency is a partnership or a consortium, this Pact must be signed by all the partners or by one or more partner holding power of attorney signed by all partners and consortium members. In case of a Company, the Pact must be signed by a representative duly authorized by board resolution.
- 4) Should one or several provisions of this Pact turn out to be invalid; the remainder of this Pact remains valid. In this case, the parties will strive to come to an agreement to their original intensions.
- 5) It is agreed term and condition that any dispute or difference arising between the parties with regard to the terms of this Integrity Agreement / Pact, any action taken by the Owner/Principal in accordance with this Integrity Agreement/ Pact or interpretation thereof shall not be subject to arbitration.

**Article 8- LEGAL AND PRIOR RIGHTS**

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

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

.....  
(For and on behalf of Principal/Owner)

.....  
(For and on behalf of Bidder/Contractor/agency)

**WITNESSES:**

1. ....  
(Signature, name and address)

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

# **PART - B**

**PART-B**

**(Conditions & Specifications)**

## **SECTION-I: GENERAL TERMS AND CONDITIONS**

### **1 GENERAL**

- 1.2 Order of Preference:  
Should there be any difference or discrepancy between the description of items as given in the Schedule of Quantities, technical specifications for individual items of work (including additional and commercial conditions) and IS Codes etc., the following order of preference shall be followed:
- a) Schedule of quantities.
  - b) Commercial and Additional conditions for this work.
  - c) General Conditions of Contract for CPWD Works. (The full text documents are available at [www.cpwd.gov.in](http://www.cpwd.gov.in) for reference).
  - d) Drawings.
  - e) CPWD General Specifications. (The full text documents are available at [www.cpwd.gov.in](http://www.cpwd.gov.in) for reference).
  - f) Relevant IS or any other International code in case IS code is not available.  
These Commercial and Additional conditions are to be read in conjunction with above and in case of variations, specifications given in these additional conditions shall apply. However, nothing extra shall be paid on account of these additional specifications and conditions, as the same are to be read along with schedule of quantities for the work.  
This specification covers manufacture, testing as may be necessary before dispatch, delivery at site, all preparatory work, assembly and installation, commissioning putting into operation of equipment of all E&M components of the tender.
- 1.3 The tenderer should in his own interest visit the site and get familiarize with the site conditions before tendering.
- 1.4 No Tools & Plants shall be issued by the Department and nothing extra shall be paid on account of this.
- 1.5 **LOCATION: SPAV, ITI Road, Vijayawada**

### **2 COMMERCIAL CONDITIONS**

- 2.1 Type of Contract: The work to be awarded by this tender shall be treated as indivisible works contract.
- 3 Income tax, VAT, work contract tax, labour cess & other statutory deductions etc. shall be made at source as per the prevalent laws. The deductions of Security Deposit, Income-Tax, Works Contract Tax etc. shall be done after calculation of the due payments and net payment shall be reduced accordingly.

#### 4.1 RATES

The rates quoted by the tenderer, shall be firm and inclusive of all taxes (including works contract tax, VAT, labour cess), duties levies, octroi etc. and all charges for packing forwarding, insurance, freight and delivery, installation, testing, commissioning etc. at site including temporary construction of storage, risks, overhead charges, general liabilities/obligations and clearance from CEA, if required.

**Service Tax shall not be included in the quoted rates.**

The contractor has to carry out comprehensive maintenance as per manufacturer's standards for a period of 12 months from the date of handing over of the installations to the department for beneficial use. Nothing extra shall be paid on this account.

#### 4.2 **The School will not issue Octroi exemption certificate or any other concessional/exemption certificates.**

4.3 The contractor has to carry out maintenance as per CPWD General Specifications and manufacturer's standards for a period of 12 months from the date of handing over. Nothing extra shall be paid on this account.

#### 4.4 **In case the same item appears more than once in the schedule of work under the same sub head or among the different subhead of works, the lowest rate quoted for that item elsewhere shall be considered for other items also during evaluation of tender.**

### 5 **COMPLETENESS OF TENDER**

All sundry equipment, fittings, unit assemblies, accessories, hardware items, foundation bolts, termination lugs for electrical connections, and all other items which are useful and necessary for efficient assembly and installation of equipment and components of the work shall be deemed to have been included in the tender irrespective of the fact whether such items are specifically mentioned in the tender documents or not.

### 6 **STORAGE AND CUSTODY OF MATERIALS**

The agency has to make his own arrangements. No storage accommodation shall be provided by the department. Watch and ward of the stores and their safe custody shall be the responsibility of the contractor till the final taking over of the installation by the department.

### 7 **CARE OF THE BUILDING:**

Care shall be taken by the contractor while handling and installing the various equipments and components of the work to avoid damage to the building. He shall be responsible for repairing all damages and restoring the same to their original finish at his cost. He shall also remove at his cost all unwanted and waste materials arising out of the installation from the site of work.

### 8 **COMPLETION PERIOD**

The completion period indicated in the tender documents is for the entire work of planning, designing, approval of drawings etc., arrangement of materials & equipments, delivery at site including transportation, installation, testing, commissioning and handing over of the entire system to the satisfaction of the Engineer-in-charge.

### 9 **WARRANTY:**

9.1 All equipments supplied and installed shall be covered by warranty for 12 months effective from the date of acceptance against defective workmanship and materials. If any equipment is found to be defective due to faulty workmanship, faulty materials, faulty design or inferior quality of materials during the warranty period it shall be repaired and/or replaced at site free of charge by the successful tenderer at his own cost. The warranty shall cover consequential damages to the equipments supplied and installed by the tenderer due to poor workmanship or defective materials. All repairs shall be done promptly within a reasonable period.



Warranty certificates from the manufacturers of the equipment shall invariably handed over to the department after completion of the work in the prescribed manner for record and reference.

9.2 The tender shall guarantee among other things, the following:

- a. Quality, strength and performance of the materials used as per manufacturers standards.
- b. Safe mechanical and electrical stress on all parts under all specified conditions of operation. Satisfactory operation during the maintenance period.

**10 POWER SUPPLY:**

The contractor has to make its own arrangement for power supply required for execution of the work.

**11 WATER SUPPLY: *Water supply shall be arranged by the contractor for execution of work at his own cost.***

**12 ACCEPTABLE MAKES OF VARIOUS EQUIPMENTS:**

The acceptable makes of various equipments/components/accessories have been indicated in "Acceptable Makes" appended with the tender documents. The tenderer shall work out the cost of the offer on this basis. Alternate makes are not acceptable.

**13 DATA MANUAL AND DRAWINGS TO BE FURNISHED BY THE TENDERER:**

**13.1 After award of work**

The successful tenderer would be required to submit the following drawings after award of work for approval as per mile stones of tender.

- a) General arrangement drawing ( including detailed shop drawings) of all equipments of E&M components as per individual E&M component
- b) Details of foundations for the equipments and the weights of assembled equipments.
- c) Any other drawings necessary for the job.

14 The successful tenderer should furnish well in advance of commencement of work three copies of detailed instructions and manuals of manufacturers for all items of equipments regarding installation, adjustments operation and maintenance including preventive maintenance & trouble shooting together with all the relevant data sheets, spare parts catalogue etc. all in triplicate.

**15 EXTENT OF WORK**

The work shall comprise of entire labour including supervision and all materials necessary to make a complete installation and such tests and adjustments and commissioning, as may be required by the department. The term complete installation shall not only mean major items of the plant and equipments covered by specifications but all incidental sundry components necessary for complete execution and satisfactory performance of installation with all layout charts whether or not those have been mentioned in details in the tender document in connection with this contract as this is a turnkey job.

***In addition to supply, installation, testing and commissioning of Kitchen Equipment the following works shall be deemed to be included within the scope of work to be executed by the tenderer as this is a turnkey job-***

- (a) Minor building works necessary for installation of equipments, foundation, making of opening in walls or in floors and restoring them to their original condition / finish and necessary grouting etc. as required.
- (b) The successful tenderer should furnish well in advance three copies of detailed instructions and manuals of manufacturers for all items of equipments regarding installation, adjustments operation and maintenance including preventive maintenance & trouble shooting together with all the relevant data sheets, spare parts catalogue etc. all in triplicate.

**Exclusion and work to be done by other agencies:**

The following shall be excluded from the scope of the work:

15.1 Major dismantling of any existing building work.

15.2 Electricity supply in sub-station building for commissioning purposes.

- 15.3 The cables and other items shall be brought at site only after taking correct measurements as per actual requirement of work. Excess quantities shall not be accepted and paid. i.e., Quantity of item brought to site and used in work as per actual requirement shall only be measured and paid irrespective of quantities of BOQ / work schedule.
- 15.3 In addition to supply, installation, testing and commissioning, of all E&M equipment, following works shall be deemed to be included within the scope of work to be executed by the tenderer as this is a turnkey job.
  - a) Minor building works necessary for installation of equipments, foundation, making of opening in walls or in floors and restoring them to their original condition finish and necessary grouting etc. as required.
  - b) All necessary supports may be arranged.
  - c) Testing of PTs/CTs for metering & protection purpose & relay calibration & setting.
- a) Getting inspection done & obtaining approval from Central Electrical Authority and local fire authority for energizing the installation. However, necessary fees for inspection shall be borne by the Department.

**16 INSPECTION AND TESTING**

- All major equipments shall be offered for initial inspection contractor will intimate the date of testing of equipments at the manufacturer's works before dispatch. The successful tenderer shall give advance notice of minimum two weeks regarding the dates proposed for such tests to the department's representative to facilitate his presence during testing. The Engineer-in-charge or his representative may witness such testing. The cost of the Engineer's visit to the factory will be borne by the Department. Equipments will be inspected at the manufacturer/ Authorized Dealers premises, before dispatch to the site by the contractor if so desired by the Engineer-in-charge. Engineer-in-charge at his discretion may waive of inspection at factory /at the manufacturer's works before dispatch.
- Copies of all documents of routine and type test certificates of the equipment, carried out at the Manufacture's premises shall be furnished to the Engineer-in-charge and consignee.
- After completion of the work in all respects the contractor shall offer the installation for testing and operation.

17 **COMPLIANCE WITH REGULATIONS AND INDIAN STANDARDS:**

17.1 All works shall be carried out in accordance with relevant regulation, both statutory and those specified by the Indian Standards related to the works covered by this specification.

In particular, the equipment and installation will comply with the following:

- i) Factories Act.
- ii) Indian Electricity Rules.
- iii) B.I.S. & other standards as applicable.
- iv) Workmen's compensation Act.
- v) Statutory norms prescribed by local bodies like CEA, Power Supply Co., etc.

17.2 After completion of the installation, the same shall be offered for inspection by the representatives of the Central Electricity Authority and local fire authority the contractor will extend all help including test facilities to the representatives of CEA/Local fire authority. The observations of CEA/Local fire authority will be attended by the contractor. The installation will be commissioned only after getting clearance from CEA/Local fire authority. Contractor should get inspection done & obtain approval from Central electrical Authority and local fire authority.

17.3 Nothing in this specification shall be construed to relieve the successful tenderer of his responsibility for the design, manufacture and installation of the equipment with all accessories in accordance with currently applicable statutory regulations and safety codes.

18 **INDEMNITY:**

The successful tenderer shall at all times indemnify the department, consequent on this works contract. The successful tenderer shall be liable, in accordance with the Indian Law and Regulations for any accident occurring due to any cause and the contractor shall be responsible for any accident or damage incurred or claims arising there from during the period of erection, construction and putting into operation the equipments and ancillary equipment under the supervision of the successful tenderer in so far as the latter is responsible. The successful tenderer shall also provide all insurance including third party insurance as may be necessary to cover the risk. No extra payment would be made to the successful tenderer on account of the above.

19 **ERECTION TOOLS:**

No tools and tackles either for unloading or for shifting the equipments for erection purposes would be made available by the department. The successful tenderer shall make his own arrangement for all these facilities.

20 **COOPERATION WITH OTHER AGENCIES:**

The successful tenderer shall co-ordinate with other contractors and agencies engaged in the construction of buildings, if any, and exchange freely all technical information so as to make the execution of this work/contract smooth. No remuneration should be claimed from the department for such technical cooperation. If any unreasonable hindrance is caused to other agencies and any completed portion of the work has to be dismantled and re-done for want of cooperation and coordination by the tenderer during the course of work, such expenditure incurred will be recovered from the successful tenderer if the restoration work to the original condition or specification of the dismantled portion of the work was not undertaken by the tenderer himself.

21 The work will be carried out with least disturbance during shifting & shut down taken in consultation with the client department.

22 **INSURANCE AND STORAGE:**

All consignments are to be duly insured upto the destination from warehouse at the cost of the contractor. The insurance covers shall be valid till the equipment is duly installed, tested and commissioned and handover to SPAV.

23 **VERIFICATION OF CORRECTNESS OF EQUIPMENT AT DESTINATION:**

The contractor shall have to produce all the relevant records to certify that the genuine equipments from the manufacturers has been supplied and erected.

24 **PAINTING:**

This shall include cost of painting of the entire installation. The major equipments like HT panel, transformers, L T panel, bus duct, cable trays etc. shall be factory final finish painted. The agency shall be required to do only touching to the damages caused to the painting during transportation, handling & installation at site, if there is no major damage to the painting. However hangers, supports etc. of bus trunking & cable tray etc. shall be painted with required shade including painting with two coats of anticorrosive primer paint at site.

26 **TRAINING:**

The scope of works includes the on job technical training of two persons of Department at site. Nothing extra shall be payable on this account.

27 **MAINTENANCE:**

27.1 Sufficient trained and experienced staff shall be made available to meet any exigency of work during the guarantee period of one year from the handing over of the installation.

The maintenance, routine as well as preventive, for one year from the date of taking over the installation as per manufacturer's recommendation.

28. Approval of drawings, makes and models of equipment/materials for all E&M components

28.1 The agency shall submit drawings and details such as makes and models of the equipments/materials offered by him along with specifications for all E&M components to the Engineer-in-charge of the work, before ordering the equipment/materials for approval of the department.

28.2 The Officer -in-charge shall scrutinize the proposal and approve the makes and models which are acceptable as per the schedule, specifications, conditions of the agreement and inform the agency for procurement. The approving authority shall be technical sanctioning authority of Electrical & Mechanical component.

28.3 After approval of the equipment/materials by the department the agency shall procure the equipment/materials from the OEM/authorized distributor/dealer as the case may be:

29. Adequate care that only tested and genuine materials of proper quality are used in work shall be ensured by firm. The firm shall also ensure that:

- i. Material will be ordered & delivered at site only with the prior approval of the department to ensure timely delivery.
- ii. As and when the order is placed for the fittings/ fixtures, cables, switchgears, poles, other main items etc, its copy shall be endorsed to the Officer-in-charge of work.
- iii. The contractor will submit makes & brands of electrical fittings wires & cables, conduits and switchgears, rising mains, poles , outdoor fittings etc. of preferred make list as per tender documents for approval of Officer-In-Charge, whose decision will be final in the matter.
- iv. The firm will be required to procure material directly from the manufacturer/ authorized dealers to ensure genuineness & quality and as per the approved makes only. Proof in this regard shall be submitted by the contractor if required by the department.
- v. Inspection at factory or at godown, as required, shall be arranged by the firm for a mutually agreed date.

- vi. Delivery of material shall be taken up only with the consent of department, after clearance of the material.
  - vii. Department shall reserve the right to waive inspection in lieu of suitable test certificate, at its discretion.
  - viii. All the materials to be supplied by the contractor shall be procured & brought to site as per requirement at site of work in consultation with department so that these materials are not damaged & their manufacturer's warrantee.
1. Safety Codes & Statutory Regulations:
    - a. Nothing in this specification shall be construed to relieve the successful tenderer of his responsibility for the design, manufacture and installation of the equipment with all accessories in accordance with currently applicable statutory regulations and safety codes.
    - b. Successful tenderer shall arrange for compliance with statutory provisions of safety regulations and departmental requirements of safety codes in respect of labour employed on the work by the tenderer. Failure to provide such safety requirement would make the tenderer liable for penalty of Rs.1000/- for each default. In addition, the department will be at liberty to make arrangement for the safety requirements at the cost of tenderer and recover the cost thereof from him.

### **RELATED DOCUMENTS:**

This specification shall be read in conjunction with the relevant latest CPWD general Specifications as amended up to date for the works described for technical matters and with the standard conditions of the contract appended with amendments for other matters as well as with schedules and drawings and requirements under this specification. In the event of any discrepancies between this specification and interconnected documents, the specific requirements as per this specification shall be followed and deemed to be having overriding value.

### **COMPLETENESS OF INSTALLATION :**

All fittings, unit assemblies, accessories, hardware, foundation bolts, terminal lugs for electrical connections, cable glands and miscellaneous materials or accessories or items of work which are useful and necessary for efficient assembly and working of the equipment shall be deemed to be included in the tender within the overall cost quoted. The equipment shall be complete in all details whether such details have been specifically mentioned or not.

Nothing in these specifications shall be construed to relieve the successful tenderer of his responsibility for design, manufacture and installation of the equipment with all accessories in accordance with the applicable statutory and safety regulations in force, BIS recommendations and CPWD codes.

### **General Workmanship and Quality of Materials:**

All manufactured/ fabricated items shall conform to first class workmanship and shall comply with the best commercial standards for ruggedness of construction. All the materials and equipment supplied shall be new and as per the prescribed specifications. All the installation shall be as per the good practices of the industry.

Bad workmanship and use of inferior materials shall be liable for rejection and the department may at its discretion cause the defective/ inferior work to be removed/ rectified charging the expenditure to the successful tenderer.

**Test Certificates:**

Copies of all documents like routine and type test certificate of the installation / equipment / tests carried out at manufacturers premises shall be furnished as required.

**Date of acceptance:**

The date of successful completion of the prescribed testing at site after installation and handing over the installation to the department shall be taken as the date of completion of the work. The warranty/free maintenance period if any will commence from this date.

**Works to be Done by the Successful Tenderer:**

Unless otherwise mentioned in the tender documents, the successful tenderer shall do the following works and therefore their cost is deemed to be included in the tendered cost.

- a) Foundation for equipment and components where required, including foundation bolts.
- b) All minor building works connected with the work such as making openings in walls/ floor, either in RCC/ brick masonry etc; and restoring the same to the original condition and finish.
- c) The successful tenderer shall arrange for all scaffolding, tools and plant required for the completion of work.
- d) Making necessary drain connections and connecting them to a common sump / drain point inclusive of all materials / valves /accessories.
- e) Supports for pipes, Cable trays and ducting etc.
- f) All electrical works required from and beyond Power point provided by the department.

**WATCH AND WARD:**

Watch and ward of the entire work shall be the sole responsibility of the contractor for the entire period of completion including extension of time requested by the contractor and/ or granted by the department.

**MODE OF OPENING OF TENDER**

The requisite eligibility documents as per the list of mandatory documents (as mentioned and instructions for bidders for Tendering contractors) are opened & checked first on the date and time as specified in the tender form, in the presence of the tenderers or their authorized representatives, who will remain present. Then the Financial bids of only those agencies who satisfy the eligibility criteria will be opened.

**The tenderers are advised not to deviate from the technical specifications / items, commercial terms and conditions of NIT like terms of payment, guarantee, arbitration clause, escalation etc.**

In the financial bid, there shall be no conditions whatsoever. In case any tenderer mentions any condition including conditional rebates in their price part, tender shall be rejected forthwith. A tenderer will not be allowed to withdraw or modify any condition at a time after the technical bids have been accepted and the decision to open the price bid has been taken by the department.

The department reserves the right to reject any or all the price bids and call for fresh prices/tenders as the case may be without assigning any reason.

**TERMS OF PAYMENTS** The following percentage of contract rates for the various items included in the contract shall be payable against the stage of work shown herein.

75% after initial inspection and delivery at site in good condition on pro-rata basis.

20% after completion of installation in all respects.

Balance 5% will be paid after testing, commissioning & handing over to the department for beneficial use.

**SECURITY DEPOSIT** Security Deposit shall be deducted from each running bill and the final bill to the extent of 2.5% of the gross amount payable subject to a maximum amount of 2.5% of the tendered value. The earnest money if any deposited shall be adjusted against this security deposit. The security deposit shall be released on the expiry of guarantee period stipulated in the contract. Bank guarantee will not be accepted as security deposit.

#### **PERFORMANCE GUARANTEE**

The successful tenderer shall submit an irrevocable performance guarantee of 5% of the tendered amount in addition to other deposits mentioned elsewhere in the contract for his proper performance of the contract agreement within 15 days of issued of letter of acceptance of tender. This guarantee shall be in the form of Demand Draft / Pay order or irrevocable bank guarantee bond of any scheduled bank or the State Bank of India in the specified format or in the form of Government security, fixed deposit receipt pledged in favour of Executive Engineer or as specified in the letter of acceptance of tender. The performance guarantee shall be initially valid up to the stipulated date of completion plus 60 days beyond. This bank guarantee shall be kept valid till the recording of completion certificate for the work by the competent authority.

Income tax, VAT, work contract tax, labour cess & other statutory deductions etc. shall be made at source as per the prevalent laws. The deductions of Security Deposit, Income-Tax, Works Contract Tax etc. shall be done after calculation of the above due payments as per clauses of Part – B Section – I and net payment shall be reduced accordingly.

## **COMPLIANCE WITH REGULATIONS AND INDIAN STANDARDS:**

All works shall be carried out in accordance with relevant regulation, both statutory and those specified by the Indian Standards related to the works covered by this specification. In particular, the equipment and installation will comply with the following:

(i) Factories' Act 1948 (ii) Indian Electricity Rules 1956 (iii) B.I.S. & other standards as applicable. (iv) Workmen's Compensation Act 1923 (v) Statutory norms prescribed by local bodies like CEA, Power Supply Co.etc

Nothing in this specification shall be construed relieve the successful tenderer of his responsibility for the design, manufacture and installation of the equipment with all accessories in accordance with currently applicable statutory regulations and safety codes.

Successful tenderer shall arrange for compliance with statutory provisions of safety regulations and departmental requirements of safety codes in respect of labour employed on the work by the tenderer. Failure to provide such safety requirement would make the tenderer liable for penalty of as decided by the Engineer-in-charge for each default. In addition, the department will be at liberty to make arrangement for the safety requirements at the cost of tenderer and recover the cost thereof from him.

**MOBILIZATION ADVANCE:** No mobilization advance shall be paid for this work.

### **SECTION II** **TECHNICAL SPECIFICATIONS**

#### **1. General:**

It will be the responsibility of the successful Tenderer to obtain all statutory approval from Municipal, Electrical and other authorities. This will include obtaining approval from CEIG, including preparation and submission of drawings, calculations to the concerned authorities.

Quoted rates shall also include free replacement of any part of the system that fails to perform due to any reason including premature fusing, wear and tear etc., during the Guarantee Period. (for this purpose, Tenderer should stock at site sufficient quantity of spares as deemed essential). All equipment including luminaries and the glass shield shall be weather proof and their performance shall not be affected by weather conditions when in use or otherwise.

#### **School of Planning and Architecture, Vijayawada, TECHNICAL SPECIFICATION**

##### **Technical Specifications for Kitchen Equipments/ Fabrication**

###### **1.0 STAINLESS STEEL:**

Wherever stainless steel is specified, it shall be what is known to the trade as Austenitic type(Cr-Ni) AISI 304 grade with a content from 18% to 20% Chrome, 8% to 10.50% Nickle and a maximum Carbon content of 0.08 %. All exposed surfaces shall be given a finish equal to #4 (brushed finish)pickled and polished with 150 to 180 grit .Where manufacturing process and welding disturb original finish it shall be carefully reground, polished and restored to match balance of surface. All stainless steel sheets of AISI 304 grade and stainless steel angles, flats shall be of 'JINDAL' / 'SALEM' steel make or equivalent approved make. The contractor shall furnish the proof of having procured the stainless steel raw material exclusively for this work from approved manufacturer clearly mentioning the grade of sheets and angles etc. During fabrication of the kitchen equipment, random samples of stainless steel sheets, angles etc from the shop floor of the fabrication unit shall be collected at regular intervals by the Engineer-in-Charge or his authorized representative.



The same shall be sent to approved laboratory for testing the chemical composition and mechanical properties of the material.

In the event of test reports indicating that the sample does not conform to AISI 304/ AISI 202 standards, the entire lot of Kitchen Equipment shall be summarily rejected. The contractor shall strictly adhere to the thickness and grade of stainless steel sheet /angle for different members specified in the schedule of quantities. Any deviation in the material, noticed at any stage, shall make the item liable to be rejected. Payment made, if any, to the contractor for the rejected item will be recovered in full from the payments due to the contractor.

## **2.0 STAINLESS STEEL PIPE AND TUBING:**

All the units shall have a substructure of tubular pipe vertical support of 38 mm dia (outer diameter) 16 swg AISI 304 Grade stainless steel unless otherwise specified in schedule of quantities /drawings.

Framework of all units shall be of AISI 202 Grade stainless steel angles of size 35 x 35 x 3 mm or as otherwise specified. Stainless steel angles of same section shall be provided around sinks, burners, hot plates etc. Seamless tubing shall be thoroughly and properly ground smooth and finished to match adjacent work.

## **3.0 STRUCTURAL STAINLESS STEEL:**

All angles, flats, channels or other structural shapes used for framing shall be of approved manufacture, uniform and ductile in quality, free of hard spots, runs, checks or cracks or other surface defects. It shall be what is known to the trade as Austenitic type (Cr-Mn) AISI 202 Grade with a content of Chrome 17% to 19% , Manganese 7.5% to 10% and a maximum Carbon content of 0.15% , with all flux removed and excess spelter removed to be smooth and free from cold runs, blister, uncoated or scaly patches.

## **4.0 HANDLES, BRACKETS, LOCKING DEVICES AND HARD WARE:**

Wherever equipments are provided with handles, knobs, hinges, brackets or other misc. hardware all shall be of heavy duty #4 finish stainless steel.

## **5.0 FASTENINGS:**

Welds, bolts screws, nuts and washers shall be of stainless steel. The spacing and extent of welds, bolts and screws shall be such as to ensure suitable fastenings and prevent bulging of the material fastened.

## **6.0 WELDING:**

All welding shall be done by the Argon Arc /Tig welding only. Electrical Arc Welding, Carbon-arc or gas welding will not be permitted. All welding shall be done in a thorough manner, with welding rod of same composition as sheets or parts welded. Welds shall be complete, strong and ductile, with excess metal ground off joints finished smooth to match adjoining sheet surfaces. All joints on top of fixtures, tables, drain boards; exposed shelving, sinks etc. shall be welded.

All equipment here in specified which is constructed in more than one piece of sheet of metal, shall be continuously Welded together with welds ground smooth and polished.

## **7.0 GRINDING, POLISHING, FINISHING:**

All welded exposed joints shall be suitably ground flush with adjoining material and neatly finished and buffed to harmonize with adjoining surfaces. Wherever material has been sunken or depressed by the welding operation, such depression will be suitably hammered and pressed flush to adjoining surfaces and if necessary again ground to eliminate low spots. All ground surfaces shall then be polished or buffed to match adjoining surfaces, consistent with good workmanship. Care shall be exercised in all grinding operations to avoid excessive heating of metal & metal discoloration. In all cases, grain of rough grinding shall be removed by successive polishing operations.

Texture of final polishing operation shall be uniform and smooth consistent with reasonable care and good workmanship. General finish of all equipment shall be of high grade. Butt joints and contact joints, wherever they occur, shall be close fitting and shall not require solder as filler. Wherever breaks, bends occur, it shall be free from undue extrude and shall not be flaky scaly or cracked in appearance and where such break work does mar the uniform surface appearance of the material, all such marks shall be removed by suitably grinding, polishing and finishing. Wherever sheared edges occur they shall be free from burrs, fins or irregular projections and shall be finished over such sheared edges. Where miters or bull nosed corners occur, they shall be neatly finished with under edge of material neatly ground to a uniform condition and, in no case any overlapping materials shall be accepted.

Joints shall be continuous with welded joints except in the case of field joints. All joints made in the field shall be closely butted, pulled together in the field, field welded and polished smooth in accordance with section. Tops of fixtures shall be of maximum length and with welded factory joints to an absolute minimum. It is the intention of this specification that all welded joints shall be homogenous with the sheet metal itself. Where sheet sizes necessitate a joint, such a joint shall be welded. Tops of fixtures shall be fabricated in the factory with welded joints to reduce field joints to a minimum. All exposed surfaces shall be of # 4 finish. Where not specified, all doors cabinets, shelves, whether inside /outside of cabinets and wherever exposed are to be # 4 finish.

This applies to inside finish of any cabinet having doors or otherwise. An exposed surface shall be interpreted as meaning an inside surface exposed to view when a sliding or swinging door is opened. Final # 4 finish is to be factory finish, not as furnished by mill. Indication of die markings not blending with final finish will not be accepted.

#### **8.0 BOLT CONSTRUCTION:**

It is the intention of this specification that all equipment on exposed surfaces and wherever bolts are used to fasten trim to paneling and body of warmers, cabinets, counters etc. and more particularly to fasten tops of counter, dish tables etc. to top of framing, such bolts and screws which occur on the inside of the fixtures and are either visible or might come in the contact of the hands or the wiping cloth, such bolts, screws shall be capped with a suitable lock washer and chrome plated, brass or bronze acorn nut . Where screw nuts are not visible or readily accessible, they may be capped with a standard lock washer & steel nut treated to prevent rusting & corroding. Wherever bolts and screws are welded to underside of trim or tops, the reverse side of weld shall be neatly finished uniform with the adjoining surface of trim or top. Depressions at these points will not be acceptable.

#### **9.0 SOUND DEADENING:**

Underside of all stainless steel top for tables, counters, sink dishes and pot table with angle framework shall be treated with a coating of "Carbozite" with aluminum spray paint finish.

#### **10.0 MATERIAL AND WORKMANSHIP:**

All material, equipment etc. shall be new and of the kind specified and shall be in undamaged condition when turned over to Engineer-in-Charge. All workmanship shall be of best quality of craftsmen skilled in their respective trades. Appliances shall be of rigid construction free from objectionable vibrations and quiet in operation. Kitchen equipment Manufacturer's nameplate shall not appear on any of the fabricated equipment.

#### **11.0 LEGS:**

All legs to be constructed of 38mm diameter (outer diameter) stainless steel tubing with 16 SWG sheet , cold drawn, annealed and pickled, spaced no more than 1800mm centre to centre along the length of the unit. All legs, unless otherwise specified, shall be of AISI 304 grade Stainless Steel.

All legs bracing where required, are to be constructed of not less than 25 mm diameter (outer diameter) AISI 304 Grade stainless steel tubing with 16 SWG sheet unless otherwise specified . All cross bracing to run horizontal between all legs, approximately 150 mm above floor unless otherwise specified. All joints to be completely welded around entire perimeter forming complete seal with all welds ground and finished. Where one side of box unit is eliminated to provide space for cans, carts, plumbing or otherwise, single cross brace to be given for connecting adjacent horizontal members, such cross brace to be of tubing 25 mm dia. (outer diameter)-16 SWG AISI 304 grade stainless steel and shall not be at less than 150mm from each side, all welded as specified herein before.

#### **12.0 UNDER BRACING:**

All stainless steel counters, tables, boards and dish table tops to be braced below with inverted type channels made of AISI 304 Grade 16SWG Stainless Steel as specified, measuring 25 mm X 100mm X 25mm spaced not more than 750 mm center-to-centre along the length of the unit. This bracing shall be in addition to any stainless steel angle bracing specified in schedule of quantities.

#### **13.0 FEET:**

All legs shall be provided with heavy duty White Nylon Bullet Leg with 25mm height Adjustment.

#### **14.0 GAS BURNERS AND CONTROLS:**

Burners shall be high pressure and of quality approved by IOC with individual control valve and pilot burner. The manifold and copper pipe used should be of quality approved by IOC and Government safety rules.

#### **15.0 SINKS AND DRAIN BOARDS:**

All sinks and drain boards to be constructed of AISI 304 Grade stainless steel 16 SWG unless otherwise specified, with all joints neatly welded, ground and polished smooth. No soldering at any point will be accepted in sink and drain board construction. All front and free standing edges to be turned up 40mm and to be turned out 50 mm and down 38 mm in 12mm raised fronts and ends of drain board are to be level with sink and continuous therewith and is not to follow pitch of drain boards.

Drain boards to be pitched 3mm X 25 mm towards sink compartment. Sinks and drain boards to have 100 mm high splash back level and continuous not following pitch of drain boards adjacent to walls or adjoining equipment. Where drain boards exceed 600 mm in length, legs shall be provided as here in before specified. All vertical and horizontal corners to be rounded to radius of approx. 38 mm with all intersections meeting in spherical section. All sinks having two or more compartments shall have double dividing partitions, with fully rounded corners, both vertical & horizontal. All corners of drain boards to be rounded on insides to a radius of 38 mm front corners of rolled rim to be fully rounded on outside rolls and be concentric with inside of roll. Bottom of each sink compartment to be creased to sufficient pitch towards 50 mm dia stainless steel Waste Coupling at bottom centre of the bowl. The waste coupling shall be provided with 50 mm dia. Gate Valve of approved make. Opening for hot & cold-water faucets to be cut in to splash back, if required. All sinks shall be 200 mm deep unless otherwise specified to a # 4 finish.

#### **16.0 HINGED DOORS:**

Hinged doors for cabinets, counter etc. to be constructed as specified in respective item in stainless steel 16 SWG AISI 304 Grade . Hinges, catches and locking devices to be chrome plated brass unless otherwise specified. Hinges to be of construction as to eliminate exposed bolts and screw heads. Doors handles shall be of stainless steel .

## **17.0 ELECTRICALS**

- 17.1 All electrically operated equipment/appliances shall have an indicator lamp.
- 17.2 Thermostat used shall be of reputed make and approved by EIC.
- 17.3 Heating elements used shall be of reputed make and approved by EIC.
- 17.4 Contactors used shall be of reputed make and approved by EIC.
- 17.5 Wiring used shall be fibre coated copper wire/Teflon coated wire as specified.
- 17.6 Electric motors used shall be of reputed make and approved by EIC.
- 17.7 Power plug and cord shall be of required rating and shall be of approved brand
- 17.8 The length of power cord for fabricated appliances like deep freezers, ovens etc shall be 3.0 m.
- 17.9 All internal wiring for fabricated equipment items, including all electrical devices built into or forming an integral part of these items, to be furnished and installed by contractor.

## **18.0 LPG**

- 18.1 All LPG equipment shall have individual controls and pilot lamp.
- 18.2 All the components and burners shall be of 'UNITED ' make or as approved equivalent
- 18.3 All copper pigtailed, Needle Control Valves, Pilot Burner etc shall be of approved brand.

## **19.0 CASTERS**

- 19.1 Casters for the trolleys etc. shall be heavy duty
- 19.2 The brackets shall be with stainless steel (AISI 304) caster wheels ,swivel brackets with double ball bearing in the swivel head, bolted and secured central king pin, bolted wheel axle with self locking unit .
- 19.3 The wheels shall be polyurethane tread on nylon core mechanically bonded. The hardness of Polyurethane tread shall be 98 shore -A with low noise emission. The casters shall be of iron core with double ball bearings and load capacity not less than 250 kgs
- 19.4 All Casters shall be of Reputed Brand and approved by Engineer-in-charge.

## **20.0 REFRIGERATION**

- 20.1 Refrigeration systems: The contractor shall furnish and install complete refrigeration systems in accordance with the plans and specifications and including air and water cooled condensing units, evaporator units, controls piping, and all accessories as specified herein and as required to provide complete and satisfactory systems in accordance with accepted refrigeration practice. The contractor shall extend refrigerant lines from condensing units to evaporator unit completely hooked up and made ready for operation.
- 20.2 Condensing Units: Systems to be complete with pressure switches, expansion valves, liquid line dehydrators, sight glasses, vibration eliminators in liquid and suction lines, freon gas and all additional refrigeration equipment and accessories required to make complete refrigeration systems to maintain temperatures indicated.
- 20.3 Systems to be provided with low ambient controls consisting of all required condenser fan controls, thermostat time clocks and crank case heaters.
- 20.4 Piping: Refrigerant, drain and condensate water piping shall be Type L hard drawn seamless copper tubing with silver-soldered joints. All refrigerant suction lines shall be insulated with 12 mm wall insulation applied in accordance with the manufacturer's recommendations. All condensate drain lines shall be similarly insulated with 12 mm insulation. Each refrigeration system shall include a dehydrator, liquid line sight glass, shutoff valve, thermostatic expansion valve at each evaporator and other fittings and accessories . Condensate lines shall be run immediately from unit in cavity between cooler and block wall to hub drain in boiler room. See Plumbing for hub drain location.

- 20.5 Controls: The temperature for each unit shall be controlled by means of a thermostat wired to actuate a solenoid valve in the liquid line, with the compressor operation controlled by the low pressure cut-out switch. Thermostats and low pressure controls shall be adjusted to maintain the room temperatures.
- 20.6 Hook-up: Room thermostats and liquid line solenoid valves (for pump down cycle operation) and refrigerant lines (insulated as required) to be provided by contractor. All electrical interconnection and control wiring between blowers and compressors to be provided by electrical contractor.
- 20.7 All compressors used shall be of Kirloskar /Copeland /Tecumesh make or as approved equivalent of required capacity.
- 20.8 Insulation shall be of polyurethane foam (PUFF).

## **21.0 INSTALLATION AND CONDITIONS AT SITE:**

- 21.1 The items are to be installed in the ground and first floor as indicated in the drawings. Install all items of equipment as recommended by manufacturer. An item which because of its unwieldy size or which cannot be delivered in one piece because of physical conditions at site, or which may be damaged or cause damage during delivery and placement, may be delivered in sections but the sections must be of such size as to hold field joints to a minimum and must have been pre-fitted at the factory. Carefully join at the site and weld seamless (after placement) with the same type of weld and welding material used in the fabrication. Welds shall be flat and homogeneous and shall be ground to original finish of metal.
- 21.2 Installation: Place all equipment, assemble, and make a complete unit in the required location, properly levelled, fitted and secured in place, ready for all plumbing, electrical and ventilating connections .
- 21.3 All equipment with backsplashes for passing through walls is to be placed tight to the wall and sealed to wall with silicone sealant approved by EIC, as required to prevent entry of vermin and insects.
- 21.4 Before final inspection, contractor shall remove all protective covering and coatings from his work and thoroughly clean all parts of equipment and service them, leaving all items free from defect, adjusted and lubricated according to the recommendations of the manufacturer. Instruct EIC or his authorised representative as to proper operation and maintenance, and manner and proper intervals for lubrication.
- 21.5 After all utility connections to the equipment are made conduct final test of equipment under operating conditions in the presence of EIC or his representatives.

## **22.0 GENERAL**

- 22.1 All the other fittings used shall be of standard ISI specifications.
- 22.2 All necessary attachments and openings shall be provided in the equipment/appliances as required for proper installation in terms of connections for plumbing, electrical, LPG, ventilation and refrigeration.
- 22.3 Site measurements shall be taken/checked for all the said equipment/appliances so as to be in proper line and level and to fit into their respective locations perfectly
- 22.4 All electric operated and/or heated equipment, fabricated, or otherwise shall conform to the latest standards of the ISI
- 23.0 Access to Shops:The contractor shall accord to the Engineer-in-charge or to his authorized representative access to the shop floor or fabrication yard where all equipment is fabricated, for the inspection of materials, collection of samples of raw materials, and for inspection of the general construction of the work as it proceeds before completion and shipment.

#### 24.0 GUARANTEES AND WARRANTIES:

Any equipment found defective shall be replaced at no cost to Engineer-in-charge. Any defects developing not due to carelessness or misuse occurring within defect-liability period shall be promptly rectified by the Contractor at his own expense upon notification by the Engineer-in-charge.

All refrigerated equipment shall carry a one (1) year free service guarantee which shall include all parts and labour. In addition, all refrigeration machinery shall carry a five (5) year warranty covering compressors. Documents pertaining to Warranties extended by the manufactures on the components of the units shall be handed over to the Engineer-in-charge during the installation of the units.

#### Technical Specification for refrigerator:

Type of refrigeration system	R22 based, Split type & AIR cooled
<b>No. Of refrigeration systems</b>	<b>One</b>
<b>Total refrigeration capacity</b>	15000 BTUH at +4 deg. C room temp. & 38 deg.C ambient temp.
<b>Condensing unit details</b>	
Condensing unit	Of approved make
Compressor Type	Hermetic reciprocating
Compressor	Of approved make
No of condensing units	ONE
Condensing Coil Material	Grooved Copper tubes with Slit Aluminum Fins
<b>Evaporating unit details</b>	
Make of evaporator	Of approved make
No of Evaporators	ONE
Cooling Coil	3 Row, 6 FPI
Power Supply	230 V/ 1 PH / 50 Hz

## Technical Specification Deep Freezer:

Operating temperature	-2 / 10 deg C	-22 / -15 deg C
first compartment - min/max °C	-2 / 10 deg C	-22 / -15 deg C
Operating mode	Ventilated	Ventilated
Type of stainless steel		
external	Stainless Steel AISI 304 Scotch Brite	Stainless Steel AISI 304 Scotch Brite
internal	Stainless Steel AISI 304 Scotch Brite	Stainless Steel AISI 304 Scotch Brite
Cooling unit	Built-In	Built-In
External dimensions in mm		
width	1500	1200
depth	750	600
height	2000	2100
Doors	1 Left+1 Right	1 Left+1 Right
Door hinges	8, GN 2/1	8, GN 2/1
N° and type of grids (included)	4/20'	4/30'
N° defrost in 24 hrs.	R134a	R404a
Refrigerant type	310	450
Refrigerant quantity - g.	791	962
Refrigerant power - W		
Power - kW		
installed-electric	0.445	1.008
Net weight - kg.	217	247
Supply voltage	230 V, 1, 50	230 V, 1, 50

## Technical Bid

### **For the work of Supply, Installation, Testing and Commissioning (SITC) of Kitchen Equipment for SPAV Campus ITI Road, Vijayawada**

This Technical Bid for providing Kitchen Equipment to SPA Vijayawada, shall be filled in by the tendering agency, duly signed, stamped and sealed along with an EMD of Rs.49,000/- by way of Demand Draft in favour of “School of Planning and Architecture, Vijayawada” in a separate cover super-scribed with “Technical Bid”.

<b>S.No.</b>	<b>Particulars</b>	<b>Details</b>
1.	Name of the Tendering Company/Firm/Agency	
2.	Full Address of the Registered Office/ Branch Office (if any)	
3.	Phone No. Fax No.	
4.	State status whether firm is Proprietary/ Partnership firm / Company	
5.	Name(s) of the Director/ Proprietor/ Partners of the firms	
6.	Name & Design. Of authorized representative(s) with Ph.No.	
7.	<b>Details of EMD and Tender Document Fee</b>	
	Amount in Rupees	
	In Words	
	DD No. And Date	
	Issuing Bank	



8. Statutory information under various statutes:

Sl. No.	Registration under the	Registration No. (attested copies should be attached)
a.	Firm Registration Certificate with concerned authorities.	
b.	Shops & Establishment Act	
c.	Service Tax Registration No.	
d.	Certificate of Registration for Sales tax/VAT/GST.	
e.	Permanent Account No. (PAN)	
f.	Copy of IT return filed for the last three financial years (2013-2016)	
g.	Audited Accounts for the last three years (2013-2016) certified by the Chartered Accountant.	
h.	Average annual financial turn over	
i.	Any other	

9. Give details of major similar contracts handled during last seven years by the tendering firm to be attached.

**DETAILS OF ALL WORKS OF SIMILAR CLASS COMPLETED DURING THE LAST SEVEN YEARS ENDING UP TO PREVIOUS DAY OF LAST DATE OF SUBMISSION OF TENDERS**

S.No.	Name of the work / Project & Location	Owner or Sponsoring organization	Cost of Work in Lakhs	Date of Commencement as per contract	Stipulated Date of completion	Actual date of Completion	Litigation / Arbitration / pending / in progress with details #	Name & Postal address / telephone number / email id of officer to whom reference may be made for verification	Remarks indicating the type of work (Kitchen equipment)	Whether the work was done on back to back basis
1	2	3	4	5	6	7	8	9	10	11

- 10. Corresponding Minimum eligibility criteria requirements
- 11. Bank Solvency Certificate (Form 'B').
- 12. Certificates of Works Experience (Form 'C' & 'D').
- 13. Affidavit for Non- black listing (**Form- E**).

Seal & Signature of the Tenderer

Place:

Address.....

Date:

Phone No. ....

# **PART - C**

## Financial Bid

### **For the work of Supply, Installation, Testing and Commissioning (SITC) of Kitchen Equipment for SPAV Campus ITI Road, Vijayawada**

This Financial Bid for providing Kitchen Equipment to SPA Vijayawada, shall be filled in by the tendering agency, duly signed, stamped and sealed in a separate cover super-scribed with “Financial Bid”.

- Bill of Quantities attached is to be filled and kept in sealed cover.
- After opening of technical bid the capability and suitability of the tenderers shall be evaluated and Financial Bid of the qualified tenderers shall be opened on the date informed accordingly in presence of bidders.

1.	Name of the Tenderer	
2.	Address of the Tenderer	
3.	Phone No. & Fax No.	
4.	Whether proprietary/partnership firm or company	
5.	Name (s) of the Proprietor or Partners of the firms	

Seal & Signature of the Tenderer

Place:

Address.....

Date:

Phone No. ....

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**Bill of Quantities**

SI No	Description of the Item	Qty	Unit	Rate in Figures	Rate in Words	Amount
1	Supply, Commissioning in place of, WEIGHING SCALE, Floor Model, Capacity: 0-100 KG Range with + / - 100 gm accuracy. Stainless Steel AISI 304 Grade 18SWG Sheet Platform of Size 600X600 mm, Electronic Digital Display.	2	Each			
2	Supply, Commissioning in place of, WEIGHING SCALE, Table Top Model, capacity: 0-20 KG Range with + / - 10 gm accuracy. Stainless Steel AISI 304 Grade 18SWG Sheet Platform of Size 300X300 mm, Electronic Digital Display.	1	Each			
3	Supply, erection & Commissioning in place of, WORK TABLE WITH SINK on Left hand side , Overall Size as below :TOP: of the Table is to be Fabricated from 16SWG Stainless Steel AISI 304 Grade Sheet, Sunk in Top with Two sides & Front to be turned down 38 mm and in 12 mm, & Back side 100 mm high back splash.turned back at 90 by 20mm & 12mm, UNDERSHELVES: 1 in No. to be Fabricated from 18SWG Stainless Steel AISI 304 Grade Sheet, All sides to be turned down 38 mm and in 12 mm. Welded at 150mm from Bottom of Unit,The bottom of undershelf shall be provided with one longitudinal and two cross braces with 32x32x3 mm thick stainless steel AISI 202 grade angle for rigidity.The cross braces shall be welded to uprights. UPRIGHTS in 38 mm dia.X 16SWG thick Stainless Steel AISI 304 grade pipe fitted with White Nylon Bullet Leg with 25mm ht. adjustment. INTERNAL FRAMEWORK in 32x32X3mm thick Stainless Steel AISI 202 Grade Angle below the Top. Sink Bowl: Size- 600x600x300mm deep Fabricated from 16SWG Stainless Steel AISI 304 Grade Sheet, with all bottom & sides edges rounded at 38mm dia the Bowl Welded to Top securedly with removal of all holes or burr & finished properly to give a uniform look. Provision of 50 mm dia sunk with drain holes at bottom centre of the bowl and stainless steel coupling with gate valve of 50 mm dia. of approved make. WELDING: should be done					

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	by Argon Arc /Tig welding only. No Electrical Arc Welding should be used. All the welded edges, surfaces should be properly & smoothly ground & finished to remove any burr or sharp edges. FINISH: All plain & pipe surfaces should be finished brush / satin finish with 120 gritt (mesh) size uniformly to give an aesthetically pleasant look				
3.1	1200X650X850+100mm ht	1	Each		
3.2	1500X750X850+100mm ht	1	Each		
3.3	1500X600X850+100mm ht	1	Each		
4	Supply, erection & Commissioning in place of, THREE SHELVES STORAGE RACK, Overall Size given below SHELVES: 3 in No. to be Fabricated from 16SWG Stainless Steel AISI 304 Grade Sheet, Rear & Two sides to be turned up 38 mm at 90 and in 12 mm for chipping bend. Front Side turned down 38 mm at 90 and in 12 mm Bottom Shelf Welded at 150mm from Bottom of Unit, directly to Uprights, INTERNAL FRAMEWORK: The bottom of undershelf shall be provided with one longitudinal and two cross braces with 32x32x3 mm thick stainless steel AISI 202 grade angle for rigidity.The cross braces shall be welded to uprights. Top shelf at the top of upright & centre equidistant to top & bottom shelves. Second at 500mm from bottom of unit, Top Shelf at the Top of Upright & Rest Two Equidistant to top & Second Shelves. UPRIGHTS in 38 mm dia.X 16SWG thick Stainless Steel AISI 304 grade pipe fitted with White Nylon Bullet Leg with 25mm ht. adjustment. WELDING: should be done by Argon Arc /Tig welding only. No Electrical Arc Welding should be used. All the welded edges, surfaces should be properly & smoothly ground & finished to remove any burr or sharp edges. FINISH: All plain & pipe surfaces should be finished brush uniformly to give an aesthetically pleasant look.				
4.1	1100X600X1950mm ht	2	Each		
4.2	700X1000X1950mm ht	1	Each		

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5	<p>Supply, erection &amp; Commissioning in place of, FOUR SHELVES CLEAN DISH RACK, Overall Size 1350x600x1800mm SHELVES: 4 in No. to be Fabricated from 16SWG Stainless Steel AISI 304 Grade Sheet, Rear &amp; Two sides to be turned up 38 mm at 90 and in 12 mm for chipping bend. Front Side turned down 38 mm at 90 and in 12 mm Bottom Shelf Welded at 150mm from Bottom of Unit, directly to Uprights, INTERNAL FRAMEWORK: The bottom of undershelf shall be provided with one longitudinal and two cross braces with 32x32x3 mm thick stainless steel AISI 202 grade angle for rigidity. The cross braces shall be welded to uprights. Top shelf at the top of upright &amp; centre equidistant to top &amp; bottom shelves. Second at 500mm from bottom of unit, Top Shelf at the Top of Upright &amp; Rest Two Equidistant to top &amp; Second Shelves. UPRIGHTS in 38 mm dia.X 16SWG thick Stainless Steel AISI 304 grade pipe fitted with White Nylon Bullet Leg with 25mm ht. adjustment. WELDING: should be done by Argon Arc /Tig welding only. No Electrical Arc Welding should be used. All the welded edges, surfaces should be properly &amp; smoothly ground &amp; finished to remove any burr or sharp edges. FINISH: All plain &amp; pipe surfaces should be finished brush uniformly to give an aesthetically pleasant look.</p>	2	Each			
6	<p>Supply, erection &amp; Commissioning in place of, DUNNAGE RACK, Overall Size: 1000X1000X250mm ht. SHELF: of the Rack is to be Fabricated from 38 mm dia.X 16SWG thick Stainless Steel AISI 304 grade pipe square frame with pipes welded at 150mm C/C Horizontally to main frame. UPRIGHTS in 38 mm dia.X 16SWG thick Stainless Steel AISI 304 grade pipe fitted with White Nylon Bullet Leg with 25mm ht. adjustment. The legs shall be braced with 38 mm dia.X 16 SWG thick stainless steel AISI 304 grade pipe around at appropriate level. WELDING: should be done by Argon Arc /Tig welding only. No Electrical Arc Welding should be used. All the welded edges, surfaces should be properly &amp; smoothly ground &amp; finished to remove any burr or sharp edges. FINISH: All</p>	4	Each			

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	plain & pipe surfaces should be finished brush uniformly to give an aesthetically pleasant look.				
7	Supply, erection & Commissioning in place of, THREE SHELVES POT RACK, Overall Size 1400x575x1650 mm SHELVES: 3 in No. to be Fabricated from 38 mm dia.X 16SWG thick Stainless Steel AISI 304 grade pipe square frame with pipes.UPRIGHTS in 38 mm dia.X 16SWG thick Stainless Steel AISI 304 grade pipe fitted with White Nylon Bullet Leg with 25mm ht. adjustment. The legs shall be braced with 38 mm dia.X 16 SWG thick stainless steel AISI 304 grade pipe alround at appropriate level	1	Each		
8	Supply, erection & Commissioning in place of, WORK TABLE with two chute holes, Overall Size: 500X750X850mm TOP: of the Table is to be Fabricated from 16SWG Stainless Steel AISI 304 Grade Sheet, Two sides & Front to be turned down 38 mm and in 12 mm, INTERNAL FRAMEWORK in 32x32X3mm thick Stainless Steel AISI 202 Grade Angle below the Table Top. WELDING: should be done by Argon Arc /Tig welding only. No Electrical Arc Welding should be used. All the welded edges, surfaces should be properly & smoothly ground & finished to remove any burr or sharp edges and buffed. FINISH: All plain & pipe surfaces should be finished brush uniformly to give an aesthetically pleasant look.	1	Each		
9	Supply, erection & Commissioning in place of, WORK TABLE with chute holes, Overall Size: 500X750X850 + 100m high back splash TOP: of the Table is to be Fabricated from 16SWG Stainless Steel AISI 304 Grade Sheet, Two sides & Front to be turned down 38 mm and in 12 mm, & Back side 100 mm high back splash. turned back at 90 degrees by 20mm & 12mm, INTERNAL FRAMEWORK in 32x32X3mm thick Stainless Steel AISI 202 Grade Angle below the Table Top. WELDING: should be done by Argon Arc /Tig welding only. No Electrical Arc Welding should be used. All the welded edges, surfaces should be properly & smoothly ground & finished to remove any burr or sharp edges and buffed. FINISH: All plain & pipe surfaces should be finished brush uniformly to give an	1	Each		



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	aesthetically pleasant look.					
10	Supply, erection & Commissioning in place of, WASTE BIN TROLLEY, Overall Size: 300mm dia. X 750mm deep. WASTE BIN WITH LID: Fabricated from 16SWG Stainless Steel AISI 304 Grade Sheet 450mm dia. x 400mm ht. with side lifting handles & loose fit lid cover with handle, UNDERBIN FRAMEWORK in 32x32X3mm thick Stainless Steel AISI 202 Grade Angle PUSH CART HANDLE in 30 mm dia.X 16SWG thick Stainless Steel AISI 304 grade pipe CASTOR WHEELS: 2 Fixed & 2 Swiveling with Brake of 150mm dia x 30mm thick rubber tyres. WELDING: should be done by Argon Arc /Tig welding only. No Electrical Arc Welding should be used. All the welded edges, surfaces should be properly & smoothly ground & finished to remove any burr or sharp edges. FINISH: All plain & pipe surfaces should be finished brush / satin finish with 120 gritt (mesh) size uniformly to give an aesthetically pleasant look.	4	Each			
11	Supply, erection & Commissioning in place of, WORK TABLE WITH 2 Under Shelves, Overall Size: as mentioned below. Backsplash TOP: of the Table is to be Fabricated from 16SWG Stainless Steel AISI 304 Grade Sheet, Two sides & Front to be turned down 38 mm and in 12 mm, & Back side 100 mm high back splash.turned back at 90 by 20mm & 12mm, UNDERSHELVES: 2 in Nos. full length and full width to be Fabricated from 18SWG Stainless Steel AISI 304 Grade Sheet, All sides to be turned down 38 mm and in 12 mm. Welded at 150mm from Bottom of Unit, directly to Uprights & middle at centre of Top & bottom Shelf.The bottom of undershelf shall be provided with one longitudinal and two cross braces with 32x32x3 mm thick stainless steel AISI 202 grade angle for rigidity.The cross braces shall be welded to uprights. UPRIGHTS in 38 mm dia.X 16SWG thick Stainless Steel AISI 304					

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	grade pipe fitted with White Nylon Bullet Leg with 25mm ht. adjustment. INTERNAL FRAMEWORK in 32x32X3mm thick Stainless Steel AISI 202 Grade Angle around below and the table the Top and with stainless steel AISI 202 grade 50x3 mm flats at 450 mm c/c for rigidity. WELDING: should be done by Argon Arc /Tig welding only. No Electrical Arc Welding should be used. All the welded edges, surfaces should be properly & smoothly ground & finished to remove any burr or sharp edges. FINISH: All plain & pipe surfaces should be finished brush uniformly to give an aesthetically pleasant look.				
11.1	Overall Size: 1500X600X850+100mm ht	3	Each		
11.2	Overall Size: 550X600X600+100mm ht	1	Each		
11.3	Overall Size: 600X600X850+100mm ht	1	Each		
11.4	Overall Size: 500X600X850+100mm ht	1	Each		
12	Supply, erection & Commissioning in place of, WORK TABLE WITH 2 Under Shelves, Overall Size: as mentioned below. TOP: of the Table is to be Fabricated from 16SWG Stainless Steel AISI 304 Grade Sheet, Two sides & Front to be turned down 38 mm and in 12 mm, UNDERSHELVES: 2 in Nos. full length and full width to be Fabricated from 18SWG Stainless Steel AISI 304 Grade Sheet, All sides to be turned down 38 mm and in 12 mm. Welded at 150mm from Bottom of Unit, directly to Uprights & middle at centre of Top & bottom Shelf.The bottom of undershelf shall be provided with one longitudinal and two cross braces with 32x32x3 mm thick stainless steel AISI 202 grade angle for rigidity.The cross braces shall be welded to uprights. UPRIGHTS in 38 mm dia.X 16SWG thick Stainless Steel AISI 304 grade pipe fitted with White Nylon Bullet Leg with 25mm ht. adjustment. INTERNAL FRAMEWORK in 32x32X3mm thick Stainless Steel AISI 202 Grade Angle around below and the table the Top and with stainless steel AISI 202 grade 50x3 mm flats at 450 mm c/c for rigidity. WELDING: should be done by Argon Arc /Tig welding only. No Electrical Arc Welding should be used. All the welded edges, surfaces should be properly &				

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	smoothly ground & finished to remove any burr or sharp edges. FINISH: All plain & pipe surfaces should be finished brush uniformly to give an aesthetically pleasant look.				
12.1	Overall Size: 1500X750X850 mm	1	Each		
12.2	Overall Size: 350x350x850 mm	1	Each		
13	Supply, erection & Commissioning in place of, SINGLE BURNER RANGE INDIAN COOKING PLATFORM, Overall Size: 600X600x600+100mm ht. TOP: to be Fabricated from 16SWG Stainless Steel AISI 304 Grade Sheet, All sides to be turned down 38 mm and in 12 mm. SIDE SKIRTING: in 18SWG Stainless Steel AISI 304 Grade Sheet. UNDERSHELF: One no. with 25 mm dia pipe around and 20 mm dia pipe @ 150 mm c/c (16 swg) along the length of the unit welded to uprights at 150 mm from FFL DRIP TRAY: independant below the burner in 18SWG Stainless Steel AISI 304 Grade Sheet. UPRIGHTS in 38 mm dia.X 16SWG thick Stainless Steel AISI 304 grade pipe fitted with White Nylon Bullet Leg with 25mm ht. adjustment. INTERNAL FRAMEWORK in 32x32X3mm Angle, 25x3 mm thick Flat in Stainless Steel AISI 202 Grade. PAN SUPPORTS: independant for the burner, 450x450mm Square ring with 8 support flanges both in Cast Iron. BURNERS & FITTINGS: One no. T -35 burner or One no. M - 35 burner, "UNITED" brand or equivalent and the burner provided with Individual Pilot Burner, Needle Control Valve (3/8 BSPTM X 3/8 Cu), Copper Pigtail (Suitable Lenght) internal gas pipeline of 12 mm dia. NB with ERW mildsteel pipe 'C' Class "TATA" or approved make WELDING: should be done by Argon Arc /Tig welding only. No Electrical Arc Welding should be used. All the welded edges, surfaces should be properly & smoothly ground & finished to	6	Each		

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	remove any burr or sharp edges. FINISH: All plain & pipe surfaces should be finished brush uniformly to give an aesthetically pleasant look.				
14	Supply, erection & Commissioning in place of, SINGLE BURNER RANGE INDIAN COOKING PLATFORM, Overall Size: 600X600x600+100mm ht. TOP: to be Fabricated from 16SWG Stainless Steel AISI 304 Grade Sheet, All sides to be turned down 38 mm and in 12 mm. SIDE SKIRTING: in 18SWG Stainless Steel AISI 304 Grade Sheet. UNDERSHELF: One no. with 25 mm dia pipe around and 20 mm dia pipe @ 150 mm c/c (16 swg) along the length of the unit welded to uprights at 150 mm from FFL DRIP TRAY: independent below the burner in 18SWG Stainless Steel AISI 304 Grade Sheet. UPRIGHTS in 38 mm dia.X 16SWG thick Stainless Steel AISI 304 grade pipe fitted with White Nylon Bullet Leg with 25mm ht. adjustment. INTERNAL FRAMEWORK in 32x32X3mm Angle, 25x3 mm thick Flat in Stainless Steel AISI 202 Grade. PAN SUPPORTS: independent for the burner, 430mm diameter with 8 support flanges both in Cast Iron. BURNERS & FITTINGS: One no. G-10 burner, "UNITED" brand or equivalent and the burner provided with Individual Pilot Burner, Needle Control Valve (3/8 BSPTM X 3/8 Cu), Copper Pigtail (Suitable Length) internal gas pipeline of 12 mm dia. NB with ERW mildsteel pipe 'C' Class "TATA" or approved make WELDING: should be done by Argon Arc /Tig welding only. No Electrical Arc Welding should be used. All the welded edges, surfaces should be properly & smoothly ground & finished to remove any burr or sharp edges. FINISH: All	4	Each		

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	plain & pipe surfaces should be finished brushuniformly to give an aesthetically pleasent look.				
15	Supply, erection & Commissioning in place of, CHAPATY PLATE WITH PUFFER, LPG OPERATED, Overall Size: 1200X600X850+100mm ht. TOP: Griddle Plate in 12mm thick Mild Steel of size 1000x600mm Puffer Plate of size 300x600mm in 16 mm thick Cast Iron with 4 mm dia. holes on right hand side, with oil drip channel of size 75mm wide x 35mm deep with a oil drain on front side, The chapaty plate shall be welded with a collar made of 50x6 mm mild steel flat on all side except on front side. A Splash Guard of 100mm turned back 20mm & down 20mm both to be Fabricated from 16SWG Stainless Steel AISI 304 Grade Sheet. SIDE SKIRTING: in 18SWG Stainless Steel AISI 304 Grade Sheet, Provision of Ignition window in front skirting of size 150x150 on one side centre for burner ignition. UNDERSHELF: One no., in 18SWG Stainless Steel AISI 304 Grade Sheet. UPRIGHTS: in 38 mm dia.X 16SWG thick Stainless Steel AISI 304 grade pipe fitted with White Nylon Bullet Leg with 25mm ht. adjustment. INTERNAL FRAMEWORK: in 32x32X3mm Angle, 25x3 mm thick Flat in Stainless Steel AISI 202 Grade. BURNERS & FITTINGS: Four nos. V - 600 burners each burner provided with Individual Pilot Burner, Needle Control Valve (3/8 BSPTM X 3/8 Cu), Copper Pigtail (Suitable Length) internal gas pipeline of 12 mm dia. NB with ERW mildsteel pipe 'C' Class "TATA" or approved make WELDING: should be done by Argon Arc /Tig welding only. No	1	Each		

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	Electrical Arc Welding should be used. All the welded edges, surfaces should be properly & smoothly ground & finished to remove any burr or sharp edges.				
16	Supply, erection & Commissioning in place of, DOSA PLATE, LPG OPERATED, Overall Size:1200X600X850+100mm ht. Backsplash TOP: Griddle Plate in 16mm thick Mild Steel of size 900x500mm, All sides shall be provided with oil drip channel of size 50mm wide x 35mm deep with a oil drain on front side, A Splash Guard of 100mm turned back 20mm & down 20mm The drip channel and splash guard both to be fabricated from 16SWG Stainless Steel AISI 304 Grade Sheet. SIDE SKIRTING: in 18SWG Stainless Steel AISI 304 Grade Sheet, Provision of Ignition window in front skirting of size 150x150 on one side centre for burner ignition. UNDERSHELF: One no. full length and full width in 18SWG Stainless Steel AISI 304 Grade Sheet welded at 150 mm from FFLwith 32x32X3mm thick Stainless Steel AISI 202 Grade Angle below the under shelf on two sides welded to uprights UPRIGHTS: in 38 mm dia.X 16SWG thick Stainless Steel AISI 304 grade pipe fitted with White Nylon Bullet Leg with 25mm ht. adjustment. INTERNAL FRAMEWORK: in 32x32X3mm Angle, 25x3 mm thick Flat in Stainless Steel AISI 202 Grade. BURNERS & FITTINGS: Two nos. V-900 type burners "UNITED" or equivalent, with individual Needle Control Valve (3/8 BSPTM X 3/8 Cu), Copper Pigtail (Suitable Length) internal gas pipeline of 12 mm dia. NB with ERW mildsteel pipe 'C' Class "TATA" or approved make WELDING: should be done by Argon Arc /Tig welding only. No Electrical Arc Welding should be used. All the welded edges, surfaces should be properly & smoothly ground & finished to remove any burr or sharp edges. FINISH: All plain & pipe surfaces should be finished brush uniformly to give an aesthetically pleasant look.	1	Each		
17	Supply & Commissioning in place of, POTATO PEELER, 20 KG The unit shall be vertical design and floor mounted type.Peeling	1	Each		

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	Chamber in Stainless Steel 16 SWG AISI 304 Grade Sheet. The peeling disc shall be made of 14 swg stainless steel AISI 304 Grade Sheet. Top Lid in Stainless Steel 18SWG AISI 304 Grade Sheet. The abrasive on the disc shall be fibre glass bonded carborundrum and shall be easily removable for maintenance and cleaning .Unit Mounted on 40x40x16SWG AISI 304 Grade Square Pipe Frame. Water Inlet at the top of Chamber & Water Flow Out & removal Window at the bottom of the Chamber. Sowbhagya Brand or equivalent III Phase Electrical Motor of 1 HP of ABB/Crompton/Kirloskatr or equivalent. The machine shall be provided with On/Off Starter motor control & indicating lights, wire & plug, all complete, as required.				
18	Supply & Commissioning in place of, PULVERISER, 3 HP Pulverising Chamber, Blades, Hopper of size 400x500 mm & body in AISI 304 Grade Stainless Steel, Unit Mounted on Stainless Steel AISI 304 Grade 40x40x16SWG Grade Pipe Uprights & Frame, Two Sets of Six nos. different mesh size sieves supplied with unit. Sowbhagya Brand or equivalent. III Phase Electrical Motor of Three HP Capacity.	1	Each		
19	Supply & Commissioning in place of, Tilting WET GRINDER of over all size 110x97x168 mm of 15 Litres capacity. Detachable Grinding bowl in 19SWG AISI 304 Grade Stainless Steel with detachable White roller Stone, .Stand, Post & Supports of Pestle, Srapper, etc. in Stainless Steel AISI 304 Grade Pipe. Unit Mounted on Stainless Steel AISI 304 Grade as per manufacturers specifications with 304 Grade frame work clad with 18SWG AISI 304 Grade Sheet as per manufacturers specifications. RISHABH make or Sowbhagya Brand or equivalent III Phase Electrical Motor of 1.5 HP Capacity of ABB/ Crompton/ Kirloskar or equivalent	1	Each		

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20	<p>Supply, erection &amp; Commissioning in place of, STEAM GENERATOR LPG OPERATED, 300 ltrs capacity. Inner Chamber is to be Fabricated from 12SWG Stainless Steel AISI 304 Grade Sheet, with the Jacketed double walled outer body to be Fabricated from 10SWG Stainless Steel AISI 304 Grade Sheet, The unit is fitted with all the necessary accessories viz., Pressure Gauge, Water Level Indicator Glass Assembly, safety valve to regulate the excess steam pressure, firing chamber with door and nipples for water inlet and steam outlet, drain valve and smoke vent UPRIGHTS: in 38 mm dia.X 16SWG thick Stainless Steel AISI 304 grade pipe fitted with White Nylon Bullet Leg with 25mm ht. adjustment. INTERNAL FRAMEWORK: in 32x32X3mm Angle, 25x3 mm thick Flat in Stainless Steel AISI 202 Grade. BURNERS &amp; FITTINGS: Three Two nos. T - 65 burners,"UNITED" brand or equivalent Pilot Burner, Needle Control Valve (3/8 BSPTM X 3/8 Cu), Copper Pigtail (Suitable Length) internal gas pipeline of 12 mm dia. NB with ERW mildsteel pipe 'C' Class "TATA" or approved make WELDING: should be done by Argon Arc /Tig welding only. No Electrical Arc Welding should be used. All the welded edges, surfaces should be properly &amp; smoothly ground &amp; finished to remove any burr or sharp edges. FINISH: All plain &amp; pipe surfaces should be finished brush / satin finish with 120 gritt (mesh) size uniformly to give an aesthetically pleasant look</p>	1	Each			
21	<p>Supply, erection &amp; Commissioning in place of, TILTING MILK WARMER VESSEL, 125 LIT. CAPACITY Operated by steam.It is a cylindrical type vessel. Double jacketed. The inner and outer containers are fabricated with 16 SWG AISI 304 Grade Stainless Steel Sheet. It is provided with steam injection terminal, drain nipple, safety valve and tilting handle for tilting the vessel. The unit shall be mounted on 50 mm OD stainless steel AISI 304 grade 16 SWG pipes.</p>	1	Each			



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22	<p>Supply, erection &amp; Commissioning in place of, IDLY STEAMER, 3 X 80 =240 capacity All three boxes of 80 idlies each in 1x3 configuration Fabricated from 18SWG Stainless Steel AISI 304 Grade Sheet, Each Box shall hold 4 no of Trays with 20 pockets of 90mm dia x 7mm deep for idlies made from 19SWG Stainless Steel AISI 304 Grade Sheet, Backed with drip trays made from 21SWG Stainless Steel AISI 304 Grade Sheet. The inner and outer walls of the unit on all sides shall be filled with 75 mm thick non-sagging mineral glasswool. The door shutters of all three boxes shall be provided with 16 SWG double wall stainless steel sheet with 40 mm thick mineral glasswool in- between. The doors shall be provided with hard rubber beading around ,tightly closing handles in stainless steel with a PVC knob at the end of the handle rod and a separate knob/ handle at the centre of the shutter. UPRIGHTS: The boxes shall be integrally built one upon another and mounted on a stand .The uprights of the stand shall be in 38 mm dia.X 16SWG thick Stainless Steel AISI 304 grade pipe fitted with White Nylon Bullet Leg with 25mm ht. adjustment. The unit shall rest on the frame work of stand with 50x50x5 mm stainless steel angle of 202 grade. A drain channel of size 65x65 mm made with 18 swg stainless steel AISI 304 grade shall be provided at the bottom of the unit to collect the seepage water from boxes. A 12 mm dia stainless steel spout shall be welded at one end of the drain INTERNAL FRAMEWORK in 32x32X3mm thick Stainless Steel AISI 202 Grade Angle below the Top. WELDING: should be done by Argon Arc /Tig welding only. No Electrical Arc Welding should be used. All the welded edges, surfaces should be properly &amp; smoothly ground &amp; finished to remove any burr or sharp edges. FINISH: All plain &amp; pipe surfaces should be finished brush uniformly to give an aesthetically pleasant look</p>	1	Each		
23	<p>Supply, erection &amp; Commissioning in place of, TILTING BULK COOKING RICE/DAL PANS/VESSELS, Capacity 125 LIT. Operated by steam. It is a cylindrical type vessels, fabricated with 16</p>	2	Each		

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	SWG AISI 304 Grade Stainless Steel Sheet, provided with perforated stainless steel plate at the inner bottom for direct injection for steam and for filtering, Stainless Steel lid with handle steam injections terminal, tilting handle for tilting the vessel, drain valve and mounted on stainless steel tubular stand made of 50 mm OD 16 SWG 304 Grade pipes				
24	Supply, erection & Commissioning in place of, VERTICAL 2 DOOR REFRIGERATOR, Overall Size: 725X825X2050mm ht Internal and external structure in AISI 304 stainless steel with high-density expanded polyurethane insulating foam of 60 mm in thickness. External back panel and bottom in galvanized steel with IP65 digital control panel, automatic defrosting, adjustable stainless steel feet. All doors are fitted with standard locks and keys and microswitch to switch off the fan when the door is not opened. with all other necessary accessories.	1	Each		
25	Supply, erection & Commissioning VERTICAL 2 DOOR DEEP FREEZER Of ELECTROLUX make or approved equivalent make of, Overall Size:725X825X2050mm ht.(operating temperature -22/-15 degree Centigrade) Internal and external structure in AISI 304 stainless steel with high-density expanded polyurethane insulating foam of 60 mm in thickness. External back panel and bottom in galvanized steel with IP65 digital control panel, automatic defrosting, adjustable stainless steel feet. All doors are fitted with standard locks and keys and microswitch to switch off the fan when the door is not opened. with all other necessary accessories as per particular specifications.	1	Each		

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26	<p>Supply, erection &amp; Commissioning in place of, WATER COOLER, Capacity : 150 Litres per hour The Outer Body Fabricated from 21SWG AISI 304 grade Stainless Steel Sheet. The Inner wall of Water Tank fabricated in 22SWG AISI 304 grade Stainless Steel Sheet. UPRIGHTS in 50 mm dia.X 16SWG thick Stainless Steel AISI 304 grade pipe fitted with White Nylon Bullet Leg with 25mm ht. adjustment. Total height 100mm from bottom of Unit. INTERNAL FRAMEWORK in 32x32X3mm thick Stainless Steel AISI 202 Grade Angle below the Top. INSULATION 75mm thk. Polyurethane Foam, COMPRESSOR of suitable Capacity of Standard make. Other Accessories Like Copper Tubing, Circulation Fan, etc. of Standard Quality. Coolant Gas type.The outer and inner wall of Top Door Fabricated from 18SWG AISI 304 grade Stainless Steel Sheet with 40 mm Polyurethane Foam insulation. fitted on Pivotal Hinges with built in Handles &amp; Godrej brand Lock, Door Sealing lining in High Quality Isoprene Rubber. Provision of water inlet, Stainless Steel ball cock, front water collection tray with drain coupling &amp; 3 nos stainless steel push type faucets. WELDING: should be done by Argon Arc /Tig welding only. No Electrical Arc Welding should be used. All the welded edges, surfaces should be properly &amp; smoothly ground &amp; finished to remove any burr or sharp edges. FINISH: All plain &amp; pipe surfaces should be finished brush uniformly to give an aesthetically pleasant look.</p>	2	Each			
27	<p>Supply, Installation,Testing &amp; Commissioning of HOOD TYPE CONVEYOR DISH WASHING MACHINE ( 60/30 Glass baskets/Hour capacity,30/20 Dish baskets per hour ) The dishwasher shall be of IFB brand of modelPRO TECH 813 or equivalent approved brand.The body of the dish washer and entire assembly shall be with stainless steel AISI 304 grade sheet material .The dishwasher system shall have the following units: i) Single-Tank Hood type Dishwasher with double wall insulated construction . Powerful wash and spray by close spray arms with 20 litres tank capacity ,boiler capacity of 12 lts with 3litres of water consumption</p>	1	Each			

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	per hour and with thermo stop . Feed water temperature of 15 to 55Deg C, , The system shall carry a comprehensive warranty for one year from the date of completion of the contract.The contractor has to furnish a guarantee bond for performance of the machine for one year which shall be annuled automatically on completion of guarantee period. The rate includes cost of procurement,installation at required locations at all levels, testing and commissioning of the machine along with all accessories mentioned in the item above and any other parts/accessories incidental for satisfactory performance of the machine. Polypropelene Dish Basket -6 Nos. Polypropelene Glass Basket-6 Nos Polypropelene Cutlery Basket- 6Nos. Chemical set Drying module all complete.				
28	Supply, erection & Commissioning in place of, TWO SINK PRE WASH UNIT, Overall Size: 1600X700X850+100mm ht. TOP: of the Table is to be Fabricated from 16SWG Stainless Steel AISI 304 Grade Sheet, Sunk in Top with Two sides & Front to be turned down 38 mm and in 12 mm, & Back side 100 mm high back splash.turned back at 90 by 20mm & 12mm, UNDERSHELVES: 1 in No. to be Fabricated from 18SWG Stainless Steel AISI 304 Grade Sheet, All sides to be turned down 38 mm and in 12 mm. Welded at 150mm from Bottom of Unit, The bottom of the undershelf shall be provided with one longitudinal and two cross braces with 32x32X3mm thick Stainless Steel AISI 202 Grade Angle for rigidity.The cross braces shall be welded to uprights, UPRIGHTS in 38 mm dia.X 16SWG thick Stainless Steel AISI 304 grade pipe fitted with White Nylon Bullet Leg with 25mm ht. adjustment. INTERNAL FRAMEWORK in 32x32X3mm thick Stainless Steel AISI 202 Grade Angle below the Top. Sink Bowls: Size- 450x450x200mm deep Two in No. Fabricated from 16SWG Stainless Steel AISI 304 Grade Sheet, with all bottom & sides edges rounded at 38mm dia the Bowl Welded to Top securedly with removal of all holes or burr & finished properly to give a uniform look. Fitted at centre of the unit. Provision of 50 mm dia sunk with drain holes at bottom centre of the bowl with	1	Each		

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	Coupling and Gate Valve 50 mm dia. of approved make. WELDING: should be done by Argon Arc /Tig welding only. No Electrical Arc Welding should be used. All the welded edges, surfaces should be properly & smoothly ground & finished to remove any burr or sharp edges. FINISH: All plain & pipe surfaces should be finished brush / satin finish with 120 gritt (mesh) size uniformly to give an aesthetically pleasent look.				
29	Supply, Errection & Commissioning in place of, pre wash stainless steel JET SPRAY faucet of approved brand with flexible stainless steel hose for dishwasher rack landing table. Rate includes cost of all accessories brackets etc. Of mixer type, platform mounted	1	Each		
30	Supply, erection & Commissioning in place of, SOILED DISH TROUGH WITH 'CRUSH ALL', Overall Size: 1800X750X850+600+150mm ht. TOP: of the Table is to be Fabricated from 16SWG Stainless Steel AISI 304 Grade Sheet, Sunk in Top with Two sides & Front to be turned down 38 mm and in 12 mm, & Back side 150 mm high back splash.turned back at 90 by 20mm & 12mm, CROSS BRACINGS: in 25 mm dia.X 16SWG thick Stainless Steel AISI 304 grade pipe at 150mm from bottom. UPRIGHTS in 38 mm dia.X 16SWG thick Stainless Steel AISI 304 grade pipe fitted with White Nylon Bullet Leg with 25mm ht. adjustment. INTERNAL FRAMEWORK in 32x32X3mm thick Stainless Steel AISI 202 Grade Angle below the Top. Soiled Dish Trough: Size- 1400x600x200mm deep One in No. Fabricated from 16SWG Stainless Steel AISI 304 Grade Sheet, with all bottom & sides edges rounded at 38mm dia the Bowl Welded to Top securedly with removal of all holes or burr & finished properly to give a uniform look. CRUSH ALL OF 3 HP Capacity fitted to a centre chute below trough. WELDING: should be done by Argon Arc /Tig welding only. No Electrical Arc Welding should be used. All the	1	Each		

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	welded edges, surfaces should be properly & smoothly ground & finished to remove any burr or sharp edges. FINISH: All plain & pipe surfaces should be finished brush uniformly to give an aesthetically pleasant look				
31	Supply, erection & Commissioning in place of, GLASS RACK UNLOADING TABLE WITH 1 UNDERSHELF, Overall Size: 1100X550X850+100mm ht., TOP: of the Table is to be Fabricated from 16SWG Stainless Steel AISI 304 Grade Sheet, Two sides & Front to be turned down 38 mm and in 12 mm, & Back side 100 mm high back splash.turned back at 90 by 20mm & 12mm, UNDERSHELVES: 1 in No. full length and full width to be Fabricated from 18SWG Stainless Steel AISI 304 Grade Sheet, All sides to be turned down 38 mm and in 12 mm. Welded at 150mm from Bottom of Unit, with 32x32X3mm thick Stainless Steel AISI 202 Grade Angle below the shelf on two sides welded to uprights UPRIGHTS in 38 mm dia.X 16SWG thick Stainless Steel AISI 304 grade pipe fitted with White Nylon Bullet Leg with 25mm ht. adjustment. INTERNAL FRAMEWORK in 32x32X3mm thick Stainless Steel AISI 202 Grade Angle below the Top. WELDING: should be done by Argon Arc /Tig welding only. No Electrical Arc Welding should be used. All the welded edges, surfaces should be properly & smoothly ground & finished to remove any burr or sharp edges. FINISH: All plain & pipe surfaces should be finished brush uniformly to give an aesthetically pleasant look.	1	Each		
32	Supply, erection & Commissioning in place of, SOILED PLATE RECEIVING TROLLEY, Overall Size:1000X800X1350mm ht. TOP TRAY & BOTTOM DRIP TRAY Fabricated from 18SWG Stainless Steel AISI 304 Grade Sheet, all sides turned up by 50mm & then 12mm for chipping bend PUSH CART HANDLE in 30 mm dia.X 16SWG thick Stainless Steel AISI 304 grade pipe UPRIGHTS & FRAME in 25X25mm X 16SWG thick Stainless Steel AISI 304 grade pipe. TRAY RESTS in 30x30x16SWG Stainless Steel AISI 304 Grade Angle welded horizontally to uprights in 2 x 3 vertical	2	Each		

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	rows holding 18 plates per row. CASTOR WHEELS: 2 Fixed & 2 Swiveling with Brake of 125mm dia x 30mm thick rubber tyres. WELDING: should be done by Argon Arc /Tig welding only. No Electrical Arc Welding should be used. All the welded edges, surfaces should be properly & smoothly ground & finished to remove any burr or sharp edges. FINISH: All plain & pipe surfaces should be finished brush / satin finish with 120 gritt (mesh) size uniformly to give an aesthetically pleasant look.				
33	Supply, erection & Commissioning in place of, 12 X 1 LITRE CONTAINER MASALA TROLLEY, Overall Size:850X650X900mm htTOP Fabricated from 16SWG Stainless Steel AISI 304 Grade Sheet, all sides turned down by 40mm & then 12mm for chipping bend UNDERSHELVES: 1 in No. to be Fabricated from 18SWG Stainless Steel AISI 304 Grade Sheet, All sides to be turned down 38 mm and in 12 mm. Welded at 150mm from Bottom of Unit above castors. .The bottom of the undershelf shall be provided with one longitudinal and two cross braces with 32x32X3mm thick Stainless Steel AISI 202 Grade Angle for rigidity.The cross braces shall be welded to uprights PUSH CART HANDLE in 25 mm dia.X 16SWG thick Stainless Steel AISI 304 grade pipeMASALA POTS: 1/6x100mm deep GN Pans with lid 12 in nos. inserted in pockets of top in 4 x 3 configuration. the edges of pockets to be raised by 15mm from all sides to offer a lifting grip to vessels. The GN pans and lids shall be 'Anupam" or equivalent make of stainless steel AISI 304 grade of 22 swg . UPRIGHTS in 38 mm dia.X 16SWG thick Stainless Steel AISI 304 grade pipe CASTOR WHEELS: 2 Fixed & 2 Swiveling with Brake of 150mm dia x 30mm thick rubber tyres. WELDING: should be done by Argon Arc /Tig welding only. No Electrical Arc Welding should be used. All the welded edges, surfaces should be properly & smoothly ground & finished to remove any burr or sharp edges. FINISH: All plain & pipe surfaces should be finished brush uniformly to give an aesthetically pleasant look.	1	Each		

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34	<p>Supply, erection &amp; Commissioning in place of, PLATE / CUTLERY COUNTER, Overall Size: 800X525X850mm ht. TOP: of the Table is to be Fabricated from 16SWG Stainless Steel AISI 304 Grade Sheet, All sides to be turned down 38 mm and in 12 mm. UNDERSHELVES: 1 in No. to be Fabricated from 18SWG Stainless Steel AISI 304 Grade Sheet, All sides to be turned down 38 mm and in 12 mm. Welded at 150mm from Bottom of Unit, directly to Uprights. UNDERSHELVES: 1 in No. full length and full width to be Fabricated from 18SWG Stainless Steel AISI 304 Grade Sheet, All sides to be turned down 38 mm and in 12 mm. Welded at 150mm from Bottom of Unit with 32x32X3mm thick Stainless Steel AISI 202 Grade Angle below the under shelf on two sides welded to uprights INTERNAL FRAMEWORK in 32x32X3mm thick Stainless Steel AISI 202 Grade Angle below the Top. Side Cladding from 19SWG Stainless Steel AISI 304 Grade Sheet. WELDING: should be done by Argon Arc /Tig welding only. No Electrical Arc Welding should be used. All the welded edges, surfaces should be properly &amp; smoothly ground &amp; finished to remove any burr or sharp edges. FINISH: All plain &amp; pipe surfaces should be finished brush uniformly to give an aesthetically pleasant look.</p>	2	Each			
35	<p>Supply, erection &amp; Commissioning in place of, ELECTRICAL HOT BAIN MARIE WITH TRAY RAIL, Overall Size: 1800X(750+300+300)X850mm ht. TOP: of the Table is to be Fabricated from 16SWG Stainless Steel AISI 304 Grade Sheet, All sides to be turned down 38 mm and in 12 mm. Bain Marie Tank Fabricated from 16SWG Stainless Steel AISI 304 Grade Sheet with 12mm water inlet &amp; outlet. UNDERSHELVES: 1 in No.full length and full width to be Fabricated from 18SWG Stainless Steel AISI 304 Grade Sheet, All sides to be turned down 38 mm and in 12 mm. Welded at 150mm from Bottom of Unit,,The bottom of the undershelf shall be provided with one longitudinal and two cross braces with 32x32X3mm thick Stainless Steel AISI 202 Grade Angle for rigidity.The cross braces shall be welded to uprightsUPRIGHTS</p>	1	Each			



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	<p>in 38 mm dia.X 16SWG thick Stainless Steel AISI 304 grade pipe fitted with White Nylon Bullet Leg with 25mm ht. adjustment. INTERNAL FRAMEWORK in 32x32X3mm thick Stainless Steel AISI 202 Grade Angle below the Top. Tray Rail 300 mm wide Fabricated from 25x25 mm square tubes of 18SWG Stainless Steel AISI 304 Grade spaced at 75 mm c/c mounted on 25x25 mm 16 swg Stainless Steel Brackets provided at 500 mm c/c. Side Cladding from 18SWG Stainless Steel AISI 304 Grade Sheet. Seven nos. 1/1x 200 mm deep GN Pans with acrylic lids for Bain Marie.GN pans shall be 'Anupam' or equivalent make, made of 22 swg stainless steel AISI 304 grade. Two nos Electrical Water immersion heaters of 3KW each at bottom of Bain Marie Tank single phase with individual controls, indicator Lamps &amp; thermostats. The back side of the Bain Marie tank shall be fixed to the unit with SS crews for facilitating WELDING: should be done by Argon Arc /Tig welding only. No Electrical Arc Welding should be used. All the welded edges, surfaces should be properly &amp; smoothly ground &amp; finished to remove any burr or sharp edges. FINISH: All plain &amp; pipe surfaces should be finished brush uniformly to give an aesthetically pleasant look.</p>					
36	<p>Supply, erection &amp; Commissioning in place of, NEUTRAL SERVICE COUNTER WITH 1 U/S, Overall Size:given below. TOP: of the Table is to be Fabricated from 16SWG Stainless Steel AISI 304 Grade Sheet, All sides to be turned down 38 mm and in 12 mm. UNDERSHELVES: 1 in No. full length and full width to be Fabricated from 18SWG Stainless Steel AISI 304 Grade Sheet, All sides to be turned down 38 mm and in 12 mm. Welded at 150mm from Bottom of Unit, The bottom of the undershelf shall be provided with one longitudinal and two cross braces with 32x32X3mm thick Stainless Steel AISI 202 Grade Angle for rigidity.The cross braces shall be welded to uprights UPRIGHTS in 38 mm dia.X 16SWG thick Stainless Steel AISI 304 grade pipe fitted with White Nylon Bullet Leg with 25mm ht. adjustment. INTERNAL FRAMEWORK</p>					

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	in 32x32X3mm thick Stainless Steel AISI 202 Grade Angle below the Top. Tray Rail Fabricated from 18SWG Stainless Steel AISI 304 Grade Sheetwith corrugated top mounted on Stainless Steel Brackets. Side Cladding from 19SWG Stainless Steel AISI 304 Grade Sheet. WELDING: should be done by Argon Arc /Tig welding only. No Electrical Arc Welding should be used. All the welded edges, surfaces should be properly & smoothly ground & finished to remove any burr or sharp edges. FINISH: All plain & pipe surfaces should be finished brush uniformly to give an aesthetically pleasant look.				
36.1	1500X(750+300+300)X850mm ht	1	Each		
37	Supply, erection & Commissioning in place of, PLATFORM TROLLEY, Overall Size: 1200X600X850mm ht. PLATFORM Fabricated from 16SWG Stainless Steel AISI 304 Grade Sheet, INTERNAL FRAMEWORK in 32x32X3mm thick Stainless Steel AISI 202 Grade Angle below the platform. PUSH CART HANDLE in 25 mm dia.X 16SWG thick Stainless Steel AISI 304 grade pipe PIPE RAILING on Platform in 15 mm dia.X 16SWG thick Stainless Steel AISI 304 grade pipe 100mm high from all sides except front. CASTOR WHEELS: 2 Fixed & 2 Swiveling with Brake of 150mm dia x 30mm thick rubber tyres. WELDING: should be done by Argon Arc /Tig welding only. No Electrical Arc Welding should be used. All the welded edges, surfaces should be properly & smoothly ground & finished to remove any burr or sharp edges. FINISH: All plain & pipe surfaces should be finished brush / satin finish with 120 gritt (mesh) size uniformly to give an aesthetically pleasant look.	3	Each		
38	Supply, erection & Commissioning in place of, MULTI PURPOSE TWO SHELVES TROLLEY, Overall Size:1000X600X850mm ht. SHELVES two in no.. Fabricated from 18SWG Stainless Steel AISI 304 Grade Sheet, all sides turned up by 50mm & then 12mm for chipping bend PUSH CART HANDLE in 25 mm dia.X 16SWG thick Stainless Steel AISI 304 grade pipe UPRIGHTS in 40x40 mm square tube dia.X 16SWG thick Stainless Steel AISI 304 grade	4	Each		

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	CASTOR WHEELS: 2 Fixed & 2 Swiveling with Brake of 150mm dia x 30mm thick rubber tyres. WELDING: should be done by Argon Arc /Tig welding only. No Electrical Arc Welding should be used. All the welded edges, surfaces should be properly & smoothly ground & finished to remove any burr or sharp edges. FINISH: All plain & pipe surfaces should be finished brush uniformly to give an aesthetically pleasant look.					
39	Supplying and installing SS fabricated from square pipes main frame of 25x25mm square pipe with 16SWG ,gratings with 20x20 mm SS square pipe of 16SWG and support for grating with 6x6mm SS square pipe of 16SWG and With 20 gauge SS channel along with 15mm deep perforated removable SS tray drain grating with at Entrance/ where ever indicated using AISI 304 grade steel as per drawings provided and as directed by Engineer incharge.					
39.1	300x300mm	3	Each			
39.2	900x300	5	Each			
39.3	1200x300	3	Each			
40	Supply, erection & Commissioning in place of, WATER BOILER, 25 LITRE. The INNER BOILING CHAMBER Fabricated from 16SWG Stainless Steel AISI 304 Grade Sheet, PROVISION OF 12mm water inlet, 12mm outlet faucet (non leaking, heat resistant), glass water level indicator,etc OUTER CLADDING & TOP LID Fabricated from 18SWG Stainless Steel AISI 304 Grade Sheet, INSULATION with Non Sagging Glasswool, ELECTRICAL:1 X 3 KW Single Phase Water Immersion heater, On / Off Switch, Indicator Lamps, Thermostat (ambient - 110 C range)	1	Each			
41	Supply, erection & Commissioning in place of, INSECT KILLERS, TWIN TUBE The unit shall be electrically operated and shall be of Pest Control (I) or equivalent make with power/electric grid (fly zapper /bug zapper) .The transformer shall be 3 to 4 KVA. Shall have 360 degrees attraction when suspended from ceilings.The unit shall be fitted with a UV light reflecting sides in the stainless steel panels behind the tubes.The power/electric grid shall be of Mild	10	Each			

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	Steel with Zinc Coating.The outer casing grill shall be with PVC coated mild steel rods.Large removable tray for easy cleaning.2 nos UV tubes of Philips or equivalent brand of 600 mm long shall be fitted The unit shall be Ceiling or Wall Mounted.				
42	Supply, erection & Commissioning in place of Air Curtain with over length of 1200 mm Power: High: 510, Low: 480 Speed (m/s): High: 20, Low: 16 Air Flow (m3/h): High: 3000, Low: 2400 Noise (dB): High: 58, Low: 53 and shall be of GEEKON or equivalent make approved by the Engineer in Charge	1	Each		
43	Supplying and installing Corner Guard Stainless steel fabricated from 20SWG Stainless steel angle overall height of 2400 mm,to be fixed on edges of walls with hold fasts and 85 mm long SS flats ,outer edge to be round smoothed ,as per drawings provided and as directed by Engineer In-Charge.	19	Each		
44	Supply, erection & Commissioning in place of, CHARCOAL EARTHEN POT TANDOOR WITH SS CLADDING,Overall Size:900X900X900mm htOuter Body of the Unit fabricated from 16SWG Stainless Steel AISI 304 Grade Sheet, Inner Lining of the Unit fabricated from 18SWG Stainless Steel AISI 304 Grade Sheet, Top & AllSides insulated with non sagging mineral Glasswool, 75mm thick. Internal Framework in 35x35x16SWG thick Stainless Steel AISI 304 Grade Angle, Heavy duty charcoal heated commercial clay Tandoor with 500mm dia top mouth of capacity 25-30 rotis, properly seasoned.Space between Tandoor Pot & side Box properly packed with glasss pices, salt, brickbats, etc. Top 15mm thick Granite piece with 500mm opening for pot & a Mild Steel Ring Fixed. Provision of Lid with Handle. ash removal window at front bottom. CASTOR WHEELS: 2 Fixed & 2 Swiveling with Brake of 125mm dia x 30mm thick rubber tyres.	1	Each		
<b>LPG items</b>					
1	CYLINDER CABINET,STAGGERED, 8 X 2 CYLINDERS IN M. S.	1	Each		

**SCHOOL OF PLANNING AND ARCHITECTURE:: VIJAYAWADA**  
**(An Institute of National Importance, Ministry of HRD, Govt. of India)**  
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2	MANIFOLD, 8 X 2.	2	Each		
3	SINGLE LOCK ADAPTORS	2	Each		
4	CYLINDER PIGTAIL, 24".	17	Each		
5	NON RETURN VALVE, 1/2 MECV X 1/2 FECV	16	Each		
6	TWO BOTTLE CONNECTOR, 36" BEND.	2	Each		
7	REGULATOR, Ist STAGE REG -9. UNITED.	1	Each		
8	REGULATOR, II nd STAGE REG -4. UNITED.	1	Each		
9	ADAPTOR, 1/4 BSPTM X 1/2 MECV.	16	Each		
10	MANIFOLD / MAIN LINE / 'F' VALVE,	2	Each		
11	CYLINDER Copper PIGTAIL,36".	12	Each		
12	M.S., 1/2" I.D., `C' CLASS PIPE	30	Mtrs		
13	M.S., 1" I.D., `C' CLASS PIPE	15	Mtrs		
14	UNION/ LOOSE PIN SETS, 1/2 MECV.	4	Each		
15	UNION/ LOOSE PIN SETS, 1 MECV.	4	Each		
16	M.S. ADAPTORS, 3/8 BSPTF	2	Each		
17	NEEDLE CONTROL VALVES, 3/8B SPTMX 3/8Cu.	12	Each		
18	Burner Flexible Pipe, 3/6 Cu Bullnose X`3 /8 Cu Bullnose, 1200mm Long 'Suraksha' brand or equivalent approved brand	30	Mtrs		
19	PIPELINE, WELIDING/BENDING/ ERRECTION/PAINTING/ TESTING ETC.(LABOUR CHARGES). 1/2"LINE.	30	Mtrs		
20	PIPELINE, WELIDING/BENDING/ ERRECTION/PAINTING/ TESTING ETC.(LABOUR CHARGES). 1/2" LINE.	15	Mtrs		
<b>Total (In Figures and Words)</b>					

Place:

Date:

Seal & Signature of the Tenderer

Address.....

Phone No. ....