



**NATIONAL INSTITUTE OF TECHNOLOGY
ROURKELA-769008 (ODISHA)**

Sealed Tenders are invited from reputed civil contractors for Tender Notice No - CT-15/2013-14 and from leading Manufacturers/suppliers of Kitchen equipment for Halls of Residence, Vide Tender Notice No. CT-18, 2013-14 and CT-19/2013-14 for the following tenders in NIT Rourkela.

(Construction of Common Dining Hall Including Internal Electrical Works for KMS Hall of Residence, in NIT, Rourkela).

TENDER NOTICE NO – CT-15/2013-14. Date: 09.11.2013

(Supply, Installation and commissioning of Kitchen Equipment for Vikram Sarabhai & C.V. Raman Hall of Residence, in NIT, Rourkela)

TENDER NOTICE NO CT-18/2013-14 Date: 09.11.2013

(Supply, Installation and commissioning of Kitchen Equipment for GD Birla – Vishveshwarya Hall & D. Ambani-M Swaminathan Hall of Residence in NIT, Rourkela)

TENDER NOTICE NO CT-19/2013-14 Date: 09.11.2013

Last date & time of submission for all: **05/12/2013 by 3.00 PM**

Open on : **05/12/2013 by 3.30 PM**

For details, visit www.nitrkl.ac.in

Contact: Prof. S. K. Das, PIC (Civil Construction)

Phone:0661-2462315, **Email:** sarat@nitrkl.ac.in

**Sd/-
REGISTRAR**



NATIONAL INSTITUTE OF TECHNOLOGY ROURKELA-769008, ODISHA

(TENDER NOTICE NO CT-18/2013-14) (SUPPLY, INSTALLATION AND COMMISSIONING OF KITCHEN EQUIPMENT FOR VIKRAM SARABHAI HALL & C.V. RAMAN HALL OF RESIDENCE)

Sealed tenders are invited from leading Manufacturers/suppliers of kitchen equipment for above mentioned Hostels as per size, specifications and bill of quantities enclosed. The quality of work shall be of superior type conforming to relevant IS standards.

Estimated Cost:- Rs. 156 Lakh (Approx)

Earnest money Deposit:Rs. 3.20 Lakh

Time of Completion : 6 Months

1. Eligibility Criteria:

Firms who fulfill the following requirements shall be eligible to apply. Joint ventures are not accepted.

- i. Should have had average annual turnover of Rs. 1.5 Crores during last three financial years for supply, installation and commissioning of similar kitchen equipment (copy of certificates from CA to be submitted).
 - ii. The firms should have supplied similar kitchen equipment to Hostel of Institutes of about 700 persons.
 - iii. The firm should not have been black listed at any time. To this effect, an undertaking is to be given in the prescribed format.
2. Sealed tenders on item rate basis are invited in the prescribed form for providing, installation and commissioning of Kitchen equipment of the Hostels.
3. The tender must accompany the earnest money of Rs. 3.20 Lakhs. in the form of Demand Draft of Nationalized Bank (payable at Rourkela in favour of Director, National Institute of Technology Rourkela). A part of earnest money is acceptable in the form of bank guarantee also. In such case, Rs. 1.60 Lakhs will have to be deposited in the shape of Demand Draft and balance amount in shape of Bank Guarantee of any Nationalized Bank having branch at Rourkela. The intending bidders have to fill in all the details such as Banker's name,

Demand Draft, Bank Guarantee number, amount and date. The Bank Guarantee submitted as a part of Earnest Money shall be valid for a period of six months or more from the date of submission of the tender.

4. The tender papers may be downloaded from NIT website (i.e. www.nitrkl.ac.in). However, payment of Rs.1, 000.00 (nonrefundable) towards price of Tender documents plus Rs. 50.00 towards VAT in the form of separate Bank Drafts of Nationalized Bank payable at Rourkela in favour of Director, National Institute of Technology, Rourkela shall be submitted with EMD.
5. Interested reputed Manufacturer/suppliers who are financially sound and who have supplied similar type of Kitchen Equipment to Hostels of Academic Institution/Star Hotel etc and who meets our eligibility criteria are requested to apply with credentials/information/work orders/testimonials.
6. The submission of bids by the supplier should be addressed to the Registrar, National Institute of Technology, Rourkela in three separate sealed Envelopes enclosed in one cover envelope superscribing on the top of the envelope:

**1. SUPPLY, INSTALLATION AND COMMISSIONING OF
KITCHEN EQUIPMENT FOR NIT, HALLS OF
RESIDENCE**

2. (TENDER NOTICE NO- CT-18/2013-14)

3. DUE DATE: 05.12.2013.UP TO 3.00 PM

Envelope No-I: - To contain Bank Drafts towards: (i) Earnest Money deposit and (ii) Tender Document Price and VAT.

Envelope No-II: - To contain techno commercial bids, BOQ and other Tender documents (General Conditions of Contract, special conditions specifications etc.) attached to the tender signed and stamped on all pages confirming acceptance.

Envelope No-III: -The envelope marked as "Price Bid" shall contain the rate and amount for individual schedule items of work with total value with signature in each page of schedule. In case of partly quoted or conditional rates, the tender will be rejected.

7. (a) **Validity of Tender** : -120 days
(b) **Last date of Submission** : -05.12.2013.Up to 03.00 PM
(c) **Date & Time Opening of Tender:** - 05.12.2013 at 3.30 P.M

8. Tenderers must include in their rates, sales tax including VAT, excise duty, octroi, and sales tax on works contract and any other tax & duty or other levy by the central and state government or any other tax & duty or other levy to be

levied in future by the central government or state government or local authority if applicable except service tax.

9. The tender price quoted by a tenderer shall be kept strictly confidential by them and shall not be divulged to any other party even approximately before the time limit for delivery of tender. The only exception be for obtaining an insurance quotation, you may give your insurance company or agent any essential information they ask for, so long as it is done in strict confidence. No information about others tender price should be obtained and no arrangement with anyone else should be made whether or not he submitted the tender.

10. All products to be supplied to the firm must be of superior quality of material, with very good finish and workmanship. Decision of the institute shall be final & binding. Rejected material should be taken back without argument.

11. Details including our prescribed format for prequalification, BOQ, General Conditions and Special Conditions of Contracts etc. are available in our website at <http://www.nitrkl.ac.in/tender.asp>

REGISTRAR

National Institute of Technology

Rourkela-769008 (Orissa)

Fax: 0661-2472022

Ph No: 0661-2472021

CHECK LIST FOR PRE-QUALIFICATION

Forms to be filled in properly.

1. Form-A: This form (check list)
2. Form-B: Letter of Transmittal
3. Form-C
4. Form-D
5. Photocopy of documents to be attached.
 - a) Valid license
 - b) Work orders executed of last 3 years.
 - c) Vat Clearance Certificate & PAN Card
 - d) Performance report from authority/officer having rank not below Executive Engineer with specific mention about the project components, scheduled and actual time of completion, final project value etc. to be submitted.

(Signature of the Agency)

PRE-QUALIFICATION INFORMATION

LETTER OF TRANSMITTAL

(To be typed on the Agency's Letterhead)

To

THE VISITING PROFESSOR (CIVIL)
NATIONAL INSTITUTE OF TECHNOLOGY
ROURKELA-769008.

SUB: SUPPLY, INSTALLATION AND COMMISSIONING OF KITCHEN EQUIPMENT FOR NIT, HALLS OF RESIDENCE.

Sir,

Having examined the details of pre-qualification document, I hereby submit the pre-qualification documents and other relevant information.

1. I hereby certify that all the statements made and information supplied in the enclosed forms A to D and accompanying statements are true and correct to the best of my knowledge. I understand that if any information found incorrect, the application is liable to be cancelled.
2. I have furnished all information and details necessary for pre-qualification and have no further pertinent information to supply.
3. I certify that my firm is not **blacklisted/ banned** from business by any organization.
4. I hereby accept the rules and procedures of the Institute for pre-qualification of Contractor and agree that the Institute has the right to accept or reject any application without assigning a reason thereto.

(Signature of the Agency)

FORM-C/18

NATIONAL INSTITUTE OF TECHNOLOGY, ROURKELA

APPLICATION FOR PRE-QUALIFICATION

1. **Name of Agency/Firm :-** _____
2. **Address:-** _____
3. **FAX/Telephone Number: -** _____
4. **Special Qualification for technical Person**

5. **Details of Registration**_____
6. **Volume of business in last three financial years.**
2010-11 Rs _____
2011-12 Rs _____
2012-13 Rs _____
7. **Important jobs executed in NIT Rourkela including specifications, materials used etc.**
8. **Field of Specialization.**
9. **Valid Income Tax clearance certificate (ITCC).**
10. **Any other information regarding technical capability.**

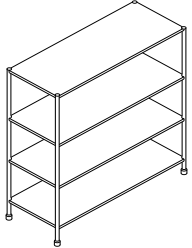




(Signature of the Agency)



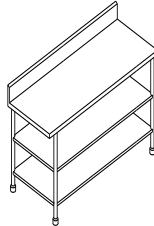
Annexure to application for pre-qualification

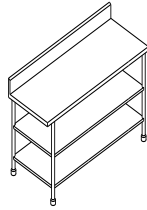
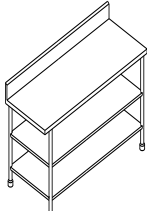
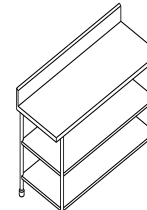
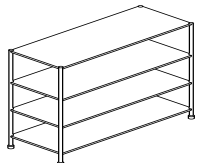
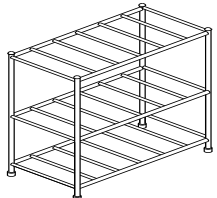

WORKS COMPLETED AND IN PROGRESS DURING THE LAST 3 YEARS (INCLUDING ALL WORKS AWARDED)

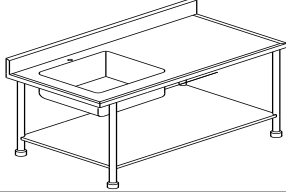
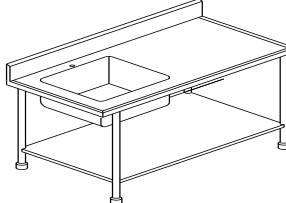
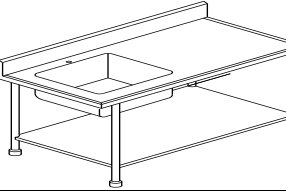
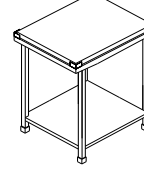

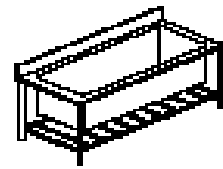

{ADD ADDITIONAL SHEETS, IF NECESSARY}




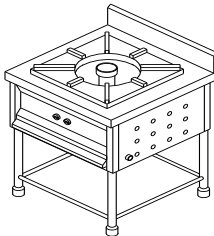
	Name of Work & Agreement No	Date of start	<u>Date of Completion</u>		Tendered Cost	Complete address of the Authority for whom the Work was done
			<i>Stipulated</i>	<i>Actual</i>		

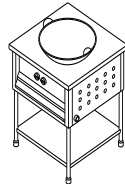
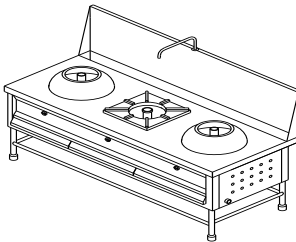
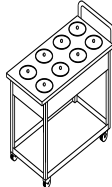
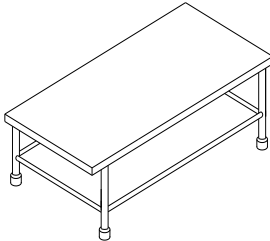
Name of Work :- Kitchen Equipment Schedule for Vikram Sarabhai Hall & C.V. Raman Hall.												
Sl. No.	Item					Unit	Quantity		Total Quantity	Rate	Amount	Remark
	Code	Equipment	Specifications	Reference Image	Size LxBxH		Vikram Sarabha Hall	C.V. Raman Residence				
1	ST 01 to 08/ ST 05 to 14/ ST 04 to10/ NV 08	SS Storage Rack	Unit to be provided with four (4) shelves, starting at 150 mm and then at equidistant, constructed with 38 mm dia SS pipe of 16 SWG (304). 35X35X3 mm thick SS angle frame under support. 18 SWG (304) SS shelf double beaded on all sides. Four numbers SS legs with adjustable bullet feet.		1200x450x1800	No	8	10	18			Custom Fabricated
2	ST 09/10/11/12 / ST 02/03/04	Plastic Pallets	Heavy duty plastic pallets / Make Nilkamal/Supreme/Brite.		1200x1200x100	No	4	3	7			Indian Bought Out
3	ST 11-16 / ST-14 / ST-15 / ST 11-14	PLASTIC STORAGE BINS	Capacity 200kgs / 100 ltrs. Heavy Duty Food grade plastic bins with lids from reputed manufacturers such as Sintex / Neelkamal / Brite			No	6	6	12			Indian Bought Out
4	NV 08 / NV 02	PLASTIC DUST BINS	Plastic heavy duty dust bin with removable lid and built in wheels / 100 ltr capacity - maximum height of 750 mm / base dia 415 mm. Make - Sintex/Neelkamal/Brite.			No	9	9	18			Indian Bought Out
5	ST 17/ST 13/ ST 01/ST 03	ELECTRONIC WEIGHING SCALE	Capacity Of 300 kgs. Unit should have SS Platform of size 750 x 750 mm with a digital instrument panel connected on a vertical stand with a backlit display (Minimum calibration 50 grams). It should be provided with a 5 amp. power cord of minimum 1½ meter length having a battery backup. Brands - ISI specified brand / approved by weights and Measures department.			No	1	1	2			Indian Bought Out
6	NV 01/ NV 06/	4 DOOR VERTICAL FREEZER (1200 ltrs)	The unit shall be of full SS construction with the interior and exterior of SWG 20 SS 304. The inner wall to be suitably insulated with 2 inch PUF. Should have 4 doors, constructed of SWG 18 SS 304. The doors to be provided with locking device with adjustable wings inside. SS wire meshed shelves to be provided. It should be fitted with a digital temperature indicator, control switches and indicator lights. An isolator switch on the front panel near the digital thermometer to be provided for ON / OFF of the refrigerator. The equipment shall be able to maintain temperature range of -15 C to - 20 C. The unit should be provided with a removable SS drip tray. The compressor unit to be mounted on top and should be of Kirloskar / Tecumshah make. completely automatic defrosting and automatic evaporation of defrost water / doors in 304 SS / 150 mm high adjustable feet / rounded internal corners and easily removable runners and grids / The refrigerated compartment designed to 2/1 GN pans / Suitable to operate in ambient temperature up to +43°C / Forced air circulation for rapid cooling and an even temperature distribution / HCFC, CFC and HFC free insulation (Cyclopentane), HCFC and CFC free refrigerant gas (R404a) / High-density expanded polyurethane insulating foam, 60 mm in thickness, with cyclopentane injection / Self closing doors with magnetic door seal / all doors fitted with locks and keys. Four SS legs of 50 mm dia, SWG 16 with adjustable bullet feet at 150 mm from FFL.		1200x675x2100	No	1	1	2			Refrigeration - Indian

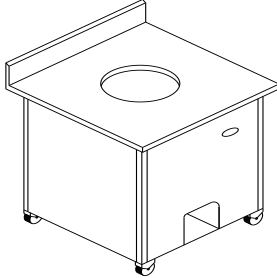
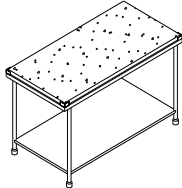
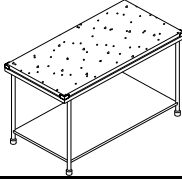
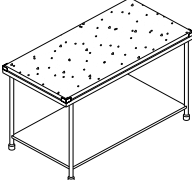
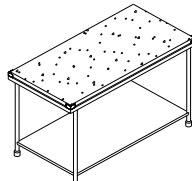

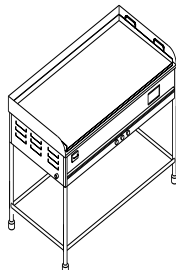
Sl. No.	Item					Unit	Quantity		Total Quantity	Rate	Amount	Remark
	Code	Equipment	Specifications	Reference Image	Size LxBxH		Vikram Sarabha Hall	C.V. Raman Residence				
7	NV 07 / MK-46/47 / MK-02/05 / MK 05/06	4 DOOR VERTICAL REFRIGERATOR (1200 ltrs)	The unit shall be of full SS construction with the interior and exterior of SWG 20 SS 304. The inner wall to be suitably insulated with 2 inch PUF. Should have 4 doors, constructed of SWG 18 SS 304. The doors to be provided with locking device with adjustable wings inside. SS wire meshed shelves to be provided. It should be fitted with a digital temperature indicator, control switches and indicator lights. An isolator switch on the front panel near the digital thermometer to be provided for ON / OFF of the refrigerator. The equipment shall be able to maintain temperature range of + 2 C to + 6 C. The unit should be provided with a removable SS drip tray. The compressor unit to be mounted on top and should be of Kirloskar / Tecumshah make. Completely automatic defrosting and automatic evaporation of defrost water / 150 mm high adjustable feet / rounded internal corners and easily removable runners and grids / The refrigerated compartment designed to 2/1 GN pans / Suitable to operate in ambient temperature up to +43°C / Forced air circulation for rapid cooling and an even temperature distribution / HCFC, CFC and HFC free insulation (Cyclopentane), HCFC and CFC free refrigerant gas (R404a) / High-density expanded polyurethane insulating foam, 60 mm in thickness, with cyclopentane injection / Self closing doors with magnetic door seal / Four SS legs of 50 mm dia, SWG 16 with adjustable bullet feet at 150 mm from FFL.		1200X675X2100	No	3	2	5			Refrigeration - Indian
8	MK 06	2 DOOR VERTICAL REFRIGERATOR	The unit shall be of full SS construction with the interior and exterior of SWG 20 SS 304. The inner wall to be suitably insulated with 2 inch PUF. Should have 2 doors, constructed of SWG 18 SS 304. The doors to be provided with locking device with adjustable wings inside. SS wire meshed shelves to be provided. It should be fitted with a digital temperature indicator, control switches and indicator lights. An isolator switch on the front panel near the digital thermometer to be provided for ON / OFF of the refrigerator. The equipment shall be able to maintain temperature range of + 2 C to + 6 C. The unit should be provided with a removable SS drip tray. The compressor unit to be mounted on top and should be of Kirloskar / Tecumshah make. Completely automatic defrosting and automatic evaporation of defrost water / 150 mm high adjustable feet / rounded internal corners and easily removable runners and grids / The refrigerated compartment designed to 2/1 GN pans / Suitable to operate in ambient temperature up to +43°C / Forced air circulation for rapid cooling and an even temperature distribution / HCFC, CFC and HFC free insulation (Cyclopentane), HCFC and CFC free refrigerant gas (R404a) / High-density expanded polyurethane insulating foam, 60 mm in thickness, with cyclopentane injection / Self closing doors with magnetic door seal / Four SS legs of 50 mm dia, SWG 16 with adjustable bullet feet at 150 mm from FFL.		675x675x2100	No		1	1			Refrigeration - Indian
9	NV 02/ NV 05/ MK 01/04/07/ MK 49/50/ MK 56 / MK 31/32 / VP 03 / VP 08 / MK 04 / MK 10/11	SS WORK TABLE WITH 2 UNDERSHELVES	Constructed of 16 SWG (304) SS top, double beaded on all sides and secured to 35X35X3 mm SS angle welded framework. Top sheet to be sound deadend. One. 18 SWG (304) SS bottom shelf, starting at 150 mm height and the next shelf at equidistance. Refer drawing for raised splash back. Four numbers SS tubular legs with adjustable bullet feet.		1200x600x850+150	No	2	5	7			Custom Fabricated

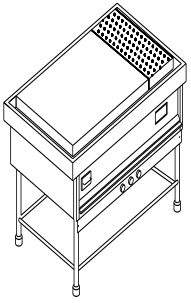
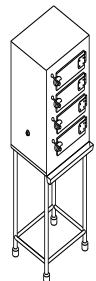
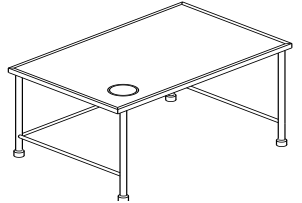
Sl. No.	Item					Unit	Quantity		Total Quantity	Rate	Amount	Remark
	Code	Equipment	Specifications	Reference Image	Size LxBxH		Vikram Sarabha Hall	C.V. Raman Residence				
10	VP 03 / 04 / 05 / MK 19/20 / NV 01/04 / VP 06/07/08 / MK 03 / NV 06 / VP 04/06 / NV 05 /	SS WORK TABLE WITH 2 UNDERSHELVES	Constructed of 16 SWG (304) SS top, double beaded on all sides and secured to 35X35X3 mm SS angle welded framework. Top sheet to be sound deadend. One. 18 SWG (304) SS bottom shelf, starting at 150 mm height and the next shelf at equidistance. Refer drawing for raised splash back. Four numbers SS tubular legs with adjustable bullet feet.		1500X600X850+150	No	6	4	10			Custom Fabricated
11	VP 04 / 05	SS WORK TABLE WITH 2 UNDERSHELVES	Constructed of 16 SWG (304) SS top, double beaded on all sides and secured to 35X35X3 mm SS angle welded framework. Top sheet to be sound deadend. One. 18 SWG (304) SS bottom shelf, starting at 150 mm height and the next shelf at equidistance. Refer drawing for raised splash back. Four numbers SS tubular legs with adjustable bullet feet.		1400X600X850+150	No	2		2			Custom Fabricated
12	MK 23 / 24 MK 36/39	SS WORK TABLE WITH 2 UNDERSHELVES	Constructed of 16 SWG (304) SS top, double beaded on all sides and secured to 35X35X3 mm SS angle welded framework. Top sheet to be sound deadend. One. 18 SWG (304) SS bottom shelf, starting at 150 mm height and the next shelf at equidistance. Four numbers SS tubular legs with adjustable bullet feet.		1200X600X850	No		4	4			Custom Fabricated
13	MK 34 / 36 / 39 / 41	SS PICK UP TABLE WITH ONE UNDERSHELF	16 SWG (304) SS top, double beaded on all sides. SS tubular legs with nylon bullets. One undershelf at 150 mm from FFL.		900X750X850	No	4		4			Custom Fabricated
14	VP 05	SS WORK TABLE WITH 2 UNDERSHELVES	Constructed of 16 SWG (304) SS top, double beaded on all sides and secured to 35X35X3 mm SS angle welded framework. Top sheet to be sound deadend. One. 18 SWG (304) SS bottom shelf, starting at 150 mm height and the next shelf at equidistance. Refer drawing for raised splash back. Four numbers SS tubular legs with adjustable bullet feet.		1800X600X850+150	No		1	1			Custom Fabricated
15	DW 01 / DW 02 / DW 13 / CSs 01 to 07 / DW 07 / 08 / 09 / 10	CLEAN DISH RACK	Unit to be provided with four (4) shelves, starting at 150 mm and then at equidistant, constructed with 38 mm dia SS pipe of 16 SWG (304). 35X35X3 mm thick SS angle frame under support. 18 SWG (304) SS shelf double beaded on all sides. Four numbers SS legs with adjustable bullet feet.		1200X600X1800	No	12	6	18			Custom Fabricated
16	PW 01 to 03	POT RACKS	Unit to be provided with three (3) shelves, starting at 150 mm and then at equidistant, The uprights should be made of 32 mm dia SWG 16 SS 304 pipe. The top sides of the uprights should be sealed and properly rounded. Shelves should be constructed with 25 mm dia SS pipe of 16 SWG (304) with internal grid of 19 mm dia SS pipe at 100 mm spacing. Four numbers, 38 mm SWG 16 (304) SS tubular legs with adjustable bullet feet.		1200x600x1500	No	3	3	6			Custom Fabricated
17	PW 04 / 05	LOW PLATFORM TABLE FOR POT WASH	The unit should be made of SS Square pipe structure of size 30 x 30 mm x 16 swg SS 304 with adjustable bullet feet and supporting cross bars at every 100 mm space.		1200x600x450	No	2	1	3			Custom Fabricated

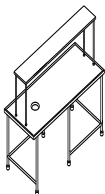

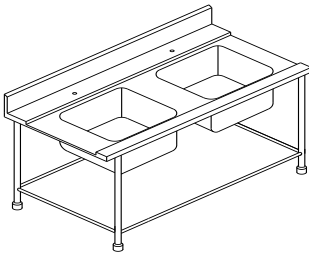
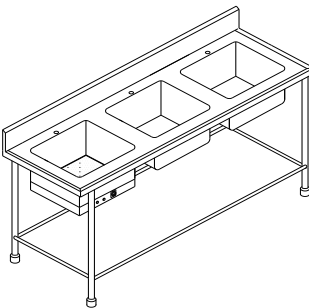
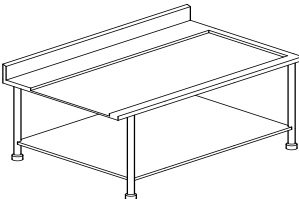
Sl. No.	Item					Unit	Quantity		Total Quantity	Rate	Amount	Remark
	Code	Equipment	Specifications	Reference Image	Size LxBxH		Vikram Sarabha Hall	C.V. Raman Residence				
18	NV 02 / 03 / MK 01/04 / NV 03/04 / VP 06 / MK 18/21 / NV 04/05	SS WORK TABLE WITH SINK	SS top, double beaded on all sides and secured to 35X35X3 mm SS angle welded framework. Sink size 450X450X250 deep integral with top sheet. (check the drawing for side) with 38mm dia drain coupling, hot and cold water faucet, deck mounted.18 SWG (304) SS bottom shelf starting at 150 mm. Four numbers, SS tubular legs with adjustable bullet feet. Back splash of 150 mm on the rear.		1500X600X850+150	No	4	2	6			Custom Fabricated
19	WP 06 / MK 52/53 / VP 07 / MK 01/07 / MK 51/ MK 54 / MK 13 / NV 04/ WP 07	SS WORK TABLE WITH SINK	SS top, double beaded on all sides and secured to 35X35X3 mm SS angle welded framework. Sink size 450X450X250 deep integral with top sheet. (check the drawing for side) with 38mm dia drain coupling, hot and cold water faucet, deck mounted.18 SWG (304) SS bottom shelf starting at 150 mm. Four numbers, SS tubular legs with adjustable bullet feet. Back splash of 150 mm on the rear.		1200X600X850+150	No	2	3	5			Custom Fabricated
20	MK 33 / MK 47	SS WORK TABLE WITH SINK	SS top, double beaded on all sides and secured to 35X35X3 mm SS angle welded framework. Sink size 450X450X250 deep integral with top sheet. (check the drawing for side) with 38mm dia drain coupling, hot and cold water faucet, deck mounted.18 SWG (304) SS bottom shelf starting at 150 mm. Four numbers, SS tubular legs with adjustable bullet feet. Back splash of 150 mm on the rear.		900X600X850+150	No	2		2			Custom Fabricated
21	NV 05 / NV 03 / NV 07	BUTCHERS BLOCK / CHOPPING BOARD ON STAND	Chopping board stand should be made of 38 mm dia SWG 16 SS 304 pipe / legs with adjustable bullet feet. The top frame should be made of 25 x 25 x 3 mm thick SS angle frame with proper support and cross bracing. A removable Virgin hard polymer block of 2 inch thick. Provide a SS knife pocket on one side.		600x600x850	No	1	1	2			Custom Fabricated
22	VP 01 / 02	POTATO ONION BIN	Unit of 35X35X3 mm SS angle with 18 G SS mesh constuction. SS bin cover with handle and a sliding door at the bottom front for the stored item to be taken out. Four numbers heavy duty castors of 150 mm dia with rubber wheels. Two of the wheels with locking arrangement.		700x700x1000	No	2	2	4			
23	VP 03 / VP 08	VEG WASH SINK	Sink bowl size: 1000 x 450 x 375 mm deep. The bottom should have a shelf similar to that of SS Pot Rack - with SS pipes. Provision to be made to mount the Table Top Jet Spray on the sink. Sink bowl to be provided with 38mm dia BSP drain coupling, hot and cold water faucet, deck mounted. Splash back 150 mm on rear / side.(AS PER DRAWING). Four numbers SS tubular legs with adjustable bullet feet.		1200X600X850+150	No	1	1	2			Custom Fabricated
24		WALK IN COLD ROOM	Unit Should be made from 60mm thick prefab rigid PUF sandwich panels with 0.60 mm thick pre-coated G.I sheet outside and 0.50 mm thick SS 304 inside having the density of 40 kg/m3. The flooring to be Aluminium checkered plate. The cold room should be with ceiling and wall panels interlocked through a cam lock mechanism. The Condensing unit should be fitted with a hermetic compressor. The cooling unit should be split type & air cooled. It should be supplied with a swing type and flush large insulated door having magnetic gasket, safety latch, lock and heavy duty hinges. The room should maintain a temperature of +2 0 C to +8 0 C. An emergency switch or alarm should be provided inside. The cold room should be provided with all accessories like light, light switch, temperature indicator and alarm. The refrigerant used should be R 22 or R 134a. The unit should be as supplied by Rinac / Blue Star / Continental.		3000X2400X2400	No	1		1			Refrigeration - Indian


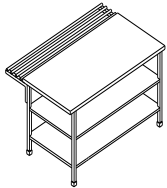
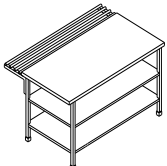
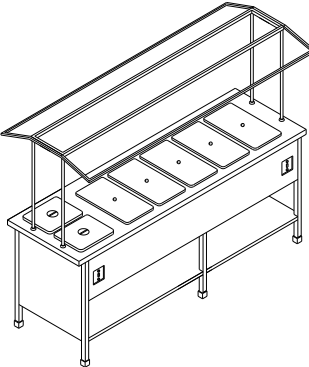
Sl. No.	Item					Unit	Quantity		Total Quantity	Rate	Amount	Remark
	Code	Equipment	Specifications	Reference Image	Size LxBxH		Vikram Sarabha Hall	C.V. Raman Residence				
25		COLD ROOM RACKS - SS PERFORATED RACKS	The shelves should be made of SWG 18 SS 304 sheet. The perforated holes to be 15 mm dia without sharp edges. The bottom shelf should be at 150 mm from FFL. Each rack should have 4 shelves placed equidistant from each and reinforced with 25 x 100 x 25 mm inverted SWG 18 SS channel. Uprights to be made of 38 mm dia SWG 16 SS 304 pipes. Four legs with adjustable bullet feet. (The racks to be fabricated after site measurements)		1200X450X1800	No	6		6			Custom Fabricated
26	WP 01 / 02 / 03	WET GRINDER	Capacity 10 ltrs (02) / 07 ltr (01). Tilting model with complete SS construction including the lid and the casing. Brand Rishab - Trident or equivalent			No	3	2	5			Indian Bought Out
27	WP 04	PULVERISER	Body made of SWG 18, 35 X 35 X 3 mm SS angle framework. All food contact parts to be of SS 304. Vertical upright pipes of 16 SWG with adjustable bullets. Top tray of 16 SWG 16"X 18"X 4"height with 1"slope on the front side. Electric motor of 5 HP. 415 V , 3 phase . Electric panel to consist of overload relay with start / stop switch. The machine should be suitable for Wet-Pulpy and Dry crushing. The Wet cum dry grinder should be able to grind Spices, green chillies, fresh ginger, garlic, fresh fruits, fruit pulp, vegetables.			No	1		1			Indian Bought Out
28	WP 05	POTATO PEELER	Capacity 10 kg. The unit should be of vertical design. Unit should be mounted on a stand made of SWG 16 SS 304 with suitable arrangements for accommodating the drain pipe of the peeler. The stand should be fitted with a dirt collection tray of removable type below the peeler. The body should be constructed of SWG 16 SS 304. The peeling disk should be separate for onion and potato. The abrasive on the disk should be fiberglass carborundum and the disk should be easily removable for cleaning and maintenance. Unit should be provided with a water inlet. 1.5 HP motor for 3 phase operation. Built in safety mechanism – the machine should stop if the door is opened.			No	1		1			Indian Bought Out
29	MK 07 / 08 / 10 / 11 / 19 / 20 / 22 / 23 / MK 12 / 13 / 14 / 16 / 17 / 21 / MK 53 / MK 25 / 26 / 35 / 36 / 38 / 39	HIGH PRESSURE SINGLE BURNER RANGE	SWG 18 (304) SS on both sides with air vents. SWG 16 (304) SS on top with front turned down and cut out to receive one gratings. 35X35X3 mm SS angular framework fully welded. One 400X400 heavy duty cast iron removable vessel rest. One T-35 burner (72000 BTU per hour) with pilot and controls. One, SWG 20 (304) SS spillage tray with SS strip handle. Manifold - ½ inch dia provided on both sides. Four (4) nos SS legs with adjustable feet. No splash back.		750X750X600	No	10	8	18			Custom Fabricated
30	MK 09 / 12 / 15 / 16 / 18 / 21 / MK 24 / 27 / 34 / 37	SS SIDE TABLE - LOW HEIGHT	16 SWG (304) SS top, double beeded on all sides. SS tubular legs with nylon bullets.		1200X750X600	No	6		6			Custom Fabricated
31	MK 15 / 18 / 19 / 22	SS SIDE TABLES - LOW HEIGHT	16 SWG (304) SS top, double beeded on all sides. SS tubular legs with nylon bullets.		900X750X600	No		4	4			Custom Fabricated

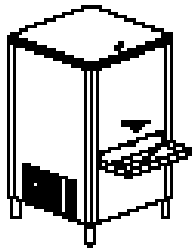


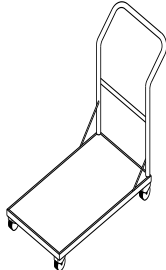
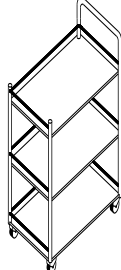
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	Code	Equipment	Specifications	Reference Image	Size LxBxH		Vikram Sarabha Hall	C.V. Raman Residence				
32	MK 13 / 14 / MK 24 / 25 / 28 / 29	BULK FRYER	Body to be constructed of SWG 18 (304) SS on both sides with air vents and front with control panel. 35X35X3 mm SS angular framework fully welded. SWG 16 (304) SS on top with front turned down and cut out to receive 1 fryer bowl and a oil drip hole. Provide a receptacle for oil drip from top sheet. One nos. SS frier bowl. One T-50 burner (1,00,000 btu/hr). Manifold - ½ inch dia provided on both sides. SWG 20 (304) SS spillage tray with SS strip handle. 16 SWG , 38mm dia SS pipe legs with adjustable bullet feet.		750x750x750	No	2	2	4			Custom Fabricated
33	MK 17 / MK 33	CHINESE RANGE	SWG 18 (304) SS on both sides with air vents.SWG 16 (304) SS on top with front turned down and cut out to receive three gratings. 35X35X35 SS angular framework fully welded.One no. 400X400 heavy duty cast iron removable vessel rest and two nos. 425 mm dia heavy duty cast iron vessel rest. Three (3) nos. T-35 burners with individual pilot and controls. Three (3) nos, SWG 20 (304) SS spillage tray with SS strip handle. Manifold -½ inch dia common for all burners provided on both sides. Four (4) nos SS legs with adjustable feet.		1500x750x850+600	No	1		1			Custom Fabricated
34	MK 18a	MASALA TROLLEY	The unit should be like a table trolley designed with SWG 16 (304) SS top, double beaded on all sides, secured to SS angle frame, with cut out to fit in inserts of 8 round containers to hold spices. Containers should of SS 304, removable of size 150 mm dia and 150 mm deep with individual lids. Unit to be fitted with heavy duty noise free castors of 100 mm dia with two castors having locking facility. The trolley should have 25 mm dia SWG 16 SSS 304 pipe handles on both sides. One undershelf of SWG 18 SSS 304 at the bottom at 150 mm from FFL.		900X600X800	No	2	2	4			Custom Fabricated
35	MK 25 / MK 26 to 28 / MK 40 / 41 / 42 / 43	SS LOW PLATFORM TABLE - BULK FOOD PICK UP	16 SWG (304) SS top, double beeded on all sides. SS tubular legs with nylon bullets.		1500X600X600	No	3	3	6			Custom Fabricated
36	MK 24 / MK 42 / 43 / 44 / 45 / MK 50 / 51 / MK 34 / 38 / MK 14 / 15 /16/17	SS PICK UP TABLE WITH ONE UNDERSHELF	16 SWG (304) SS top, double beeded on all sides. SS tubular legs with nylon bullets. One undershelf at 150 mm from FFL.		1500X600X850	No	8	2	10			Custom Fabricated
37	MK 26 / 27 / MK 40 / 41 / MK 08 / 09	MASONARY TANDOOR	Three Tandoors and side tables with granite work top / The outer cladding should be Kota stone on the sides and Marble or Granite on top. Proper heat insulation by glass wool and fire clay bricks to be done. POT - Earthen Pot (Suitable Size). ASH OUTLET - to be provide.		900X900X850	No	2	2	4			Custom Fabricated


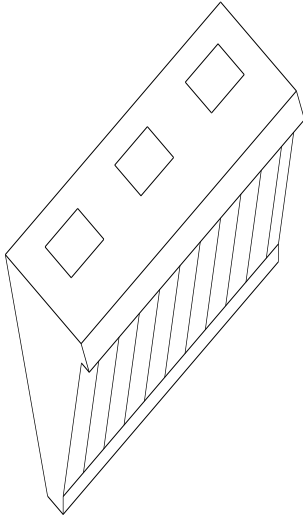
Sl. No.	Item					Unit	Quantity		Total Quantity	Rate	Amount	Remark
	Code	Equipment	Specifications	Reference Image	Size LxBxH		Vikram Sarabha Hall	C.V. Raman Residence				
38			The framework should be made of 25 x 25 SWG 14 boxed welded angles, and should be angle reinforced on all sides and bottom and intermediate positions. Exterior of base reinforced with heavy gauge MS inverted channel framework on all sides and suitable to fix castors. OUTER BODY-16 gauge SS Sheets with 25mm thk Mineral Wool insulation all around. INNER BODY - 3mm thk MS Sheets. POT - Earthen Pot (Suitable Size). ASH OUTLET - Provide Insulated door on hinges & latch(Size 6"x6" opening).		750x750x850	No	2	2	4			Custom Fabricated
39	MK 28	GRANITE TOP WORK TABLE WITH ONE UNDERSHELF	25 mm thick granite top on 3mm thick marine ply sitting on SWG 16 (304) SS channel frame with SWG 12 SS corner pieces. SWG 18 (304) SS shelf at 150 mm from FFL double beaded on all sides. 38 mm dia SWG 16 (304) SS pipe legs with adjustable feet.		1400X600X850	No	1		1			Custom Fabricated
40	MK 29 / MK 11	GRANITE TOP WORK TABLE WITH ONE UNDERSHELF	25 mm thick granite top on 3mm thick marine ply sitting on SWG 16 (304) SS channel frame with SWG 12 SS corner pieces. SWG 18 (304) SS shelf at 150 mm from FFL double beaded on all sides. 38 mm dia SWG 16 (304) SS pipe legs with adjustable feet.		1200X600X850	No	1		1			Custom Fabricated
41	MK 31 / 32	GRANITE TOP WORK TABLE WITH ONE UNDERSHELF	25 mm thick granite top on 3mm thick marine ply sitting on SWG 16 (304) SS channel frame with SWG 12 SS corner pieces. SWG 18 (304) SS shelf at 150 mm from FFL double beaded on all sides. 38 mm dia SWG 16 (304) SS pipe legs with adjustable feet.		1200X600X850	No		2	2			Custom Fabricated
42	MK 42	GRANITE TOP WORK TABLE WITH ONE UNDERSHELF	25 mm thick granite top on 3mm thick marine ply sitting on SWG 16 (304) SS channel frame with SWG 12 SS corner pieces. SWG 18 (304) SS shelf at 150 mm from FFL double beaded on all sides. 38 mm dia SWG 16 (304) SS pipe legs with adjustable feet.		900X600X850	No		1	1			Custom Fabricated
43	MK 30 / MK 12 / MK 27	DOUGH KNEADER	The frame structure to be made of MS with proper paint. Should be of heavy duty construction. The spiral arm, the bowl and the protection grid should be of SS 304. It should have a guard around the bowl and should have a protection device which will stop the machine when the grid is lifted. The movement transmission should be through pulley and belt. The electric system should comply with all standard safety rules. 1.5 HP, 3 phase – two speed motor like Crompton or equivalent with DOL starter to be provided. It should have two separate timer for two different speeds.		25 kg flour capacity (40 kg dough)	No	1	1	2			Indian Bought Out
44	MK 35 / 37 / MK 02 / 03	TAWA	16 SWG SS top with 150 mm high raised splash on rear, returned 25 mm & down 12 mm. Both sides of top rolled down 50 mm flush with body cladding. Front of worktop bull nosed. Worktop to over hang the base body by 50mm from front and 75mm at rear. SWG 18 (304) SS on all sides with air vents on both sides. On fully welded SS angle frame. Cooking top of 20 mm thick polished SS plate with 75 mm raised rear and side edges with grease collecting trough in front and grease collecting drawer. Two V-1050 burners (40,000 btu/hr) with one pilot and control valve. 16 SWG , 38mm dia SS pipe legs with adjustable nylon bullet.		1500x750x850+150	No	2	1	3			Custom Fabricated

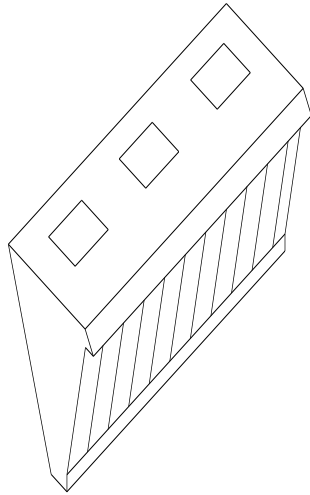
Sl. No.	Item					Unit	Quantity		Total Quantity	Rate	Amount	Remark
	Code	Equipment	Specifications	Reference Image	Size LxBxH		Vikram Sarabha Hall	C.V. Raman Residence				
45	MK 38 / 40 / MK 05 / 06/ MK 33 / 35	CHAPPATI PLATE CUM PUFFER	16 SWG SS top with 150 mm high raised splash on rear, returned 25 mm & down 12 mm, with body cladding. Front of worktop with bull nosed front turned down by 50 mm. Worktop to over hang the base body by 50mm at front and by 75mm at rear. SWG 18 (304) SS on all sides with air vents on both sides. On fully welded SS angle frame. Cooking top shall comprise of a Chapatti Plate top on left side with puffer grates on the right side for all the units. Cooking top of 20 mm thick polished M.S. plate. Plate shall be free from any imperfection and shall gently be sloped towards front to a channel provided with a S.S drawer for grease collection. Puffer grating - Two nos on right side of chapatti plate removable C.I. perforated chapatti puffer grate tops shall be provided w/suitable burners below, with control valves and pilots. Two V-600 burners with one pilot and control valve. One V-450 burner with pilot and control valve for puffer. Ignition window separately for chappati burner and puffer. SWG 20 (304) SS spillage tray with strip handle under puffer. 16 SWG, 38mm dia SS pipe legs with adjustable nylon bullet.		1500x750x850+150	No	2	2	4			Custom Fabricated
46	MK 46 / 48 / MK 53 / 55/ MK 08 / 09	IDLI STEAMER - SELF STEAM GENERATING	Body to be constructed of SWG 16 (304) SS, on a SS tubular stand. Steam inlet on one side. SS Steam control valves to be provided. Four number doors with rubber beading and locking facility. drip tary in the front. SS die pressed idli trays to steam idlis - total of 240 idlis at a time. Provide additional set of Trays with the machine. Four numbers, SS tubular legs with adjustable bullet feet			No	2	2	4			Custom Fabricated
47	MK 49 MK 48	CHEST FREEZER FOR ICE CREAMS (400 ltrs)	Completely SS 304 body. INTERIOR TEMP -5 deg C to -20 deg		1500x600x850	No	1	1	2			Refrigeration Indian
48	DW 01 / 02 / 15 / DW 08 / DW 11 / 16	SOILED DISH LANDING TABLE WITH GARBAGE CHUTE	Constructed of 16 SWG (304) SS top, double beaded on all sides and secured to welded SS angle frame. ½ inch raised marine edges. Waste chute - One no. 6 inch diameter with rubber edges on left (confirm with the drawing) hand side 175 mm from the side edges. 25 mm dia drain outlet on the left hand side corner connected to waste outlet with lever handle. Four numbers, SS tubular legs with adjustable bullet feet. Side and rear cross bracing support to give a clear front to move in waste bin under the table.		1800X650X850	No	3	2	5			Custom Fabricated
49	DW 03 / 14 / 16 / 17	DISH LOADING TABLE	16 SWG (304) SS top, double beeded on all sides. SS tubular legs with nylon bullets. One undershelf at 150 mm from FFL.		1500X650X850+150	No	4		4			Custom Fabricated
50	DW 12 / 19	DISH LANDING TABLE	16 SWG (304) SS top, double beeded on all sides. SS tubular legs with nylon bullets. One undershelf at 150 mm from FFL.		1500X650X850+150	No	2		2			Custom Fabricated
51	DW 06	DISH LOADING TABLE	16 SWG (304) SS top, double beeded on all sides. SS tubular legs with nylon bullets. One undershelf at 150 mm from FFL.		900X650X850+150	No		1	1			Custom Fabricated

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52	DW 07 / DW 01 / DW 02	SOILED DISH LANDING TABLE	Constructed of 16 SWG (304) SS top, double beaded on all sides and secured to welded SS angle frame. ½ inch raised marine edges. Waste chute - One no. 6 inch diameter with rubber edges on left (confirm with the drawing) hand side 175 mm from the side edges. 25 mm dia drain outlet on the left hand side corner connected to waste outlet with lever handle. Four numbers, SS tubular legs with adjustable bullet feet. Side and rear cross bracing support to give a clear front to move in waste bin under the table.		1500X750X 850+600	No		1	1			Custom Fabricated
53	DW 08 /	CLEAN DISH LANDING TABLE	16 SWG (304) SS top, double beeded on all sides. SS tubular legs with nylon bullets. One undershelf at 150 mm from FFL.		1500X650X 850+150	No		1	1			Custom Fabricated
54	DW 10	DISH LOADING TABLE	16 SWG (304) SS top, double beeded on all sides. SS tubular legs with nylon bullets. One undershelf at 150 mm from FFL.		1500X650X 850+150	No		1	1			Custom Fabricated
55	DW 12 / 15	SOILED DISH LANDING TABLE	16 SWG (304) SS top, double beeded on all sides. SS tubular legs with nylon bullets. One undershelf at 150 mm from FFL.		1200X650X 850	No		1	1			Custom Fabricated
56	DW 13 / 14 / 15 / 16 / DW 03 / DW 20 / 21	SS TABLE ON CASTORS	To be constructed of 16 SWG (304) SS top, double beaded on all sides and secured to 35X35X3 mm SS angle welded framework. Top sheet to be sound deadend. One undershelf, 18 SWG (304) SS bottom shelf, starting at 150 mm height. Four numbers, heavy duty GI castors with rubber wheels of 100 mm dia. Two wheels should have locking arrangement.		1200x600x850	No	4		4			Custom Fabricated
57	DW 04	PRE WASH SINK (DOUBLE SINK)	Constructed of 16 SWG (304) SS top, double beaded on all sides and secured to 38X38X3 mm SS angle welded framework. Bowl size 450X450X250 deep integral with top sheet - check the drawing for position of the bowl. In the center 38mm dia BSP drain coupling, hot and cold water faucet, deck mounted. Splash back 150 mm on rear / side.(AS PER DRAWING). 18 SWG (304) SS bottom shelf starting at 150 mm. Four numbers SS tubular legs with adjustable bullet feet. Fabricated to assist free movement of standard dish wash rack. To be provided with imported hand held spray unit. T&S brand. Other details as per general specifications.		1500X650X 850+150	No	1		1			Custom Fabricated
58	DW 02 / 09 / DW 01 / 09 / DW 05 / 09 / DW 13 / 18	3 SINK UNIT WITH STERLISER	Constructed of 16 SWG (304) SS top, double beaded on all sides and secured to 35X35X3 SS angle welded framework. Sink - Two (2) nos, Size 450X450X300 deep sink integral with top sheet on left side with 38mm dia drain coupling, hot and cold water faucet, deck mounted. Sterlising tank -One of size 450X450X350 deep, fitted with 38mm dia drain coupling and ball valve. Heating -U type thermostatically controlled heating element. 2 KW/ single phase. 150 mm splash back on the rear. Four number legs, with adjustable bullet feet.		1800X650X 850+150	No	2	2	4			Custom Fabricated
59	DW 06 / DW 03 / DW 04 /	DISH EXIT TABLE	Constructed of 16 SWG (304) SS top, double beaded on all sides and secured to 35X35X3 mm SS angle welded framework. Top sheet to be sound deadend. Fabricated to fit the standard dish wash rack movement.Four numbers, SS tubular legs with cross supports and adjustable bullet feet. 150 mm rear splash back wherever possible.		1200X650X 850+150	No	1	1	2			Custom Fabricated


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60		EXTRA DISH WASH RACKS	Plate Racks			No	12	8	20			Indian Bought Out
60.1			Cutlery Racks			No	6	4	10			Indian Bought Out
60.2			Glass Racks			No	6	4	10			Indian Bought Out
61	DW 11 / DW 12 / DW 14	WASTE DISPOSER / CRUSHER	Garbodrain Model G 3000 with 3 hp motor		600 x 600 x 700	No	1	1	2			Indian Bought Out
62	SER 01 / SER 03	BAINE MARIE SIDE TABLE	Constructed of 16 SWG (304) SS top, double beaded on all sides and secured to welded SS angle frame. SWG 18 (304) SS sheet covering on three sides. 18 SWG (304) SS bottom shelf starting at 150 mm and the next shelf at equidistant from the top. Four numbers SS legs with adjustable bullet feet. The tray rail should be made of 19 mm dia SS pipe with required support at equal intervals.		1200x675+300x850	No	8	7	15			Custom Fabricated
63	SER 03	BAINE MARIE SIDE TABLE	Constructed of 16 SWG (304) SS top, double beaded on all sides and secured to welded SS angle frame. SWG 18 (304) SS sheet covering on three sides. 18 SWG (304) SS bottom shelf starting at 150 mm and the next shelf at equidistant from the top. Four numbers SS legs with adjustable bullet feet. The tray rail should be made of 19 mm dia SS pipe with required support at equal intervals.		1500x675+300x850	No		1	1			Custom Fabricated
64	SER 02 / SR 03	BAINE MARIE - HEATED	Constructed of 16 SWG (304) SS top, double beaded on all sides and secured to welded SS angle frame, with cut out to fit in five rectangular 1/1 and two 1/2 gastronorm containers. Gastronorm containers to be 200 mm deep with lids. The tank of the baine marie should be provided with an online connection with a ball valve of 15 mm dia and a drain valve of 15 mm dia. 10 mm thick acrylic clear sneeze guard on top of the food counter at 600 mm height, resting on 25mm dia SWG 16 (304) SS pipe upright and SS frame. SWG 18 (304) SS sheet covering on three sides. 18 SWG (304) SS bottom shelf starting at 150 mm. Thermostatically controlled 3KW heating element with rotary ON/OFF switch with light indicator on the side. Water sensor to be provided in the unit to prevent heating element getting damaged due to lack of water. The unit should have 2 mtr supply cord with industrial plug. Six numbers SS legs with adjustable bullet feet. The tray rail should be made of 19 mm dia SS pipe with required support at equal intervals.		2100x675+300x850+600	No	4	4	8			Custom Fabricated
65		CUTLERY STERLISER	SS 16 G body with top cut out to accommodate six rectangular containers of 200 mm depth. Body to be insulated and single heating element to heat water. Water drain out to be provided with a lever.		450x300x300	No	4	4	8			Custom Fabricated

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66		WATER COOLER	Completely SS Body. 200 ltr capacity. To be provided with suitable water filter equipment			No	2	2	4			Refrigeration - Indian
67		WATER COOLER SIDE TABLE	Construction specification same as equipment number 13 but with 3 undershelves - bottom at 150 mm and the other 2 equidistant from each other. Shelves to be provided with drain holes.		900x600x1200	No	2	2	4			Custom Fabricated
68		AIR CURTAIN	Centrally mounted heavy duty motor high velocity and CFM industrial air curtain. Suggested company - Acme Environment control systems or Almonard. Door opening to be verified at site.		1800 mm long	No	1	1	2			Indian Bought Out
69		EXTRA GASTRONOM PANS	1/1 GN Pan 200 mm deep			No	12	12	24			Indian Bought Out
70		INSECTOCUTORS	Company - Pest Control India OR equivalent brand - Model - Low Line - Convertible model - OR equivalent model mounted on wall or ceiling. 2 tubes of 24". If wall mounted - 2100 from FFL			No	10	10	20			Indian Bought Out
71		PLATFORM TROLLEYS	Unit to be constructed of SWG 16 (304) SS double beaded on all sides on 35X35X3 mm SS angle welded framework. SWG 16 (304) SS, 1 ½ inch dia pipe handle fixed to body with SWG 14 (304) SS angular support. Four numbers 150 mm dia all swivel heavy duty rubberized castors to take loads of 150 kgs. Two of the wheels to have locking arrangement.		1050x600x900	No	1	1	2			Custom Fabricated
72		UTILITY TROLLEYS	Three (3) tray type shelves of SWG 16 (304) SS, to be reinforced with channels of SWG 16 (304) SS. All three shelves to be equidistant. 32 mm dia SWG 16 (304) SS pipes to extend on top as handle at 100 mm clear height from the top shelf. 100 mm dia all swivel rubberized castors with a load capacity of 70 kgs.		950x600x1000	No	4	4	8			Custom Fabricated
73		SS EDGE GUARDS	SS angles to be grouted to the wall edges. Each angle to be 1200 mm long. Quantity indicated is approximate		SS ANGLE OF 30 x 30 X 1.5	No	20	20	40			Custom Fabricated

Sl. No.	Item					Unit	Quantity		Total Quantity	Rate	Amount	Remark
	Code	Equipment	Specifications	Reference Image	Size LxBxH		Vikram Sarabha Hall	C.V. Raman Residence				
74		DRAIN GRATING / TROUGH / TROUGH OUTLET (VERTICAL OR HORIZONTAL - AS PER SITE CONDITION)	Removable S.S Grating of 304 of suitable size with 25 mm height / Grating with hairline finishing / Grating with 5mm thick for outside ring, 3mmthick for interior section / Grating has to be slip-resistant for one side, Plain on the others / 70 mm Trough to be made with 16 Gauge AISI 304 SS / Trough to be provided with drain outlet in the centre of the unit with all sides sloping towards centre / Drain out let of the trough to have 16 gauge extension flange of 40 mm depth and 100 mm dia. for entry in the floor drain / Trough has to be fully welded with no gaps / MAKE - VIANEN OR EQUIVALENT		650x350x70	No	24	18	42			Custom Fabricated
75		EXHAUST HOOD OVER COOKING RANGES	It shall be constructed of 20 swg SS and shall be box type in front, rear & sides raised up and turned at 90 degree. It shall have a 75 mm wide gutter running along the perimeter for oil collection with removable oil plug. From approx. 150 mm above the grease gutter at the rear, there shall be a framework at 45° made of 20 swg SS. The framework shall be provided with 500 x 500 x 50 mm thick removable grease filters. The filters shall have an outer frame constructed of 20 swg SS. To the frame, 25 x30x 25 mm “C” type 22 swg SS channels shall be welded, which will form a baffle for air movement. The filters shall be provided along the length of the hood with gaps between the filters closed. The filters should be easily removable & washable. The filters and framework shall be provided with weep holes for draining of oil. Approx. 300 mm above the grease gutter in front, there shall be provided a 20 swg SS frame, welded to the top and inside of the front side. To this frame, bulkhead lights shall be fitted, which shall be factory wired and terminated to a junction box.									
75			The sheet used in the fabrication of the unit shall be free from warps, dents and other imperfections and all edges shall be smooth. The construction should be welded and not rivetted. Wall Mounted - The unit shall be wall mounted OR ceiling mounted - at 1950 mm FFL in the front and 1500 mm FFL at the rear.									
75.1	H 01	EXHAUST HOOD OVER DOSA PLATES	4200		4200 x 900 x 600	No	1		1			Custom Fabricated
75.2	H 02	EXHAUST HOOD OVER CHAPPATI PLATES	4200		4200 x 900 x 600	No	1		1			Custom Fabricated
75.3	H 03	EXHAUST HOOD OVER TANDOOR	2200		2100X1000 X600	No	1		1			Custom Fabricated
75.4	H 04 / 05	EXHAUST HOOD OVER BULK BURNERS	16000		8100 x 900 x 600	No	2		2			Custom Fabricated
75.5	H 06 / H 07	EXHAUST HOOD OVER IDLI STEAMER	1500		900 x 750 x 600	No	2		2			Custom Fabricated

Sl. No.	Item					Unit	Quantity		Total Quantity	Rate	Amount	Remark
	Code	Equipment	Specifications	Reference Image	Size LxBxH		Vikram Sarabha Hall	C.V. Raman Residence				
75.6	H 08	EXHAUST HOOD OVER PANTRY RANGE			1500X900X 600	No	1		1			Custom Fabricated
75.7	H 09	EXHAUST VENT FOR DISH WASH MACHINE				No	1		1			Custom Fabricated
75.8		Ducting for Exhaust & Fresh Air	Ducting – GI Sheet of Jindal / Tata / equivalent make, Made out of GI 22 / 24 SWG along with MS Flanges for blower inlet and outlet connection. Qty mentioned is approximate for fresh air and exhaust ducting. Supply of air Grills, with VCD with fresh air filters of 20 microns.		Pls ascertain from the drawing	No	1		1			
75.9		Blowers - Exhaust	Centrifugal blower (for exhaust). / 60mm total static , Motor rating to be finalised based on tolat cfm requirement.			No	3		3			
75.10		Blowers - Fresh Air	Centrifugal blower (for FRESH AIR). / 60mm total static , Motor rating to be finalised based on tolat cfm requirement.			No	1		1			
76		EXHAUST HOOD OVER COOKING RANGES	It shall be constructed of 20 swg SS and shall be box type in front, rear & sides raised up and turned at 90 degree. It shall have a 75 mm wide gutter running along the perimeter for oil collection with removable oil plug. From approx. 150 mm above the grease gutter at the rear, there shall be a framework at 45° made of 20 swg SS. The framework shall be provided with 500 x 500 x 50 mm thick removable grease filters. The filters shall have an outer frame constructed of 20 swg SS. To the frame, 25 x30x 25 mm “C” type 22 swg SS channels shall be welded, which will form a baffle for air movement. The filters shall be provided along the length of the hood with gaps between the filters closed. The filters should be easily removable & washable. The filters and framework shall be provided with weep holes for draining of oil. Approx. 300 mm above the grease gutter in front, there shall be provided a 20 swg SS frame, welded to the top and inside of the front side. To this frame, bulkhead lights shall be fitted, which shall be factory wired and terminated to a junction box.									
			The sheet used in the fabrication of the unit shall be free from warps, dents and other imperfections and all edges shall be smooth. The construction should be welded and not rivetted. Wall Mounted - The unit shall be wall mounted OR ceiling mounted - at 1950 mm FFL in the front and 1500 mm FFL at the rear.									
76.1	H 01 / H 02	EXHAUST HOOD OVER IDLI STEAMER	1500		900 x 750 x 600	No		2	2			Custom Fabricated
77.2	H 03	EXHAUST HOOD OVER BULK BURNERS	14000		5800 x 900 x 600	No		2	2			Custom Fabricated
77.3	H 04	EXHAUST HOOD OVER CHAPPATI PLATES	5000		5000 x 900 x 600	No		2	2			Custom Fabricated
77.4	H 05	EXHAUST HOOD OVER TANDOOR	5100		1800X1000 X600	No		1	1			Custom Fabricated

Sl. No.	Item					Unit	Quantity		Total Quantity	Rate	Amount	Remark
	Code	Equipment	Specifications	Reference Image	Size LxBxH		Vikram Sarabha Hall	C.V. Raman Residence				
77.5	H 06	EXHAUST HOOD OVER DISH WASH MACHINE			900X900X600	No		1	1			Custom Fabricated
77.6		Ducting for Exhaust & Fresh Air	Ducting – GI Sheet of Jindal / Tata / equivalent make, Made out of GI 22 / 24 SWG along with MS Flanges for blower inlet and outlet connection. Qtty mentioned is approximate for fresh air and exhaust ducting. Supply of air Grills, with VCD with fresh air filters of 20 microns.		Pls ascertain from the drawing	No		1	1			
77.7		Blowers - Exhaust	Centrifugal blower (for exhaust). / 60mm total static , Motor rating to be finalised based on tolat cfm requirement.			No		3	3			
77.8		Blowers - Fresh Air	Centrifugal blower (for FRESH AIR). / 60mm total static , Motor rating to be finalised based on tolat cfm requirement.			No		1	1			
78		LPG BANK	The pipes shall be of MS seamless schedule 40 or TATA ‘C’ class ERW pipe. The main pipeline should be of 2” dia with respective ball valve. The pipeline should have seamless schedule 40 pipe fittings such as Tee, Elbow and other fittings up to 1” dia and the pipe from 1 “” dia should be hydraulically bent. There should be two numbers of manifold (each with the specified number of cylinder adaptors) made of seamless schedule 40 pipes with required fittings like NRV, cylinder adaptor (click on type) with flexible pipe of 3’ of United make. There should be an isolation ball valve in both the manifold to operate the manifold individually. There should be a main gas shut off valve inside and outside the gas bank to isolate the LPG supply in case of emergency. The main pipeline should run upto the kitchen area and from there it will be distributed to all the kitchen equipments with a 2nd stage regulator of United make. There should be a pressure gauge with a needle control valve installed inside the kitchen. The entire gas pipe line should be clamped properly with MS clamps on the wall. Once the entire pipe line is completed the same needs to be pressure tested. 2 manifolds of 8 cylinders each			No	1	1				
79		LPG BANK	The pipes shall be of MS seamless schedule 40 or TATA ‘C’ class ERW pipe. The main pipeline should be of 2” dia with respective ball valve. The pipeline should have seamless schedule 40 pipe fittings such as Tee, Elbow and other fittings up to 1” dia and the pipe from 1 “” dia should be hydraulically bent. There should be two numbers of manifold (each with the specified number of cylinder adaptors) made of seamless schedule 40 pipes with required fittings like NRV, cylinder adaptor (click on type) with flexible pipe of 3’ of United make. There should be an isolation ball valve in both the manifold to operate the manifold individually. There should be a main gas shut off valve inside and outside the gas bank to isolate the LPG supply in case of emergency. The main pipeline should run upto the kitchen area and from there it will be distributed to all the kitchen equipments with a 2nd stage regulator of United make. There should be a pressure gauge with a needle control valve installed inside the kitchen. The entire gas pipe line should be clamped properly with MS clamps on the wall. Once the entire pipe line is completed the same needs to be pressure tested. 2 manifolds of 6 cylinders each			No		1	1			

Sl. No.	Item					Unit	Quantity		Total Quantity	Rate	Amount	Remark
	Code	Equipment	Specifications	Reference Image	Size LxBxH		Vikram Sarabha Hall	C.V. Raman Residence				
80		LPG LINING	Please quote per running feet (including all accessories)		length given is an estimate only	No	200	150	350			
81		GAS (LPG) LEAKAGE DETECTION SYSTEM	Electronic gas leak detection system with flame proof sensing modules, hooter, monitor panel with LED display, automatic main shut off mechanism of make - GAS VIGIL TECHNOLOGIES . The number of sensors to be determined by the size of the kitchen and the gas bank. 10 + 2 sensor model			No	1		1			
			8 + 2 Sensor model			No		1	1			
82		AUTOMATIC CHAPPATI MAKING MACHINE - LPG FIRED	COSMOS ACH 900 OR EQUIVALENT / Fully automatic Chappati machine / to produce 900 chappatis per hour / SS cover & body with thermal insulation. Electrical - 1 kw heating element / 1 HP motor 3 phase / Burner LPG operated		1300X1300 X1500	No	1	1	2			Indian Bought Out
83		HOOD OVER CHAPPATI MACHINES	Construction specifications as given earlier		1500X1500 X600	No	1	1	2			Custom Fabricated
										Total =		

**GENERAL CONDITIONS
OF
CONTRACT**

**NATIONAL INSTITUTE OF TECHNOLOGY
ROURKELA**

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CONDITIONS OF CONTRACT

Part-1, General Conditions

DEFINITIONS & INTERPRETATION

1.1 Definitions

In the contract (as hereinafter defined) the following words and expression shall have the meanings hereby assigned to them except where the context otherwise requires:-

- a] “Employer” means the NIT, Rourkela.
- b] “Contractor” means the person or persons, firm or company, whose tender has been accepted by the Employer and includes the Contractors personal representatives, successors and permitted assignees.
- c] “Engineer-in-charge” means representative of NIT, Rourkela and notified in writing to the contractor to act as Engineer for the purpose of the contract.
- d] “Engineers representative” means any resident engineer or assistant of the Engineer or any clerk of works or any other employee or agent appointed from time to time by the Employer.
- e] “Work” shall mean and include all work specified or set forth and required in and by the specifications drawing and schedule here to be annexed or to be implied there from or incidental thereto or to be hereafter specified or required in such explanatory instructions and drawings.
- f] “Contract” means the Invitation to Tender, Instructions to Tenders, General Conditions of Contract, Special conditions of Contract, Specifications, Drawings, Tender Schedule showing approximate quantities, quoted rates and amount against each item, Time Schedule, Letter of intent, Tender and the Contract agreement.
- g] “Contract” Price” means the sum named in the tender subject to such additions thereto or deductions there from as may be made under the provisions of the Contract.
- h] “Constructional Plant” means all appliances or things of whatsoever, nature required in or about the execution, completion or maintenance of the Works or Temporary Works.
- i] “Temporary Works” means all temporary works of every kind required in or about the execution, completion or maintenance of the work.
- j] “Drawing” means the drawings referred to in the Specification and any modification of such drawings approved in writing by the Engineer and such other drawings as may from time to time be furnished or approved in writing by the Engineer.
- k] “Site” means the lands and other places envisaged by the Employer where the work are to be executed or carried out.
- l] “Letter of Intent” is an intimation by a letter to tenderer that tender has been accepted in accordance with the provision contained in that letter.
- m] “Approved” means approved in writing including subsequent written confirmation of previous verbal approval.

1.2 Terms “Specifications”

The term ‘Specification’ shall mean schedules, detailed designs, statements of technical data, performance characteristics and all such particulars mentioned as such in the contract. In the absence of any specific specifications issued by the Employer, the specifications issued by the B.I.S will apply.

2.0 Engineer’s Representative

The duties of the Engineer’s representative are to watch and supervise the works and to test and examine any materials to be used or workmanship employed in connection with the works. He shall have no authority to relieve the Contractor of any of his duties or obligations under the Contract nor except as expressly provided hereunder or elsewhere in the Contract to order any work involving delay or any extra payment by the Employer nor to make any variation of or in the Works. The Engineer may from time to time in writing delegate to the Engineer’s representatives any of the powers and authorities vested in the Engineer.

3.0 Assignment and Sub-Letting

The Contractor shall not assign the Contract or any part thereof or any benefit or interest therein or there under without the prior written consent of the Employer.

The Contractor shall not sublet the whole or a part of the work without prior written consent of the Employer and Sub-Contractor or Sub-Contractors are approved in writing by the Employer. Subletting shall not relieve the Contractor from any liability or obligation under the contract, and he shall be responsible for the acts, defaults and neglects of any Sub-Contractor, his agents, servants or workmen as fully as if they were the acts, defaults or neglects of the Contractor, his agents, servants or workmen. Subletting beyond the first stage shall not be permitted.

4.0 Extent of Contract

The Contract comprises of the construction, completion and maintenance of the works & except in so far as the contract otherwise provides the provision of all labour, materials, Constructional Plant, temporary works and everything whether of a temporary or permanent nature, required for such construction, completion and maintenance.

5.0 Contract Documents

The drawings shall remain in the sole custody of the Engineer but two copies thereof shall be furnished to the Contractor free of cost.

One copy of the drawings furnished to the Contractor as aforesaid shall be kept by the Contractor on the site and the same shall at the reasonable times be available for inspection and use by the Engineer and Engineers representative and by any other person authorized by the Engineer.

6.0 General Obligations

6.01 *Contract Agreement* : The Contractor shall enter into and execute a contract agreement in the form annexed hereto within the time specified in letter of intent and in default thereof the earnest money paid by the Contractor shall be forfeited and acceptance of his tender shall be considered as withdrawn. The cost of the stamp fee of the agreement is to be borne and paid by the contractor.

6.02 *Security Deposit* : The Contractor shall within the time specified in the letter of intent/work order deposit with the NIT Rourkela, further sum in addition to the earnest money paid with the tender to work upto a rate 2 ½ % of the value of the contract at the accepted rates as security deposit in cash or in the form of demand draft from a Nationalized Bank in favour of NIT, Rourkela.

In the event of this not being furnished within the period specified in the letter of intent/work order the earnest money shall stand forfeited and acceptance of the Contractor's tender shall stand withdrawn.

To this sum shall be added the deduction from the contractor's interim bills for work done, so as to make a total security of 10% of the value of the contract as aforesaid.

The security deposit shall remain at the entire disposal of the Employer as a security for the satisfactory execution and completion of the works in accordance with the conditions of the contract.

“When the Security Deposit exceeds Rs.1.00 lakh (Rupees one lakh only), the Contractor, if he so desires, may convert the amount in excess of Rs.1.00 lakh into a Bank Guarantee Bond of one of the Scheduled or Nationalized Banks.

On due satisfactory performance and completion of the contract in all respects, the security deposit will be returned to the Contractor without any interest on presentation of an absolute no demand certificate from the Engineer in the prescribed form after completion of maintenance period.

6.03 *Work to the satisfaction of Engineer* : The Contractor shall execute, complete and maintain the works in strict accordance with the Contract to the satisfaction of the Engineer and shall comply with and adhere strictly to the Engineer's instructions and directions on any matter. The Contractor shall take instruction and directions only from the Engineer/Engineer's representative.

6.04 *Programme to be furnished* : As soon as practicable after the acceptance of his tender, the Contractor shall, if required submit the Engineer for his approval a programme showing the order of procedure and method in which he proposes to carry out the works.

- 6.05 *Contractors Superintendence* : The Contractor shall give or provide all necessary superintendence during execution of the works. The Contractor or his competent and authorized agent is to be constantly on the works and shall give his whole time to the superintendence of the same.
- 6.06 *Contractors Employees* : The Contractor shall provide and employ on the site in connection with the execution and maintenance of the Works:
- (a) Technical assistants and other staff, skilled and experienced in their respective Area who are competent to give proper supervision to the work.
 - (b) Skilled, semi-skilled and unskilled labour as is necessary for the proper and timely execution and maintenance of the works.
- 6.07 *Setting-out of the Works* : The Contractor shall be responsible for the true and proper setting out of the works and for the correctness of the positions, levels, dimensions and alignment of all parts of the works and for the provision of all necessary instruments, appliance and labour in connection therewith. The checking of any setting out or of any line or level by the Engineer or the Engineer's representative shall not in any way relieve the Contractor of his responsibility for the correctness thereof.
- 6.08 *Use of the Explosives* : Explosive shall not be used on the works by the contractor without the permission in writing of the Engineer.
- 6.09 *Watching & Lighting* : The Contractor shall in connection with the works provide and maintain at his own cost all light, guards, fencing and watching when and where necessary or required by the engineer/engineer's representative.
- 6.10 *Care of Works* : From the commencement to the completion of the works, the Contractor shall take full responsibility or the care thereof & of all the temporary works and in case any damage, loss or injury shall happen to the works or to any part thereof or to any temporary works from any cause whatsoever.
- 6.11 *Accident or injury to Workman* : The Employer shall not be liable for or in respect of any damages or compensation payable by Law in respect or in consequence of any accident or injury to any workman or other person in the employment of the Contractor or any sub-contractor save and except an accident or injury resulting from any act or default of the Employer.
- 6.12 *Workman's Compensation* : The Contractor shall at all times indemnify the Employer against all claims for compensation under the provision of the Workman's Compensation Act. or any other Law for the time being in force by or in respect of any workman employed by the Contractor in carrying out the contract.
- 6.13 *Giving of Notice and Payment of fees* : The Contractor shall give all notices and pay all fees required to be given or paid under any Central or State Statute, Ordinance or other Law.

- 6.14 *Compliance With Statutes Regulation etc* : The Contractor shall conform in all respects with the provision of any such Statute, Ordinance or Law as aforesaid and the rules, Regulations or Bye-Laws of any local or other duly constituted authority which may be applicable to the Works.
- 6.15 *Opportunities for other Contractors* : The Contractor shall in accordance with the requirement of the Engineer afford all reasonable opportunities for carrying out their work to any other contractors employed by the Employer and their workmen and to the workmen of the Employer & of any other duly constituted authorities who may be employed in the execution on or near the site of any work not included in the Contract.
- 6.16 *Supply of Plant Materials and Labour* : Except where otherwise specified the Contractor shall at his own expense supply and provide all the Constructional Plant, materials both for temporary and for permanent works, and labour required for the constructions completion and maintenance of the works.
- 6.17 *Site Clearance on Completion of Work* : On the completion of the work all rubbish, debris, kilns, vats tanks, materials and temporary structures of any sort or kind used for the purpose or connected with its construction are to be removed by the contractor and all pits and excavations filled up and the site handed over in a tidy and workmanlike condition.

7.0 Labour

In respect of all labour directly or indirectly employed on the works, the Contractor shall comply with all rules framed from time to time by Government (Central or State) or other local authority and legislations governing labour for the protection or health, sanitary arrangements, wages, welfare and safety of workers.

8.0 Work Materials and Plant

- 8.01 (a) All materials and workmanship shall be of the respective kinds described in the Contract and in accordance with the Engineer's instructions and shall be subjected from time to time to such tests as the Engineer may direct at the place of manufacture or fabrication or on the site. The Contractor shall provide such assistance, instruments, machines, (labour and materials as are normally required for examining, measuring and testing any work and the quality).
- (b) All sample shall be supplied by the Contractor at his own cost.
- (c) The cost of making any test in performance of his works, shall be borne by the Contractor.
- 8.02 *Access to Site* : The Employer and / or the Engineer and any person authorized by him shall at all times have access to the works and to the site.

8.03 *Removal of improper Work and Materials* : The Engineer shall during the progress of the works have power to order in writing from time to time.

- (a) The removal from the site of any materials which in the opinion of the Engineer are not in accordance with the Contract.
- (b) The substitution of proper and suitable materials.
- (c) The removal and proper re-execution of any work which in respect of materials or workmanship, is not in the opinion of the Engineer in accordance with the contract.

9.0 Commencement Time & Delays

9.01 *Commencement of Works* : The Contractor shall commence the works on site within the period indicated in the Contract and shall proceed with the same with due expedition and without delay except as may be ordered by the Engineer.

9.02 *Time for Completion* : The whole of the works shall be completed within the time stated in the contract.

9.03 *Extension of time for Completion* : Should the amount of extra or additional work of any kind or other special circumstances of any kind whatsoever which may occur be such as fairly to entitle the Contractor to extension of time for the completion of the work the Engineer shall determine the amount of such extension.

9.04 *Rate of Progress* : The whole of the materials, plant and labour to be provided by the Contractor & the mode, manner and speed of execution and maintenance of the works are to be a kind and conducted in a manner to the satisfaction of the Engineer. Should the rate of progress of the work or any part thereof be at any time in the opinion of the Engineer too slow to ensure the completion of the works by the prescribed time or extended time for completion, the Engineer shall so notify the Contractor in writing and the Contractor shall thereupon take such steps as the Contractor may think necessary and the Engineer may approve to expedite progress so as to complete the works by the prescribed time or extended time for completion. If the work is not being carried on by day and by night and the Contractor shall request permission to work by night as well as by day.

9.05 *Liquidated Damages to Delay* : In case the Contractor fails to complete the work within the stipulated time period indicated in the contract, unless such failure is due to force majeure or due to the Employer's default, the contractor shall pay to the Employer by way of compensation for delay and not as penalty, a sum up to maximum 10% of the contract value. This is agreed that this is a pre-estimate of the loss/damage which will be suffered on account of delay/breach on the part of the contractor and the said amount will be payable on demand without there being any proof of the actual loss or damages caused by such delay/breach. The decisions of the Engineer/Site-in-charge in regard to the actual delay will be final and binding on the contractor.

9.06 *Certificate of Completion of Works* : As soon as in the opinion of the Engineer the works shall have been substantially completed & shall have satisfactorily passed any final test that may be prescribed by the contract the Engineer shall on receiving a written undertaking by the contractor to finish any outstanding work during the period of Maintenance, issue a certificate of completion in respect of the works and the period of Maintenance of the works shall commence from the date of such certificate.

- 9.07 *Definition of Period of Maintenance* : In these conditions the expression “Period of Maintenance” shall be either twelve months or any other period if specifically specified in the special conditions of this contract, and calculated from the date of completion of the works certified by the Engineer.
- 9.08 *Execution of Works of repair etc.* : To the intent that the works shall at or as soon as practicable after the expiration of the period of maintenance be delivered up to the NIT in as good & perfect a condition to the satisfaction of the Engineer as that in which they were at the commencement of the period of maintenance the Contractor shall execute all such work of repair, amendment, reconstruction, rectification and making good of defects imperfection, or other faults as may be required of the contractor in writing by the Engineer during the period of maintenance.
- 9.09 *Cost of Execution of Works of Repair etc.* : All such work shall be carried out by the contractor at his own expense if the necessity thereof shall in the opinion of the Engineer be due to the use of materials or workmanship not in accordance with the contract or to neglect or failure on the part of the contractor to comply with any obligation expressed or implied on contractor’s part under the contract.

10.0 Alternations, Additions & Omissions

- 10.01 *Variations* : The Engineer shall make any variation of the form of quantity of the works or any part thereof that may in his opinion be necessary and for that purpose or if for any other reason it shall in his opinion be desirable shall have power to order the contractor to do and the contractor shall do any of the following :
- a) Increase or decrease the quantity of any work included in the contract.
 - b) Omit any such work.
 - c) Change the character or kind of any such work.
 - d) Execute additional work of any kind necessary for the completion of the work.
- 10.02 *Valuation of Variation* : The Engineer shall determine the amount (if any) to be added or to be deducted from the sum named in the tender in respect of any extra or additional work done or work omitted by his order. All such work shall be valued at the rates set out in the Contract if in the opinion of the Engineer the same shall be applicable.
- 10.03 *Claims* : The Contractor shall send to the Engineer’s representative once in every month an account giving particulars as full and detailed as possible of all claims for any additional expense to which the Contractor may consider himself entitled and of all extra or additional work order by the Engineer which he has executed during the preceding month and no claim for payment for any such work will be considered which has not been included in such particulars.

10.04 *Materials Obtained from Dismantlement and Excavation etc :*

- (1) The Contractors in the course of their works, should understand that all material obtained in the work of dismantling, excavation etc. will considered Employer's property.
- (2) All gold, silver, oil and other minerals of any description and precious stones, coins, treasures, etc. which shall be found in or upon the site shall be the property of the employer, and the Contractor shall duly preserve the same to the satisfaction of Employer and shall from time to time, deliver the same to such person or persons as the Employer may appoint to receive the same.

11.0 Measurement

11.01 *Quantities* : The quantities set out in the tender Schedule are the estimated quantities of the work but they are not to be taken as the actual and correct quantities of the works to be executed by the Contractor in fulfillment of his obligations under the Contract.

11.02 *Works to be Measured* : The Engineer shall except as otherwise stated ascertain and determine by taking measurement of the work done in accordance with the Contract. He shall when he requires any part or part of the works to be measured give notice to the Contractor's authorized representative should forthwith attend or send a qualified agent to assist the Engineer or his representative in making such measurement and shall furnish all particulars required by them. The Contractor shall be paid for the quantities resulting from measurement of the executed work.

12.0 Provisional Payment

(a) No payment's shall ordinarily be made for works estimated to cost less than Rupees One Thousand till after the whole of the works shall have been completed but if any payment during the course of the execution of works is considered desirable in the interest of works, the Contractor may be paid at the direction of Engineer. But in the case of works estimated to cost more than Rupees One Thousand, mostly payments for the portion of work already done, may be made either on the basis, of measurements to be recorded by the Engineer or the Contractor shall on submitting the bill therefore be entitled to receive a monthly payment proportionate to the part there of then approved and passed by the Engineer, whose passing of the sum to be payable shall be final and conclusive against the Contractor. But all such intermediate payments shall be regarded as payments by way of advance against the final payment only.

(b) A bill shall be submitted by the Contractor each month on or before the date fixed by the Engineer for all work, executed in the previous month and the Engineer shall take or cause to be taken the requisite measurement for the purpose of having the same verified and the claim, as far as admissible, adjusted, if possible, before the expiry of ten days from the presentation of the bill. If the Contractor does not submit the bill within the time fixed as aforesaid the engineer may depute his representative to measure up the said work in the presence of the Contractor, whose countersignature to the measurement list will be sufficient warrant and the Engineer may prepare a bill from such list which shall be binding on the Contractor in all respects.

(c) As and by way of additional security from every progressive on account bill of the Contractor, 7 ½ percent of the value of the work executed, shall be deducted and kept as security deposit until the total of the amount so deducted plus the security (including the earnest money) already deposited will equal the prescribed security, which is 10 % of the value of the works.

(d) The Employer shall not be liable for any loss of securities of any description, nor for any depreciation in the value of securities while in its charge nor for any loss of interest thereon.

The Employer shall not be liable to the Contractor for any matter or thing arising out of or in connection with the contract or the execution of the works unless the contractor shall have made a claim in writing in respect thereof before the giving of the Maintenance Certificate under this clause.

13.0 Remedies and Powers

13.01 *Forfeiture* : If the Contractor shall become bankrupt or have an order for appointment of any receiver made against him or shall present any petition in bankruptcy or shall make an arrangement with or assignment in favour of his creditors or shall agree to carry out the Contract under a committee of inspection of his creditors or if the Contractor shall assign the Contract within the consent in writing of the Employer first obtained or shall have an execution levied on his goods or if the Engineer shall certify in writing to the Employer that in his option the Contractor :-

- (a) has abandoned the Contract, or
- (b) without reasonable excuse has failed to commence the works or has suspended the progress of the works for 28 days after receiving from the Engineer written notice to proceed, or
- (c) has failed to remove materials from the Site or to pull down and replace work for 28 days after receiving from the Engineer written notice that the said materials or work had been condemned and rejected by the Engineer under these conditions, or
- (d) is not executing the works in accordance with Contract or is persistently or flagrantly neglecting to carry out his obligations under the Contract, or
- (e) has to the detriment of good workmanship or in defiance of the Engineer's instructions to the contrary sub-let any part of the contract, or
- (f) otherwise failed to perform his part of the contract according to the true intent & meaning thereof then the Employer may after giving 14 day's notice in writing to the Contractor, enter upon the site and the works and expel the Contractor there from without thereby avoiding the contract or releasing the Contractor from any of his obligations or liberties under the Contractor or effecting the rights & powers conferred on the Employer or the Engineer by the Contract or otherwise available under the law and may himself complete the works or may employ any other Contractor to complete the works.

- 13.02 *Valuation at Date of Forfeiture* : The Engineer shall as soon as may be practicable after any such entry and expulsion by the Employer fix and determine ex-parte or by or after reference to the parties or after such investigation or enquiries as he may think fit to make or institute and shall certify what amount (if any) had at the time of such entry and expulsion been reasonable earned by or would reasonable accrue to the Contractor in respect of work then actually done by him under the Contract.
- 13.03 *Payment after Forfeiture* : If the Employer shall enter and expel the Contractor under this clause he shall not be liable to pay to the Contractor any money on account of the Contract until the expiration of the Period of Maintenance and there after until the costs of completion and maintenance damages for delay in completion (if any) and all other expenses incurred by the Employer have been ascertained and the amount thereof certified by the Engineer. The Contractor shall then be entitled to receive only such sum or sums (if any), as the Engineer may certify would have been due to him upon due completion by him after deducting the said amount.
- 13.04 *Illegal Gratification and breach the terms of Contract* : The Contract may also be rescinded and the Contractor shall be liable to make good any loss or damage resulting from such cancellation.
- (a) If any bribe, gratuity, gift, loan, perquisite, reward or advantage, pecuniary or otherwise, shall either directly or indirectly be given, promised or offered by the contractor, any of his servants or agents to any public office or person in the employment of the Employer in any way relating to his office or employment or if any such officer or person shall become in any way directly or indirectly interested in the contract, or
- (b) If the Contractor has committed a breach of any of the terms of the contract and in particular fair wages clause and labour regulations.
- 13.05 *Urgent Repairs* : If by reason of any accident or failure or other event accruing to or in connection with the works or any part thereof either during the execution of the works or during the period of Maintenances, any remedial or other work or repair shall in the opinion of the Engineer or the Engineer's representative be urgently necessary for security and the Contractor is unable or unwilling at once to do such work or repair the Employer may be his own or other workmen do such work or repair as the Engineer or the Engineer's representative may consider necessary. If the work or repair so done by the Employer is work which in the opinion of the Engineer, the Contractor was liable to do at his own expense under the Contract, all the cost and charges properly incurred by the Employer in so doing shall on demand be paid by the Contractor to the Employer or may be deducted by the Employer from any money due or which may become due to the Contractor provided always that the Engineer or the Engineer's representative (as the case may be) shall as soon after the occurrence of any such emergency as may be reasonable practicable notify the Contractor thereof in writing.
- 10.06 *Employer Will have full Liberty to retain and set off sums due or to Become due to Contractor* : The Employer will have full liberty to retain and set off all sums due or to become due to the Contractor (including Security Deposits and Earnest money) whether under this contract or under any other transaction or claim whatsoever, against any sum due or to the Employer under this contract or under any other transaction or claim whatsoever.

14.0 Notice

- 14.01 *Service of Notice on Contractor* : Any notice to be give to the Contractor under the terms of the Contract shall be served by sending the same by post to or leaving the same at the Contractor's principal place of business.
- 14.02 *Service of Notice on Employer* : Any notice to be given to the Employer under the terms of the contract shall be served by sending the same by post to or leaving the same at the Employer's last known address.
- 14.03 *Importance of Special Conditions* : The Special Conditions attached hereto where they differ from the General Condition and Specifications shall over- ride them similarly the description of work in the tender schedule where it differs from the specifications or drawings shall over-ride them.

15.0 Miscellaneous

- 15.01 *Provision of Adequate Shoring* : The Contractor shall at his own cost, provide the material for and execute all such shoring, timbering and strutting as is necessary during the execution of work for the stability and safety of all structures, excavations and works such that no damage, injury or loss is caused or likely to be caused to any person or property.
- 15.02 *Provision of Shed, Store, Houses etc.* : The Contractor shall, at his own cost, provide such sheds or damp proof store houses as the Employer may consider necessary for storage of materials and shall also at his own cost provide Concrete Mixer, Soaking vats etc.
- 15.03 *Payment of Wages act* : The Contractor shall comply with the provisions of the Payment of Wages Act, and the Rules made there under in respect of all employees employed by him in carrying out this contract as he himself and not the Employer, is responsible under the said act for the compliance thereof.
- 15.04 *Safety* : The Contractor shall be responsible for the safety of his workmen and employees. All serious accidents to them on construction site are to be immediately reported. The Contractor shall be responsible that all such accidents, however and wherever occurring on his works, are reported with out delay to the Engineer and he should make every arrangement to give all possible assistance.
- 15.05 *Laws, Bye Laws etc. relating Works* : The Contractor shall strictly conform to the provisions, for the time being in force of any law relating to works of any regulations and byelaws made by any local authority or any water and lighting companies or any undertakings, within the limits of the jurisdiction of which it is proposed to execute the work.
- 15.06 *Change in Partnership Firm* : In the case of contract by partnership firm, any change in the constitution of the firm shall forthwith be notified by the Contractor to the Engineer.

15.07 *Provision for settlement of disputes* : All questions, disputes or difference of any kind whatsoever, arising out of or in connection with the contract at any time, whether during the progress of the work or after its completion or whether before or after the determination of the contract, other than questions, disputes or differences for the decision of which specific provision have been made in the foregoing clause of these conditions (hereinafter referred to as “excepted matters” and decisions on such “except matters” according to the said specific provisions shall be final and binding on the Contractor and shall not be re-opened or attempted to be re-opened on the ground of any informality; omission, delay or error in the proceeding in or about the same or on any other ground whatsoever) shall be submitted in writing by the Contractor to the Employer and the Employer shall within a reasonable time, after the submission of the same, make and notify its decision thereon in writing.

If the Contractor be dissatisfied with the decision of the Employer on any matter in question, dispute or difference on any ground in connection with this contract or as to the withholding by the Employer of any certificate to which the contractor may claim to be entitled to, or if the Employer fails to make a decision within a reasonable time, then and in any such case but not including any of the excepted matters, or matters for which the Contractor has given no claim certificates, the Contractor may within ten days of the receipt of such decision or after the expiry of the reasonable period of time, as the case may be, demand in writing that such matter in question, dispute or difference in connection with this contract be referred to arbitration. Such demand for arbitration shall be delivered to the Employer by the Contractor shall specify the matters which are in question, dispute or difference and only such question, dispute or difference, other than any of the excepted matters, in respect of the contract of which the demand has been made and no other shall be referred to arbitration.

The further progress of any work under the contract shall, unless otherwise directed by the Engineer, continue during the arbitration proceeding, and no payment due or payable by the Employer shall be withheld on account of such proceeding, provided, however, that it shall also be opened to the arbitrator to consider and decide whether or not such work shall continue during the arbitration proceeding.

Matters in question, dispute or difference other than the excepted matters, in respect of this contract to be submitted to arbitration as foresaid shall be referred for decision to a Sole Arbitrator, who shall be the Director, NIT, Rourkela, or any person nominated by him in his behalf.

In case an arbitrator nominated by Director, NIT, Rourkela fails or neglects to arbitrate or is removed, dies or become incapable or withdraw from arbitration for any reason whatsoever, the Director, NIT, Rourkela, as the case may be, shall have the authority to nominate any other person afresh and / or supply the vacancy for the arbitration.

Such submission shall deemed to be submission to arbitration and the decision of such arbitration shall be final and conclusive and the provision of the Indian Arbitration Act of the rules there under and all statutory modifications thereof shall govern all such arbitration proceeding and shall be deemed to apply to and be incorporated in this contract.

- 15.08 *Wages to be Paid in time* : The contractor shall ensure that their employees are paid the wage in time and can only make such deductions which are authorized under the payment of wages act and rules framed there under, that relevant records and registers required to be maintained under the said Act & Rules to be maintained by the Contractors and produced before the officers of the Institute and such other authorities under the Act for scrutiny as & when required. In case the Contractors default in making statutory payments under payment of wages Act or any other labour Act, which the Contractor is obliged to make to their employees, the Employer reserves the right to deduct any amount from the bills of the Contractors towards payment to their employees on demand from the Govt. Labour Directorate. This amount shall be made available to such authorities of the Govt. for disbursement to the employees of the contractor. They, however, will be kept informed about the same.
- 15.09 *Malpractice* : Any unauthorized removal or possession of any of the Employer's properties by the Contractor, its agents, servants and / or employees shall be deemed to be a malpractice. If the Contractor is found guilty of Malpractice in the course of carrying out the contract resulting from the acceptance of his tender, the contract will be liable to the cancelled and the security deposit forfeited without prejudice to and other action which the employer may take under law.
- 15.10 *Black Listing* : Any Contractor found guilty of theft or in unauthorized possession of Institute's properties, is liable to be debarred from allotment of further work and the work in hand is also liable to be terminated without any notice. Further such contractors are liable to be blacklisted from allotment of work in NIT. The above action will be taken in addition to the other penal action under the relevant provisions of law which the employer may take.

SPECIAL CONDITIONS OF CONTRACT

FOR CIVIL ENGINEERING WORKS

1. The scope of contract generally covers complete civil engineering works required in connection with (i) including all ancillary works such as drains, diversions, alterations and additions to existing Civil Engineering Works and cleaning the site etc. complete as per the approved working drawings and instructions used to contractor from time to time. The contractor shall have to take the necessary precaution to safeguard against any damage to the neighboring existing structure and underground services etc.

2. The tenderer shall visit and is deemed to have visited the site and make himself thoroughly acquainted with the nature and requirement of the job, facilities of access for materials and removal of rubbish cost, of carriage, freights and other charges and shall allow in his tender for special difficulties if any in carrying out the work. He shall also include in his tender, charges for doing final surfacing to all repairs required to be done for any type of fixture, installation, etc. and for the removal of spoil arising of his contract.

3. The contract for the work is a complete one for labour, materials and workmanship including the use of construction equipments, tools and tackles. The contractor shall have to make his own arrangement for all materials required for the due performance of the contract.

All lap lengths in reinforcement rods have to be approved by the Engineer. Measurements of reinforcement will be inclusive of approved chairs, spacers, stays and overlaps.

4. The specifications and drawings given for execution, acceptance of construction and erection works are obligatory on the contractor for the construction works of NIT, Rourkela. If in the course of construction work, some additional problems arise, which are not covered by the given specifications, the contractor will be given proper instruction by the Engineer. Such instructions shall be observed in full by the contractor regarding specifications, drawings, method of conducting work, any other measures necessary for the fulfillment of construction. Verbal instructions be always got confirmed from the Engineers concerned, before execution by the contractor.

5. Specifications for the quality of building materials as also for the quality of construction work are given in corresponding sections of these specifications and / or the working drawings. Unless otherwise specified all materials and workmanship shall conform to the specifications attached and drawings supplied. Any item not covered by these, shall conform of the latest Indian Standard specifications.

6. Work shall be carried out in such a manner as not to interfere with or affect, retard or disturb the progress of other works being executed by other agencies. The contractor's rate shall include for any losses due to likely delay in coordinating with other works and interruption on account of inherent nature of the job, and as such, no extra claim will be admissible on such account.

7. If due to the design and other stipulations in the tender, or requirements at site, a particular sequence of overall constructional operations has to be followed due to which certain interruptions to any one or more types of work or items of execution are inherent, no claims for such interruption are admissible.

8. For carrying out the work, the contractor will be provided with two sets of working drawings.

9. All technical documents regarding the construction of works are generally given in the metric system and all works should be carried out according to the metric system. All documents concerning the work shall also be carried out in the metric system.

10. While carrying out the works the contractors should be provided for:-

- a) Safety of personnel engaged on the construction.
- b) Protection and safety of works during their progress.
- c) Sanitary and hygienic condition of working and living for his workers, as per labour regulations.

11. In respect of portions of works which are likely to be embedded or covered up by the other works, the contractors shall submit them for technical inspection and have the necessary measurement and completion certificates duly signed by the engineer and contractor before letting such portions to be embedded or covered.

12. On completion of work, the contractor must submit to the engineer the following documents for the passing of the works:-

- i) The technical documents according to which the work was carried out.
- ii) A copy of the working drawing showing thereon all additions and alterations in the process of execution.
- iii) Completion certificates for 'embedded' and 'covered up' works.
- iv) Manufacturer's certificates, guarantees and test certificates.
- v) Certificates or control checking and test of materials.

13. The contractor shall submit to the engineer, in the form required by him and in the appointed time, the information regarding the progress of the work being carried out by them.

14. The power given to the representative of the contractor for signing technical certificates shall be indicated in a special letter addressed to the engineer.

15. The technical commission for the acceptance of covered work and unfinished work should consist of a representative each of:-

- (1) Employer
- (2) Consultants.
- (3) Contractor who has done the work, and
- (4) Agency who accepts the work for continuation of the construction of the building or/ erection of equipment.

16. Contractor shall properly store all materials brought by him to the work site to prevent damage due to rain, wind direct exposure to sun etc. and also from theft, pilferage etc. The contractor shall maintain stocks of all materials required by him for the proper and speedy execution of his work.
17. The contractor shall make his own arrangement to procure all construction plant and equipment, tool and tackles etc. for his works.
18. All materials, construction plants and equipments etc. once brought by the contractor within the NIT area are not to be moved from there without the written authority from the engineer. Similarly, all enabling works built by the contractor for the main construction undertaken by him, are not to be dismantled and removed without authority from the Engineer.
19. The contractor shall at all times provide sufficient fencing, notice boards, lights, watchmen to protect and guard the works and provide all facilities and observe all the rules mentioned in the General Conditions of the Contract enclosed with the tender.
20. (a) Concrete and mortars are generally specified by the strength or the approximate proportions by volume respectively. The contractor may quote on the basis of their proportions. The concrete that will be used in the work shall be proved to be of requisite standard as laid down in the Indian standard specification and also by other intermediate test that may be prescribed for important construction. Batching by volume may be permitted at the discretion of the Engineer.
- (b) The quantities of all excavation, concrete, reinforcement steel work and shuttering as shown in the tender schedule are approximate. The rate quoted shall fully apply for any variations in the scope of work and the resulting quantities. The payment shall be made on actual quantities constructed and measured at site as per standard practice in conformity with I.S 1200.
21. The aggregate to be used in the work shall be hard, strong and durable and shall be clean and free from clay films and other adherent coating. These must be machine crushed, screened before mixing. Sand must be coarse and thoroughly screened before mixing. Mixing shall be done by an approved mechanical batch mixer or by portable concrete mixers.
22. In the areas of fill, filling shall not be done until foundations and underground work e.g. pipes cables, etc. are completed. Should the fill be done prior to such completion, the contractor shall do all excavation and protection work for doing the foundations, underground works etc. at his own cost.
23. (a) The specifications prescribe various tests at specified intervals for ascertaining the quality of his work done. If the tests prove unsatisfactory, the Engineer shall have liberty to order the contractor to redo the work done, in that period, and do order such alterations and strengthening that may be necessary at the cost of the contractor. The contractor shall be bound to carry out such orders failing which the rectification, will be done by the Engineer through other agencies and cost recovered from the contractor.
- (b) Structure test:- The engineer shall instruct the contractor to make a loading test on the work or any part thereof at the contractors cost, if in his opinion such a test is necessary.

(c) Charges for all tests shall be borne by the contractor.

24. The contractor shall not allow any visitors on the works except with the approval of the Engineer.

25. The tenderers are required to quote rates against all the items of the attached Tender schedule, failing which their tender may not be considered.

26. All guarantees such as for water- proofing materials for the entire work as obtained from the manufacture shall be transferred to the employer by the contractor after completion of the work.

27. The contractor shall keep a competent and qualified engineer constantly, assisted by others, who will be responsible for carrying out of the work to the satisfaction of the engineer-in – charge. Any direction or instructions given to him in writing shall be held to have been given to the contractor.

28. The following guidelines should be followed in respect of calculation of theoretical consumption of cement for civil engineering works:-

- i) Theoretical consumption will be calculated on the basis of design-mix.
- ii) In case of concretes and mortar specified in the contract on volumetric proportion basis, the calculation of theoretical consumption will be governed by analysis.
- iii) The permissible wastage of cement over the theoretical consumption as indicated above will be upto 5%.

29. (a) Item of work not covered by the specification attached shall conform of the latest version of Indian standard Specification.

(b) The contractor shall employ such workers who possess good antecedent reports. The contractor shall be fully responsible for the conduct of his workman and shall ensure that his workers do not indulge in any criminal activities. In case of any loss suffered by the NIT due to theft, damage etc. caused by the contractor's workmen, the same will be made good by suitable recovery from the contractors running bills without prejudice to other rights of the company under the contract and under the law.

30. a) The contractor should be conversant about the location & the condition of the surroundings before quoting the rates.

b) The provision for approach road for bringing the building materials at the works site will be the responsibilities of the contractor at his cost.

31. The date of taking over of the building by the representative of NIT shall be taken as the date of completion of the building. The defects of construction which are within the scope of the contract shall be recovered and signed jointly by the contractor's representative. The recorded defects will have to be attended by the contractor and it shall be the sole responsibility of the the contractor. Only after completion, finalization of accounts in respect of final bill will be taken up by the department. If the recorded defects are not attended to by the contractor within 15 days, the department will at its own discretion employ another agency at

the risk and cost of the contractor to get those recorded defects attended without any further reference to the contractor.

32. The contractor shall deal with all aspect of their as well as their sub- contractors labour including industrial relations.

33. The contractor should ensure payment of all dues including retrenchment compensation, even if the labour is engaged by his sub-contractor.