MAHARSHI DAYANAND UNIVERSITY ROHTAK

(A State University established under Haryana Act No. 25 of 1975)
NAAC accredited 'A' Grade

NOTICE INVITING TENDER

Sealed tenders on percentage basis are invited on behalf of the Registrar, MDU, Rohtak from contractors / societies / agencies on approved list of PWD, MES, CPWD, autonomous bodies and State / Centre Govt. undertakings. The tender forms will be issued to the contractors / societies /agencies / Suppliers/manufacturers (for sr. no. 4 only) up to the date of opening of tenders as mentioned against work by 12:00 Noon and will be received up to 2:00 P.M. in the office of the Registrar and opened at 3:00 P.M. on the same day in the Committee Room of Registrar office in the presence of the tenderers or their authorized representatives, who may like to be present at that time. The tender documents may be obtained from the office of the undersigned and the same be deposited in the office of the Registrar by the due date.

Sr. No.	Name of work	App. Amt. (Rs.)	Earnest Money (Rs.)		Cost of tender form	Date of opening of tender	Time limit
			Society	Contractor	(Rs.)		
1.	Construction of 36 nos. flats (equivalent to Type-IA Houses) including PH & E.I	4,67,00,000/-	4,67,000/-	9,43,000/-	15,000/-	05.09.2014	18 months
2.	Construction of 12 nos. Faculty flats (equivalent to Type-III Houses) including PH & E.I	2,75,00,000/-	2,75,000/-	5,50,000/-	15,000/-	05.09.2014	15 months
3.	Construction of Campus Boundary Wall towards Railway Line side	1,60,00,000/-	1.60,000/-	3,20,000/-	15,000/-	05.09.2014	02 months
4.	Providing and fixing desk benches in the Lecture Theatres in various buildings	47,50,000/-	47,500/-	95,000/-	5,000/-	05.09.2014	04 months

CONDITIONS:-

- 1. Complete NIT / DNIT (Detailed Notice Inviting Tender) alongwith eligibility criteria/terms & conditions and changes if any can be seen in the office of undersigned on any working day during office hours (9:00 AM to 5:00 PM) or on University Website www.mdurohtak.ac.in
- 2. The tenderer will keep in touch with the University Web site for any change in the NIT / DNIT till the last date/revised last date of sale of tender and incorporate such changes in NIT / DNIT and the tender bids.

- 3. At the time of purchase of tender documents, the contractors should submit the following documents:-
 - (a) Proof of enlistment.
 - (b) Copy of PAN card.
 - (c) Copy of latest income tax return.
 - (d) Successfully work done certificates of civil works during last 5 years (financial year 2009-10 to 2013-14) as under:-

One certificate of 80% of the estimated cost of this tender.

Or

Two certificates of 60% of the estimated cost of this tender

Or

Three certificates of 40% of the estimated cost of this tender

All the above certificates in paras 3(a) to 3(d) above will be self attested with stamp.

- 4. In case tendering receiving / opening day happens to be a holiday, the tenders will be received / opened on next working day at the same time.
- 5. Validity of tender will be 90 days.
- 6. Earnest money is to be deposited at the time of purchase of the tender. It should be in the shape of Demand Draft in favour of the Executive Engineer, MDU, Rohtak payable at Rohtak.
- 7. Contractors shall quote the rate of all items of DNIT separately. The N.S. item rates are to be quoted separately. The tender without item wise rate in DNIT, will be rejected.
- 8. The rates should be quoted in words as well as in figures otherwise the tender will liable to be rejected.
- 9. Conditional tender is liable to be rejected.
- 10. Any work, here tendered, may be withdrawn from further processing at any stage at the discretion of the competent authority without assigning any reason.
- 11. Engineer-in-Charge is competent to increase / decrease the quantity of work. In case of decrease of quantity, the contractor shall have no claim to any payment or compensation whatsoever on account of any profit or advantage which he might have derived from the execution of the work in full.
- 12. Nothing extra whatsoever shall be paid on account of losses, damages done by rains or any other natural calamity.
- 13. The tender is liable to be rejected if the tender is found in variance of the above conditions or the conditions of the DNIT.
- 14. The University reserves the right to accept or reject or negotiate any of the tender or conditions/items without assigning any reason.
- 15. Plumbing and E.I. work shall be got done through license holder agencies for the works involving PH / E.I.

- 16. The agencies shall paste the cello tape on the rates quoted by them.
- 17. Tender by post / telegraphic/courier shall out rightly be rejected.
- 18. Exemption of tender fee or earnest money or security will not be permitted in any case.

Executive Engineer

Endst. No. EE/ 2014 / 3910-45

A copy of the above is forwarded to the following for information and necessary action:-

Dated: 07.08.2014

- 1. Superintending Engineer, PWD B&R Circles, Rohtak
- 2. Technical Advisor to VC, MDU, Rohtak
- 3. Executive Engineer(C-II), MDU, Rohtak
- 4. Executive Engineer, PWD B&R (Medical College), Rohtak / KUK / HAU. Hisar / GJU, Hisar / CDLU, Sirsa / BPS Women University, Khanpur/ DBSCRU, Murthal
- 5. P.A. to Vice-Chancellor (for kind information of the Vice-Chancellor), M. D. University, Rohtak
- 6. P.A. to Registrar (for kind information of the Registrar), MDU, Rohtak
- 7. Divisional Accountant, Engg. Cell, MDU, Rohtak
- 8. SDE(C-I, II, III) / SDE (Elect.) / SDE (PH) / SDE (Horti.-I, II), MDU, Rohtak
- 9. H.D.M., Engineering Cell, MDU, Rohtak
- 10. Notice Board

11.	Contractor/Agency/Society:	

Executive Engineer

DETAILED NOTICE INVITING TENDER NAME OF THE WORK:- "CONSTRUCTION OF 36 NOS. FLATS (EQUIVALENT TO TYPE-IA HOUSES) INCLUDING PH & E.I."

App. Amount. Rs. 4.67 crore

Earnest Money Rs. 4,67,000/- / Rs. 9,34,000/
Time Limit: 18 months

Sr. No.	HSR Ref. No & NS	Description of item	Qty	Unit	Each Rate to be quoted by the Contractor (Rs.)
A.		CIVIL WORK			
1	6.6	EARTH WORK Earth work in excavation in foundations, trenches, etc in all kinds of soils, not exceeding 2 mtr depth including dressing of bottom and sides of trenches, stacking the excavated soil, clear from theedge of excavation and subsequent filling around masonary, in 15 cm layers with compaction, including disposal of all surplus soil, as directed within a lead of 30 mtr.	1016.33	%Cum	
2	6.13/ a	Earth filling under floors with surplus ordinary soil or soil containing gravel or kankar upto 40% excavated fromfoundation and taken only from outside the building plinth in 15cm layers including ramming, watering and consolidating lead upto 30 mtrs.	571.61	% Cum	
3	6.15(a) (i)	Antitermite Treatment (using Aldrin) (a) Pre-construction Work Providing and injection chemical emulsion for preconstructional antitermite treatment and creating a chemical barrier under and around the column pits, wall trenches, basement excavation, top surface of plinth filing junction of wall and floor, alongwith the external perimetre of building, expansion joints surrounding of pipes and conduite etc, complete (plinth area of the building at ground floor only shall be measured) Aldrin Embulsifiable concentrate (0.5%)	1126.32	Sqm	
4	10.39	CEMENT CONCRETE Cement concrete 1:4:8 with stone aggregate 40mm nominal size in foundation and plinth	163.15	Cum	
5	10.90	Cement concrete 1:2:4 with stone aggregate 20 mm nominal size for reinforced concrete work in footings, strips, foundations, beams, rafts, pedestals and approach slabs of bridges etc, excluding steel reinforcement but including centring and shuttering, laid in position, complete in all respects.(For work upto 1.5 metres below ground level).	283.98	Cum	

Sr. No.	HSR Ref. No & NS	Description of item	Qty	Unit	Each Rate to be quoted by the Contractor (Rs.)
6	10.86	Cement concrete 1:2:4 with stone aggregate 20mm nominal size for reinforced concrete work for walls exceeding 20cm thickness (straight and curved) beams, griders, stairs, columns,(Square or rectangular) battens and lintels etc. exculding steel reinforcement but including centering and shuttering, laid in position, complete in all respects.			
		Ground floor	140.88	Cum	
		First floor	142.81	Cum	
		Second floor	103.46	Cum	
		Third Floor	25.62	Cum	
7	10.82	Cement concrete 1: 2: 4 with stone aggregate 20mm nominal size for reinforced concrete work in slabs with inculcation not exceeding 25 degree with horizontal, excluding steel reinforcement but including centering and shuttering, laid in position, complete in all respects. Ground floor	146.61	Cum	
		First floor	146.61	Cum	
		Second floor	146.61	Cum	
		Third Floor & Mumty	31.85	Cum	
8	10.81	Cement concrete 1:2:4 with stone aggregate 20 mm nominal size for reinforced concrete work in shelves excluding steel-reinforcement but including centering and shuttering, laid in position complete in all respects.	31.82	Cum	
9	10.89	Cement concrete 1:2:4 with stone aggregate 20 mm nominal size for reinforced concrete work in fascias parapets and other thin vertical sections, not covered by Item Nos. 10.82, 10.86 to 10.88 not exceeding 10 cm thickness excluding steel reinforcement but including centring and shuttering, laid in position, complete in all respects	21.38	Cum	
10	10.95	Extra over Item Nos. 10.79 to 10.94, if 1:1 $\frac{1}{2}$:3 mix is used, instead of 1:2:4	1221.62	Cum	
11	18.22	STEEL REINFORCEMENT Cold twisted deformed (ribbed/tor steel) bars for RCC works, where not included in the complete rate of RCC including bending, binding and placing in position complete.	1649.18	Qtl	

Sr. No.	HSR Ref. No & NS	Description of item	Qty	Unit	Each Rate to be quoted by the Contractor (Rs.)
12	11.2	BRICK WORK First Class Brick work Laid in Cement Sand Mortar 1:6 In Foundation & Plinth (including duct wall)	313.96	Cum	
13	11.7	First class brickwork laid in cement sand mortar 1:6 in first storey upto 4 meters above plinth level.	920.93	Cum	
14	11.46	11.43cm thick brick wall with every fourth course, reinforced with hoop-iron, laid in 1 : 4 cemnet sand mortar in super- structure ${}^{\circ}$	2356.47	Sqm	
15	14.1	FLOORING Base course of floors consisting of 100 mm thick cement concrete 1 : 8 : 16 and 100 mm sand or stone filling	917.28	Sqm	
16	14.4	Screed of 50mm thick cement concrete 1:8:16 to be laid below the floor topping	2001.82	Sqm	
17	14.91	Providing and fixing ceramic tiles/anti skid tiles of size 400mmx400mm or above size of approved make in flooring, laid in any pattern as specified over base of 20mm thick cement coarse sand mortar 1:3 and jointed with white cement slurry mixed with pigment to match the shade of tile. Note: Tiles shall be premium quality (first quality) of reputed manufacturer like NITCO, KAJARIA, SOMANI, ORIENT & JOHNSON'S.	290.51	Sqm	
18	14.89	Providing and fixing viterified tiles size 600x600mm of approved make in flooring laid in any pattern as specified over base of 20mm thick cement coarse sand mortar 1.3 and jointed with white cement slurry mixed with pigment to match the shade to tiles.	2215.00	Sqm	
		Note : Tile shall be of premium quality (first quality) of reputed manufacturer like NITCO, KAJA-RIA, SOMANI, ORIENT, JOHNSONS & RAK			
19	14.90	Providing and fixing viterified tiles size $600 \times 600 \text{mm}$ of approved in skirting/dado laid in any pattern as specified over base of 12mm thick cement coarse sand mortar 1.3 and jointed with white cement slurry mixed with pigment to match the shade to tiles.	310.00	Sqm	
		Note : Tile shall be of premium quality (first quality) of reputed manufacturer like NITCO, KAJA-RIA, SOMANI, ORIENT, JOHNSONS & RAK			

Sr. No.	HSR Ref. No & NS	Description of item	Qty	Unit	Each Rate to be quoted by the Contractor (Rs.)
20	14.92	Providing and fixing Ist quality ceramic glazed wall tiles confirming to I.S. 15622 (thickness to be specified by the manufacturer) of approved make in all colours, shades expect burgundy, bottle green, black of any size as approved by Engineer-In-Charge in skirting, riser of steps and dados over 12mm thick bed of cement mortar1: 3 coarse and jointed with grey cement slurry, including pointing in white cement mixed with pigment of matching shades complete.			
	a)	Size of ceramic glazed tile 200x300mm	1437.58	Sqm	
21	NS	Coloured Granite Stone tiles 20mm thick in skirting risers of steps, dado walls and pilars laid in 12.5mm thick cemnet mortar 1 : 3 (1 cement 3 coarese sand) and jointed withg neat cement slurry mixed with pigment to match the shade of stone, including rubbing and polishing including labour for fixing dowel pins and cramps if required/ required.	686.00	Sqm	
22	14.49	Marble stone flooring 20mm to 25mm thick slab including matching grains of marble laid in any pattern as specified over base of 12 mm thick cement coarse sand mortar 1:3 and jointed with white cemnet slurry mixed with pigment to match the shade of marble including rubbing and polishing (using marble stone slab of size more than 3.38sqm each)			
	(c)	Green Marble			
		Ground flor	221.14	Sqm	
		First floor	153.10	Sqm	
		Second flor	153.10	Sqm	
		Third Floor	61.30	Sqm	
23	14.62	Kotah stone flooring 25mm thick in any pattern as specified over 20 mm thick base of cemnet coarse sand mortar 1:3 laid and jointed with neat cement slurry mixed with pigment to match the shade of stone including rubbing and polishing.	433.00	Sqm	
24	14.66	Kotah stone 20 mm thick in skirting risers of steps, dados and wall facing (lining) and pillars laid on 12 mm thick cement coarse sand plaster 1:3 laid and jointed with neat cement slurry, mixed with pigment to match the shade of stone including rubbing and polishing including labour for fixing cramps, dowels and pins etc.	34.00	Sqm	

Sr. No.	HSR Ref. No & NS	Description of item	Qty	Unit	Each Rate to be quoted by the Contractor (Rs.)
		PLASTERING- FINISHING			
25	15.6	12mm thick cement plaster	8467.38	Sqm	
26	15.13	20 mm thick cement plaster 1: 2 in 2 coats work	5644.92	Sqm	
27	15.52	10mm thick cement plaster 1 : 4 under side of ceiling	3022.21	Sqm	
28	16.52	Preparation of plastered surfaces for Oil bound distemper including sand papering the surface, applying one coat of linseed oil, and filling with approved quality filler, consisting of white lead, linbseed oil, varnish amd chalk mittin including finishing the surface to the required finish complete.	15459.02	Sqm	
29	16.57	Distempering with washable oil bound distemper (of approved manufacture) two coats excluding priming coat on new work.	15459.02	Sqm	
30	16.61	Finishing walls with exterior decorative cement based paints such as snowcem, Robbiacem etc. on new work, two coats to give an even shade.	5026.48	Sqm	
31	16.24	Preparation of plastered or concrete surfaces for painting, including sand papering the surface, applying one coat of linseed oil and filling with approved quality filler, consisting of white lead, linseed oil, varnish and chalk mitti including finishing surface to the required finish, complete.	5026.48	Sqm	
		ROOFING -WATER PROOFING			
32	13.13	Terracing consisting of tiles 22.86 cm \times 11.43 cm \times 3.81 cm laid over 87.50 mm mud filling on a layer of 25mm mud plaster and an other layer of mud mortar for laying he tiles, including two coats of bitumen laid hot at 1.65 kg per sqm on top of R.C.C. slab including grouting with cement sand mortar 1 : 3 and top surface to be left clean etc.	972.35	Sqm	
33	15.71	Cement pointing 1:2 flush on flat brick flooring / tile terracing.	972.35	Sqm	
34	13.89 b)	Providing and fixing PVC rain water pipe 6Kg. Pressure of ISI mark in cement mortar during masonry work.			

Sr. No.	HSR Ref. No & NS	Description of item	Qty	Unit	Each Rate to be quoted by the Contractor (Rs.)
		150mm dia PVC bend	858.30	Mtr	
35	13.90 b)	Providing and fixing PVC bend ISI marked			
		150mm dia PVC bend	30.00	Each	
36	13.50	Top khurra 0.6 m x 0.6 m for rain water pipe in 25 mm thick cement concrete 1:2:4 over 50 mm thick cement concrete 1:8:16	30.00	Each	
37	13.57	Bottom khurra on ground 1:2 m X 0.6 m consisting of brick-on-edge laid in cement mortar 1:3 over 75 mm cement concrete 1:8:16 including 12 mm thick cement plaster 1:3	24.00	Each	
38	13.64	Cement concrete 1:2:4 gola $10\text{cm} \times 10\text{cm}$ quadrant along junction of roof with parapet wall finished smooth, where specially specified.	332.55	Mtr	
39	15.76	12mm thick cement plaster damp proof couse 1:3 with 2 coats of bitumen at 1.65 Kg per Sqm laid hot and sanded:- Horizental	409.39	sqm	
40	18.34	Pressed steel sheet frames (Chowkats) consisting of 2 mm thick steel sheet of the specified section, including iron lugs (hold fasts), iron hinges, conforming to P.W.D . Specifications, including bolts for fixing stops,, locknotch, provision for receiving tower bolts, and finished with one coat of ready-mixed paint red lead non-setting primer, of approved quality, fixed in position including the coat of cemnet concrete 1:3:6, for filling in the frame, and cement conrete 1:3:6 for lugs complete: -			
	a) b)	Door and window frame size 89mm x 50mm with 40mm wide single rebate. Door and window frame of size 76 mm x 38 mm with 35 mm wide single rebate	842.64 725.00	Mtr Mtr	
	c)	Door and window frame size 127mm x 50mm with 40mm wide double rebate.	1324.51		
41	17.93	Factory manufacture solid flush door shutter with block board core as per I.S. no. 1659-1969 bonded with water proof type phenol formaldehyde synthetic resin hot pressed conforming to IS 2202 part-I and part II, fixed in position, including iron hinges, screws, chocks/cleats and stops etc (excluding the cost of any fittings other than specified above , but including labour for fixing the same in position)			
	a)	commercial veneering with vertical grains or cross bands and face veneer on both			
	iii)	sides commercial facing with laminated core and lipped edges: 35 mm thick	792.00	Sqm	

Sr. No.	HSR Ref. No & NS	Description of item	Qty	Unit	Each Rate to be quoted by the Contractor (Rs.)
42	17.90	Factory manufactured panelled door or glazed window, shutters of commercial hard wood, such as hollock, champ,chikrassy and chaplash,etc.,(non-coniferous timber other than teak,conforming to I.S.specification No.1003,kiln-seasoned),with 100 mm wide verticle styles,150 mm wide lock rail, 200 mm wide bottom rail and 100 mm wide other rails, with panels of15 mm thick, tongued and grooved of commercial hard wood and including cost of ironhinges, screws, chocks / cleats, stops,nails etc.,complete,fixed in position (excluding the cost ofany fittings,other than specified above,but including labour for fixing the same in position).			
	a)	30mm thick	518.91	Sqm	
43	17.72	Cost of aluminium fittings complete for doors and windows, such as tower bolts, handles, etc., and screws for these fittings (excluding sliding bolt)			
	b)	Double leaf Door & window	786.72	Sqm	
	a)	for single leaf shutter	524.48	Sqm	
44	17.32	Cupboard shutters of commercial hard wood such as hollock, champ, chikrasy and chaplash etc., (non-coniferous timber other than teak conforming to I.S. specification no.1003, kiln seasoned) excluding chowkat but with commercial plywood panels or faced on one side including iron hinges and screws fixed in position (excluding the cost of handles, tower bolts, hasp with stample, but including the labour for fixing the same.			
	b)	25 mm thick	227.00	Sqm	
45	17.83	Providing and fixing sliding bolt with nuts and screws, etc, complete-			
	ii)	Size 250mm x 16mm	324.00	Each	
46	17.73	Providing and fixing six-levers brass 10 cm mortice latch and lock, and a pair of lever handles with necessary screws, etc., complete (Indian make of reputed firm, such as Godrej or equivalent)	120.00	Each	
47	17.79	Providing and fixing helical door spring 150 mm (superior quality) including necessary screws, complete.			
	b)	Iron	192.00	Each	

Sr. No.	HSR Ref. No & NS	Description of item	Qty	Unit	Each Rate to be quoted by the Contractor (Rs.)
48	17.92	Factory manufactured wire gauze door and window shutters of commercial hard wood such as hollock, champ, chikrassy and chaplash,etc.,(non-coniferous timber other teak,conforming to I.S.specification No.1003, kiln-seasoned),with 100 mm wide verticle styles, 150 mm wide lock rail, 200 mm wide bottom rail, and wire gauze of 140G or 120G designation including cost of iron hinges, screws,chocks/cleats,stops nail etc.,complete fixed in position (excluding the cost of any fitings,other than specified above,but including labour for fixing the same in position)- (style and rails of windows shutter shall be 75 mm wide)			
	i) ii)	30 mm thick 35 mm thick	475.00 350.00	Sqm Sqm	
49	17.75	Providing and fixing 150mm floor brass door stoppers, with rubber cushion, screws, etc, to suit shutter thickness complete -	480.00	Each	
50	18.12	Wrought iron and mild steel (using angles, flats, square bars, tees and channels) ladders, grills, gratting frames, window guards, iron doors open able or fixed stair case or parapet or any other type of railing, gates and tree guards etc., including cost of screws and welding rods or bolts and nuts complete fixed in position.	123.86	Qtl	
51	18.11	Iron-grated doors, including pintle hinges and arrangements	90.72	Qtl	
		PAINTING - POLISHING			
52	16.10	Applying priming coat on steel work consisting of genuine red lead mixed with linseed oil and turpentine oil in equal proportions.	2690.06	Sqm	
53	16.17	Painting two coats excluding priming coat with ready-mixed paint for metallic surfaces in all shades on new steel or iron work.	2690.06	Sqm	
54	16.2	Applying pink primer or aluminium priming coat on wood work including preparation of surface, knotting and stopping, etc.	5010.00	Sqm	
55	16.3	Painting two coats excluding priming coat with synthetic enamel paint in all shades on new wood work or matallic or plastered or concrete surfaces to give an even shade.	5010.00	Sqm	

Sr. No.		Description of item	Qty	Unit	Each Rate to be quoted by the Contractor (Rs.)
56	18.13 / a)	Stair case railing of 40mm internal dia G.I. pipe class 'B' as per I.S. No. 1239 as hard rail using flats and square bars as supporting members and base plate welded as per design specified includingcutting, wellding rods and complete fixed in position.	18.68	Qtl	
	b)	Parapet railing of 40 mm internal dia G.I. Pipe class 'B' as per I.S. No.1239 as hand rail using flats and square bars as supporting members and base plate welded as per design specified including cutting, welding rods and fixed in position complete in all respect.	27.14	QtI	
В		PUBLIC HEALTH			
		SANITARY INSTALLATION			
57	30.84	Providing and fixing in position HCI soil waste vent or antisyphonage pipes to ISI specification of E.L.C. manufacture or of any other reputed firm including cutting and wastage etc. and cutting holes in walls, roofs or floor etc. and making good to its original condition but excluding cost of lead jointing.			
	a)	100mm internal diameter	492.00	Mtr	
	b)	75mm internal diameter	996.00	Mtr	
58	30.87	Providing lead caulked joints to HCI pipes and specials conforming to ISI specification of E.L.C. manufacture or any other reputed firm including cost of lead yarn, fuel and tools etc.			
	a)	100mm internal diameter (1.13kg)	480.00	Each	
	b)	75mm internal diameter (0.91 kg)	924.00	Each	
59	30.88	Providing and fixing in position M.S. or heavy flat iron clamps made out of M.S. flat not less than 5mm of the approved design for fixing C.I. Soil waste vent or anti pipes to walls complete in all respects including cutting and making good the walls and floors etc. and painting.			
	a)	For 100mm internal diameter pipes.	156.00	Each	
	b)	For 75mm internal diameter pipes.	192.00	Each	
60	30.89	Providing and fixing HCI floor trap ISI marked of the self cleaning design with CP brass hinged grating with frame with or without vent arm and including cement concrete 1:2:4 under and around the floor trap where required upto floor level complete in all reapects including cutting and making good the walls and floors etc. minimum depth of water should be 150 mm with a minimum seal of 50mm.			

Sr. No.		Description of item	Qty	Unit	Each Rate to be quoted by the Contractor (Rs.)
	b)	with 75mm i/d out let	276.00	Each	
61	30.91	Providing and fixing in position HCI specials for soil, waste, vent or anti-syphonage pipes to ISI marked including cutting and wastage etc. cutting holes in walls roofs or floors etc. and making good to its original condition but excluding cost of lead jointing.			
	a)	For 100mm I/D pipes			
	I)	Heal rest bend.	96.00	Each	
	iv)	Single junction with door 100mm x 100mm x 100mm	48.00	Each	
	xvi)	Cowls	24.00	Each	
	xvii)	Door piece	12.00	Each	
	xxii)	Collars	24.00	Each	
	b)	For 75mm I/D pipes.			
	xviii)	Collars	24.00	Each	
	iv)	Single junction with door 75mmx75mm x75mm	120.00	Each	
	xvii)	Cowls	60.00	Each	
	i)	Heal rest bend	60.00	Each	
62	NS	Providing and fixing in position high quality ISI marked Indian make white vitreous chinaware European water closet suite P or S - trap including one no. superior quality white solid plastic seat and lid (seat cover) 8 Litre capacity PVC low level cistren, 40 mm size, CP brass flush bend and coupling of approved municipal design including cutting and making good the walls and floors with cement concrete 1:2:4 wherever required complete.	72.00	Each	
63	NS	Providing and fixing CP brass spray jet for EWC including CP brass hexa nipple etc.	72	2 Each	
64	30.41 (a)	Providing and fixing in position best indian make (Ordinary) lavatory suites consisting of White			
	(iv)	Size 550mm x 450mm with one no. tap	72.00	Each	

Sr. No.		Description of item	Qty	Unit	Each Rate to be quoted by the Contractor (Rs.)
65	NS	Providing and fixing in position best quality stainless steel sink built in draining board of size 600mm x 450mm complete as described in item no. 30.53 above	36.00	Each	
66	30.71	Providing and fixing in position best Indian make bevelled edge 5.5mm thick mirror mounted on asbestos sheet ground fixed in position by means of 4 nos chromium plated brass screws & washers over rubber washers and rawl plug embedded in the wall or chromium plated brass clamps with C.P. brass screws (as required by the Engineer-in-charge) complete including cutting and making good the walls etc.			
	a)	Indian make			
	ii)	600 mm x 450 mm	72.00	Each	
67	30.68	providing and fixing in position best indian make towel rail fixing in with rwls lugs embedded in wall with c.p brass scerws, complete in all respect including cutting and making good the walls etc.			
	b	20mm dia C.P brass adjustable towel ring	72.00	Each	
	е	C.P brass towel ring	36.00	Each	
68	30.77	Providing and fixing CP brass liquid soap container of best quality complete	72.00	Each	
69	NS	Providing and fixing in position high quality heavy pattern CP brass (concealed) stop cock of standard design and of approved make conforming to IS:8931			
	i)	15 mm nominal bore	144.00	Each	
70	NS	Providing and fixing in position approved make PVC pipe connections 375mm long with CP brass nuts and rubber washers complete	144.00	Each	
71	30.114	Providing and fixing in position gully traps fixed in cement concrete 1:4:8 complete with H.C.I. Grating 150mm x 150mm cast iron cover weighing approximately 7.26 kg frame clear opening 399mm x 300mm and outside size 330mm x 330mm and chamber including cost of all brick work in cement mortar 1:5 cement concrete 1:8:16 in foundations and cement concrete 1:2:4 in coping around C.I. cover and frame superior paint of approved manufacture on all C.I. work as per standard design, minimum depth of water should be 150mm with a minimum seal 50mm.			
	d)	150mm internal diameter HCI gully trap.	60.00	Each	

Sr. No.	HSR Ref. No & NS	Description of item	Qty	Unit	Each Rate to be quoted by the Contractor (Rs.)
72	29.84	Constructing brick masonry inspection chamber size as given below upto 0.60 metre average depth in cement mortar 1:5 lime concrete with 40 percent lime mortar 2:3 in foundation cement concrete 1:2:4 benching 12mm thick cement plaster 1:2 with a floating coat of 1mm thick of neat cement RCC 1:2:4 slab 100mm thick /C.C. topping 50mm thick with 455 mm x455mm /455mm x 610mm inside light duty C.I. inspection chamber cover and frame weight as per ISI specifications painted with 3 coats of black bitumastic superior paint complete as per standard design.			
	c)	Size 600 $$ x 900mm inside (with 455m x455mm cover and frame light duty single seal weighing 20 kgs with RCC slab)	36.00	Each	
73	29.85 (C)	Extra for every 0.30 mtr depth of Inspection Chamber 600x900mm	36.00	Each	
74	NS	Providing and fixing GI pipe complete with GI fittings and clamps including cutting and making good the wall etc. complete to the entire satisfaction of the Engineer-in-Charge.			
	ii)	32 mm dia nominal bore	72.00	Mtr	
	iii)	25 mm dia nominal bore	72.00	Mtr	
	iv)	20 mm dia nominal bore	1728.00	Mtr	
	v)	15 mm dia nominal bore	396.00	Mtr	
75	NS	Providing and fixing in position 15 mm internal diameter CP brass bib cocks of high quality ad conforming to IS specifications with CP brass cap complete to the entire satisfaction of the Engineer-in-Charge.			
	i)	15 mm nominal bore short body	72.00	Nos	
	ii)	15 mm nominal bore long body	216.00	Nos	
76	30.119	Providing and fixing HDPE water storage tanks of Sintex , Diplast, O.K. make with covers/lids marked with IS: 12701 on roof top of buildings including cost of hoisting and placing in position, making connection with inlet and outlet pipes, providing overflow & scour provisions with suitable plug on scour pipe including cost of nipples, washers, flanges for connections in tanks complete in all respects to the satisfaction of Engineer-in-Charge. (except civil work)			
	e)	1000 ltr. capacity	36.00	Nos	
	- /				

Sr. No.		Description of item	Qty	Unit	Each Rate to be quoted by the Contractor (Rs.)
77	NS	Providing and fixing in position heavy pattern gun metal peet valve ISI marked with hand wheels, on GI pipe lines laid in ground or inside building as per approved drawings, specifications complete to the entire satisfaction of the Engineer-in-Charge.			
	ii)	32mm dia nominal bore	36.00	Nos	
	iv)	20mm nominal bore	36.00	Nos	
78	NS	Providing and fixing GI union in GI pipe including cutting and threading the pipe and making ling screws etc. complete to the entire satisfaction of the Engineer-in-Charge.			
	ii)	32mm dia nominal bore	24.00	Nos	
	iii)	25mm dia nominal bore	24.00	Nos	
79	30.110	Providing and fixing in position automatic brass ball valve in tanks complete to the entire satisfaction of the Engineer-in-Charge.			
	b)	With Plastic ball			
	iv)	32 mm dia nominal bore	36.00	Nos	
80	NS	Providing and fixing in position approved make CP brass stop cock with large size CP brass cap/flange complete to the entire satisfaction of the Engineer-in-Charge.			
	a)	15mm i/d angle valve	72.00	Nos	
81	NS	Providing and fixing shower complete to the entire satisfaction of the Engineer-in-Charge.	36.00	Nos	
С		ELECTRICAL			
82	31.12 (c)	Moulded case circuit breakers			
		Supply and erection of Moulded case circuit breakers on wall or on existing pedestal including bonding to earth and necessary connections :-			
	(i)	15 amp. To 60 amp . 415 V 10 K.A. 3 phase	37 mps/	Each	
	(iv)	300 amp. To 400 amp. 415 V 35 K.A. 3 phase	02 nos.	Each	

Sr. No.	HSR Ref. No & NS	Description of item	Qty	Unit	Each Rate to be quoted by the Contractor (Rs.)
83	31.13	Supply and erection of M.S. angle iron frame duly welded for housing M.S. sheet & main switches etc. on it. On it, fixed on wall by means of suitable size of rag bolts with cement concrete, duly painted with three coats of approved paint including one coat of red oxide.			
	(ii)	Size 40 mm x 40 mm x 6 mm	90 mtrs.	Mtr	
84	31.14	Supply and erection of 3 mm thick mild steel sheet duly welded on exiting M.S. angle iron frame for fixing the main switches etc. as required, duly painted with three coats of approved paint including one coat of red oxide	15 sqm	Sqm	
85	31.15	Supply and erection of sheet steel enclosure 2 pole/3 pole with earth plug and socket suitable for incorporating single pole/triple pole MCB on wall/on exiting pedestal complete with necessary connections etc:-			
	(ii)	S.P.N. enclosure for single pole MCB 20 amp.	NIL	-	
86	31.16	Supply and erection of blanking sheet in exiting distribution board.	144 nos.	Each	
87	31.17	Supply and erection of miniature circuit breaker/isolator 240/415 V in the exisiting distribution board including making necessary connections :-			
	(a)	Miniature Circuit Breakers of 9 K.A. breaking capacity			
	(ii)	6 amp. To 32 amp. SPMCB	504 nos.	Each	
	(iii)	40 amp. To 63 amp. TPNMCB	37 nos.	Each	
	(iii)	40 amp. To 63 amp. TPMCB	04 nos.	Each	
88	31.18 (M)	Supply and erection of Fittings and Accessories			
	(vii)	Call bell 220/230 Volts A.C. bakelite with double coil.	36 nos.	Each	
	xi)	Bakelite angle / straight button holder large size.	900 nos.	Each	

Sr. No.		Description of item	Qty	Unit	Each Rate to be quoted by the Contractor (Rs.)
	xxvi)	Supply and erection of hexagonal M.S. box 1.60 mm thick having each side 8 cms, 7.5 cms deep, top covered with M.S. lid by means of screws including 10 mm dia 30cm long mild steel rod made into suitable suspension hook and erected in RCC slab for erection of fan, the bottom covered with 3 mm thick bakelite sheet with suitable holes, painting etc. complete with all labour and material required to complete the job.	216 nos.	Each	
89	31.21	Supply and erection of pipe for wiring purposes including bends inspection boxes etc. where necessary and painting as required.			
	xxi)	Heavy gauge welded conduit pipe 20 mm dia 1.60 mm thickness flushed.	360 mtrs.	Mtr	
	xxii)	Heavy gauge welded conduit pipe 25 mm dia 1.60 mm thickness flushed.	1100	Mtr	
	xxx)	Supply and erection of PVC pipe of 6 kg pressure, laid 1 metre below ground level complete, including digging refilling of the trench with jointing etc.	mtrs.		
	a)	PVC pipe 120 mm dia	39 mtrs.	Mtr	
	b)	PVC pipe 80 mm dia	50 mtrs.	Mtr	
90	31.22 i)	Earthing with G.I., earth pipe $4.5\ m$ long and $40\ mm$ dia with masonry enclosures on the top etc. as required.	74 nos.	Each	
	ii)	Extra for using salt and charcoal/coke for pipe earth electrode as required.	74 nos.	Each	
	iv)	Earthing with tinned copper earth plate 600 mm \times 600 mm \times 6 mm thick including accessories and providing masonary enclosures with cover plate having locking arrangement and watering pipe etc. (but without charocal or coke and salt) etc. complete as required.	04 nos.	Each	
	v)	Extra for charcoal or coke and salt for GI plate or copper plate earth electrode.	04 nos.	Each	
	x)	Providing and fixing 25 mm x 5 mm copper strip in 40 mm dia G.I. pipe from earth electrode as required.	30 mtrs.	Mtr.	
	xiii)	Providing and laying earth connections from earth electrode with 4.00 mm dia copper wire in 15 mm dia G.I. pipe from earth electrode as required.	2000 mtrs.	Mtr.	
	xiv)	Providing and fixing 25 mm \times 5 mm copper strip on surface or in recess for connections etc. as required with all labour and material.	20 mtrs.	Mtr.	

Sr. No.	HSR Ref. No & NS	Description of item	Qty	Unit	Each Rate to be quoted by the Contractor (Rs.)
	xvii)	Providing and fixing 4.00 mm dia copper wire on surface or in recess for loop earthing as required.	2000 mtrs.	Mtr.	
91	31.24 ii)	Excavation earth pit 180 cm round at top and 90 cm at bottom 4.5 metres deep and refilling the same in plains including supply of necessary charcoal / coke and salt mixture.	05 nos.	Each	
	iv)	Supply and erection of 60 cm x 60 cm x 6 mm thick galvanised iron plate including necessary bolts and nuts	05 nos.	Each	
	v)	Providing standard watering tank including down pipe and C.I. cover with locking arrangement etc. $$	05 nos.	Each	
	vi)	Providing and erection of 20 mm x 3 mm thick lighting conductor G.I. tape fixed with suitable G.I. stapples of same size.	300 mtrs.	Mtr.	
	vii)	Supply and erection of G.I. tape 32 mm \times 6 mm thick from earth electrode directly in ground and surface fixed with G.I. stapples of same size.	300 mtrs.	Mtr.	
	viii)	Supply and erection of 25 mm dia-meter 1.5 metre long lighting G.I. tube rod tapered into a point at the top with 16 cm \times 16 cm \times 3 mm thick G.I. base plate and necessary nuts and bolts with washers.	05 nos.	Each	
	ix)	Providing and fixing testing jhoints made of 20 mm x 3 mm thick G.I. strips 125 mm long with 4 Nos. bolts and nuts with washers complete.	05 nos.	Each	1
92	31.26	Supply and erection of under ground cable, loose in existing pipe or trenches complete with necessary connections.			
	xxxiii)	240 Sqmm 3.1/2 Core Cable (Armoured)	400 mtrs.	Mtr.	
	xI)	16 Sqmm 4 core cable (Armoured)	2000 mtrs.	Mtr.	
	xli)	25 Sqmm 4 core cable (Armoured)	25 mtrs.	Mtr.	
93	31.28	Supply and erection of suitable compression type brass cable glands for underground cable:-			
	ii)	10 Sqmm to 16 Sqmm Cable 2 to 4 Core	72 nos.	Each	
	iii)	25 Sqmm to 50 Sqmm Cable 2 to 4 Core	02 nos.	Each	
	vi)	240 Sqmm Cable 3 to 3.1/2 Core	02 nos.	Each	
94	31.35 ix)	Supply and erection of aluminium lugs heavy duty including crimping etc. upto the entire satisfaction of the Engineer-in-charge of the work.			

Sr. No.	HSR Ref. No & NS	Description of item	Qty	Unit	Each Rate to be quoted by the Contractor (Rs.)
	d)	16 Sqmm	1152 nos.	Each	
	e)	25 Sqmm	24 nos.	Each	
	j)	120 Sqmm	02 nos.	Each	
	m)	240 Sqmm	06 nos.	Each	
95	31.36	Wiring in 1.5 sqmm PVC insulated copper conductor cable in 1.6 mm thick conduit pipe.			
	i)	Fan point			
	b)	Medium point	60 nos.	Each	
	c)	Long point	12 nos.	Each	
	ii)	Light Point			
	a)	Short Point	396 nos.	Each	
	b)	Medium point	216 nos.	Each	
	c)	Long point	216 nos.	Each	
	iii)	Twin Control light point with 2 ways, 5 amp. Single pole switch.			
	b)	Medium point	144 nos.	Each	
	c)	Long point	144 nos.	Each	
	vi)	Call bell point including MS box of size 180 mm x100 mm x 60 mm deep for call bell			
	c)	Long point	72 nos.	Each	
	vii)	3-pin 5 amp plug point including earthing the 3rd pin etc.			
	a)	Short Point	432 nos.	Each	
	b)	Medium point	36 nos.	Each	
	c)	Long point	72 nos.	Each	
	viii)	3-pin 15 amp plug point with 4 sqmm PVC insulated copper conductor cable including earthing the 3rd pin etc.			
	a)	Short Point	72 nos.	Each	

Sr. No.	HSR Ref. No & NS	Description of item	Qty	Unit	Each Rate to be quoted by the Contractor (Rs.)
	b)	Medium point	72 nos.	Each	
	c)	Long point	360 nos.	Each	
96	31.40	Supply and erection of PVC unsheathed copper conductor cable single core 1100 Volts grade in pipe of suitable size excluding cost and erection of pipe.			
	i)	Cable size 1.5 Sqmm (3/0.81mm)	1500	Mtr.	
	ii)	Cable size 2.5 Sqmm (3/1.05mm)	mtrs. 7200 mtrs.	Mtr	
	iii)	Cable size 4 sqmm (7/0.85 mm)	3000 mtrs.	Mtr	
	v)	Cable size 10 sqmm (7/1.35 mm)	150 mtrs.	Mtr	
97	31.12 (d)	Supply and erection of sheet steel enclosure distribution board suitable for MCBs etc. on wall/exisiting board/pedestal with rag bolts including bonding to earth :-			
	v)	Distribution board 6 way	72 nos.	Each	
98	31.42	Supply and erection doule pole/ Four pole Residual current circuit breaker (RCCB/ELCB) suitable for operation on 240/415 V, 5Hz. A.C. supply installed in existing sheet steel enclosures including making necessary connections and bonding to earth with all labour and material required to complete the job in all respect upto the entire satisfaction of the Engineer-in-charge of the work.			
	xv)	63A/415V FP ELCB with 30mA sensitivity.	72 nos.	Each	
99	31.44	Supply and erection of PVC conduit pipe ISI marked (medium) recessed in wall/ceiling etc. including cost of PVC bends, inspection box and all other material required to complete the job in all respect upto the entire satisfaction of Engineer-incharge of work.			
	b)	25 mm dia	1500 nos.	Each	
100	31.45	Supply and erection of copper lugs including crimping etc. upto the entire satisfaction of Engineer-in-charge of the work.			
	a)	1.5 sqmm to 2.5 sqmm	1008 nos.	Each	
	b)	4 sqmm to 6 sqmm	1008 no.	Each	

Sr. No.	HSR Ref. No & NS	Description of item	Qty	Unit	Each Rate to be quoted by the Contractor (Rs.)
	c)	10 sqmm	572 nos.	Each	
101	31.48	Supply and erection of MS saddles and clamps on wall/ RCC parapit for fixing underground cable at a distance of 0.60 metre centre to centre fixed by means of rawl plug including the cost of all labour and material required to complete the job in all respect.	1000 nos.	Each	
102	31.55	Supply and erection of socket size rotary step type Electronic regulator for A.C. ceiling fan Anchor make Deluxe model No. 50440 ISI/SSK make PC 561 operated on 120 / 280 V.A.C supply complete including cutting of existing bakelite sheet and making necessary connection etc. upto the entire satisfaction of the Engineer-incharge of the work.	216 nos.	Each	
103	31.61	Supply and erection of street light luminer	04 nos.	Each	
	ii)	M.H. 150 watt shreet light.			
104	31.63	Supply installation testing & commissioning of wall free standing floor mounted etc. complete in all respect.	25 sqm	Sqm	
105	31.64	Supply and fixing of copper bus bar	160 kg.	Kg	
106	31.65	Providing and fixing difiting metering .	02 sets	Set	
107	31.68	providing and fixing 9 mtr long pole with top dia etc.	04 nos.	Each	
108	6.6	Earth work in excavation in foundations, trenches, etc.in all kinds of soils, not exceeding 2 metres depth including dressing of bottom and sides of trenches, stacking the excavated soil, clear from the edge of excavation and subsequent filling around masonry, in 15 cm layers with compaction, including disposal of all surplus soil, as directed within a lead of 30 metres	600 cum	%Cum	
109	10.26	Cement Concrete 1:8:16 with brick ballast 40mm nominal size in foundation and plinth.	25 cum	Cum	
110	11.4	First class brick laid in cement sand mortar 1:4 in foundation and plinth.	90 cum	Cum	
111	15.5	12 mm thick cement plaster 1:4	1000 sqm	Sqm	

Supply of 3 phase 4 wire watt house meter 10-60 Amp services m pannel with necessary connection approved in U.H.V.B.N. (H.S.E.B.) NS Cutting of road by machine / manual means for require of size of pipe.	male in suisting 27.00 Fash
113 NS Cutting of road by machine / manual means for require of size of pipe.	make in existing 37.00 Each
	e. 60 mtrs. Mtr.
114 NS Supply & filing river sand in existing pucca trenches.	200 cum cum
115 NS Supply & erection of 1st class brick on existing cables in pucca trench	1200 nos. Each

Note:-

- 1 The underground chale will be used of Havells/Polycabe make. No extra payment will be allowed on this account.
- 2 PVC pipe of 6 Kg. pressure Kasta/Swastik/Supreme make of HSR item no. 31.21 will be used if required. No extra payment will be allowed on this account.
- The materials used for HSR item no. 31.12, 31.15, 31.17 and 31.41 will be used of Standard/Havells make if required and no extra payment will be allowed on this account.
- 4 PVC copper wire 31.38, 31.39 and 31.40 will be used of Havells/Polycable make if required and no extra payment will be allowed on this account.

DETAILED NOTICE INVITING TENDER

NAME OF THE WORK:- "CONSTRUCTION OF 12 NOS. FACULTY FLATS (EQUIVALENT TO TYPE-III HOUSES) INCLDUING PH & E.I. "

Description of item

Sr. HSR Ref.

No

No.

App. Amt. Rs. 2.75 crore

Contractor (Rs.)

Earnest Money Rs. 2,75,000/-/Rs. 5,50,000/-Each Rate to be quoted by the

Time Limit: 15 months

Qty

A. PROPOSED EXTENSION AT GROUND FLOOR, FIRST FLOOR & SECOND FLOOR (CIVIL) **CIVIL WORK** A. **EARTH WORK** Earth work in excavation in foundations, trenches, etc in all kinds of soils, not exceeding 2 mtr depth 1 6.6 568.04 %Cum including dressing of bottom and sides of trenches, stacking the excavated soil, clear from theedge of excavation and subsequent filling around masonary, in 15 cm layers with compaction, including disposal of all surplus soil, as directed within a lead of 30 mtr. 6.13/ a Earth filling under floors with surplus ordinary soil or soil containing gravel or kankar upto 40% 329.30 %Cum excavated fromfoundation and taken only from outside the building plinth in 15cm layers including ramming, watering and consolidating lead upto 30 mtrs. 6.15(a) (i) Antitermite Treatment (using Aldrin) (a) Pre-construction Work Providing and injection chemical emulsion for preconstructional antitermite treatment and creating a chemical barrier under and around the column pits, wall trenches, basement excavation, top surface of plinth filing junction of wall and floor, alongwith the external perimetre of building, expansion joints surrounding of pipes and conduite etc, complete (plinth area of the building at ground floor only shall be measured) Aldrin Embulsifiable concentrate (0.5%) **CEMENT CONCRETE** 62.47 Cum 10.39 Cement concrete 1:4:8 with stone aggregate 40mm nominal size in foundation and plinth Cement concrete 1:2:4 with stone aggregate 20 mm nominal size for reinforced concrete work in footings, 5 10.90 259.90 Cum strips, foundations, beams, rafts, pedestals and approach slabs of bridges etc, excluding steel reinforcement but including centring and shuttering, laid in position, complete in all respects.(For work upto 1.5 metres below ground level). Cement concrete 1:2:4 with stone aggregate 20mm nominal size for reinforced concrete work for walls 10.86 exceeding 20cm thickness (straight and curved) beams, griders, stairs, columns, (Square or rectangular) battens and lintels etc. exculding steel reinforcement but including centering and shuttering, laid in position, complete in all respects. Ground floor 106.37 Cum First floor 106.37 Cum Second floor 144.26 Cum 9.98 Cum Third Floor

Sr. No.	HSR Ref. No	Description of item	Qty	Unit	Each Rate to be quoted by the Contractor (Rs.)
7	10.82	Cement concrete 1: 2: 4 with stone aggregate 20mm nominal size for reinforced concrete work in slabs with inculcation not exceeding 25 degree with horizontal, excluding steel reinforcement but including centering and shuttering, laid in position, complete in all respects.			
		Ground floor	79.0	8 Cum	
		First floor	79.0	8 Cum	
		Second floor	39.5	4 Cum	
		Third Floor & Mumty	9.7	0 Cum	
8	10.81	Cement concrete 1:2:4 with stone aggregate 20 mm nominal size for reinforced concrete work in shelves excluding steel-reinforcement but including centering and shuttering, laid in position complete in all respects.	14.2	25 Cum	
9	10.89	Cement concrete 1:2:4 with stone aggregate 20 mm nominal size for reinforced concrete work in fascias parapets and other thin vertical sections, not covered by Item Nos. 10.82, 10.86 to 10.88 not exceeding 10 cm thickness excluding steel reinforcement but including centring and shuttering, laid in position, complete in all respects	9.0	06 Cum	
10	10.95	Extra over Item Nos. 10.79 to 10.94, if 1:1 $\frac{1}{2}$:3 mix is used, instead of 1:2:4	897.1	.3 Cum	
		STEEL REINFORCEMENT			
11	18.22	Cold twisted deformed (ribbed/tor steel) bars for RCC works, where not included in the complete rate of RCC including bending, binding and placing in position complete.	1211.1	12 Qtl	
		BRICK WORK			
12	11.2	First Class Brick work Laid in Cement Sand Mortar 1:6 In Foundation & Plinth (including duct wall)	115.0	2 Cum	
13	11.7	First class brickwork laid in cement sand mortar 1:6 in first storey upto 4 meters above plinth level.	379.3	34 Cum	
14	11.46	11.43cm thick brick wall with every fourth course, reinforced with hoop-iron, laid in $1:4$ cemnet sand mortar in super- structure	785.5	66 Sqm	
		FLOORING			
15	14.1	Base course of floors consisting of 100 mm thick cement concrete $1:8:16$ and 100 mm sand or stone filling	470.7	3 Sqm	
16	14.4	Screed of 50mm thick cement concrete 1:8:16 to be laid below the floor topping	951.4	11 Sqm	
17	14.91	Providing and fixing ceramic tiles/anti skid tiles of size 400mmx400mm or above size of approved make in flooring, laid in any pattern as specified over base of 20mm thick cement coarse sand mortar 1:3 and jointed with white cement slurry mixed with pigment to match the shade of tile.	161.6	55 Sqm	
		Note: Tiles shall be premium quality (first quality) of reputed manufacturer like NITCO, KAJARIA,SOMANI,ORIENT & JOHNSON'S.			

Sr. No.	HSR Ref. No	Description of item	Qty	Unit	Each Rate to be quoted by the Contractor (Rs.)
18	14.89	Providing and fixing viterified tiles size 600x600mm of approved make in flooring laid in any pattern as specified over base of 20mm thick cement coarse sand mortar 1.3 and jointed with white cement slurry mixed with pigment to match the shade to tiles.	1231.00	Sqm	P.
		Note : Tile shall be of premium quality (first quality) of reputed manufacturer like NITCO, KAJA-RIA, SOMANI, ORIENT, JOHNSONS & RAK			
19	14.90	Providing and fixing viterified tiles size $600x600mm$ of approved in skirting/dado laid in any pattern as specified over base of $12mm$ thick cement coarse sand mortar 1.3 and jointed with white cement slurry mixed with pigment to match the shade to tiles.	175.00	Sqm	1
		Note : Tile shall be of premium quality (first quality) of reputed manufacturer like NITCO, KAJA-RIA, SOMANI, ORIENT, JOHNSONS $\&$ RAK			
20	14.92	Providing and fixing Ist quality ceramic glazed wall tiles confirming to I.S. 15622 (thickness to be specified by the manufacturer) of approved make in all colours, shades expect burgundy, bottle green, black of any size as approved by Engineer-In-Charge in skirting, riser of steps and dados over 12mm thick bed of cement mortar1: 3 coarse and jointed with grey cement slurry, including pointing in white cement mixed with pigment of matching shades complete.			
	a)	Size of ceramic glazed tile 200x300mm	688.35	Sqm	
21	14.62	Kotah stone flooring 25mm thick in any pattern as specified over 20 mm thick base of cemnet coarse sand mortar 1:3 laid and jointed with neat cement slurry mixed with pigment to match the shade of stone including rubbing and polishing.	230.00	Sqm	
22	14.66	Kotah stone 20 mm thick in skirting risers of steps, dados and wall facing (lining) and pillars laid on 12 mm thick cement coarse sand plaster 1:3 laid and jointed with neat cement slurry, mixed with pigment to match the shade of stone including rubbing and polishing including labour for fixing cramps, dowels and pins etc.	12.00	Sqm	
23	NS	Coloured Granite Stone tiles 20mm thick in skirting risers of steps, dado walls and pilars laid in 12.5mm thick cemnet mortar $1:3$ (1 cement 3 coarese sand) and jointed withg neat cement slurry mixed with pigment to match the shade of stone, including rubbing and polishing including labour for fixing dowel pins and cramps if required/ required.	361.00	Sqm	
24	14.49 (c)	Marble stone flooring 20mm to 25mm thick slab including matching grains of marble laid in any pattern as specified over base of 12 mm thick cement coarse sand mortar $1:3$ and jointed with white cemnet slurry mixed with pigment to match the shade of marble including rubbing and polishing (using marble stone slab of size more than 3.38 sqm each) Green Marble			
		Ground flor	37.87	Sqm	
		First floor	37.87	Sqm	
		Second flor	37.87	Sqm	
		Third Floor	18.71	Sqm	
		PLASTERING- FINISHING			
25	15.6	12mm thick cement plaster	3227.83	Sqm	
26	15.13	20 mm thick cement plaster 1: 2 in 2 coats work	2151.89	Sqm	
27	15.52	10mm thick cement plaster 1 : 4 under side of ceiling	1523.86	Sqm	

Sr. No.	HSR Ref. No	Description of item	Qty	Unit
28	16.52	Preparation of plastered surfaces for Oil bound distemper including sand papering the surface, applying one coat of linseed oil, and filling with approved quality filler, consisting of white lead, linbseed oil, varnish amd chalk mittin including finishing the surface to the required finish complete.	6903.58	: Sqm
29	16.57	Distempering with washable oil bound distemper (of approved manufacture) two coats excluding priming coat on new work.	6903.58	Sqm
30	16.61	Finishing walls with exterior decorative cement based paints such as snowcem, Robbiacem etc. on new work, two coats to give an even shade.	1517.92	: Sqm
31	16.24	Preparation of plastered or concrete surfaces for painting, including sand papering the surface, applying one coat of linseed oil and filling with approved quality filler, consisting of white lead, linseed oil, varnish and chalk mitti including finishing surface to the required finish, complete.	1517.92	: Sqm
		ROOFING -WATER PROOFING		
32	13.13	Terracing consisting of tiles 22.86 cm \times 11.43 cm \times 3.81 cm laid over 87.50 mm mud filling on a layer of 25mm mud plaster and an other layer of mud mortar for laying he tiles, including two coats of bitumen laid hot at 1.65 kg per sqm on top of R.C.C. slab including grouting with cement sand mortar 1 : 3 and top surface to be left clean etc.	578.48	Sqm
33	15.71	Cement pointing 1:2 flush on flat brick flooring / tile terracing.	578.48	Sqm
34	13.89 b)	Providing and fixing PVC rain water pipe 6Kg. Pressure of ISI mark in cement mortar during masonry work.	151.00	
		150mm dia PVC bend	151.00	Mtr
35	13.90 b)	Providng and fixing PVC bend ISI marked		
		150mm dia PVC bend	14.00) Each
36	13.50	Top khurra 0.6 m x 0.6 m for rain water pipe in 25 mm thick cement concrete 1:2:4 over 50 mm thick cement concrete 1:8:16	14.00) Each
37	13.57	Bottom khurra on ground $1:2\ m\ X\ 0.6\ m$ consisting of brick-on-edge laid in cement mortar $1:3\ over\ 75\ mm$ cement concrete $1:8:16$ including $12\ mm$ thick cement plaster $1:3$	14.00) Each
38	13.64	Cement concrete 1:2:4 gola $10\text{cm} \times 10\text{cm}$ quadrant along junction of roof with parapet wall finished smooth, where specially specified.	250.96	Mtr
39	15.76	12mm thick cement plaster damp proof couse $1:3$ with 2 coats of bitumen at 1.65 Kg per Sqm laid hot and sanded:-		
		Horizental	409.68	sqm
40	18.34	Pressed steel sheet frames (Chowkats) consisting of 2 mm thick steel sheet of the specified section, including iron lugs (hold fasts), iron hinges, conforming to P.W.D . Specifications, including bolts for fixing stops,, locknotch, provision for receiving tower bolts, and finished with one coat of ready-mixed paint red lead non-setting primer, of approved quality, fixed in position including the coat of cemnet concrete 1 : 3 : 6, for filling in the frame, and cement conrete 1 : 3 : 6 for lugs complete:	440.20) M+
	a) b)	Door and window frame size 89mm x 50mm with 40mm wide single rebate. Door and window frame of size 76 mm x 38 mm with 35 mm wide single rebate	440.30 285.00	
	U)	Door and window frame of Size 70 filliff x 30 filliff with 33 filliff wide single repate	203.00	PILI

Each Rate to be quoted by the Contractor (Rs.)

Sr. No.	HSR Ref. No	Description of item	Qty	Unit	Each Rate to be quoted by the Contractor (Rs.)
	c)	Door and window frame size 127mm x 50mm with 40mm wide double rebate.	833.9	00 Mtr	
41	17.93	Factory manufacture solid flush door shutter with block board core as per I.S. no. 1659-1969 bonded with water proof type phenol formaldehyde synthetic resin hot pressed conforming to IS 2202 part-I and part II, fixed in position, including iron hinges, screws, chocks/cleats and stops etc (excluding the cost of any fittings other than specified above , but including labour for fixing the same in position)			
	a)	commercial veneering with vertical grains or cross bands and face veneer on both sides commercial facing			
	iii)	with laminated core and lipped edges: 35 mm thick	352.0	00 Sqm	
42	17.32	Cupboard shutters of commercial hard wood such as hollock, champ, chikrasy and chaplash etc., (non-coniferous timber other than teak conforming to I.S. specification no.1003, kiln seasoned) excluding chowkat but with commercial plywood panels or faced on one side including iron hinges and screws fixed in position (excluding the cost of handles, tower bolts, hasp with stample, but including the labour for fixing the same.			
	b)	25 mm thick	101.0	00 Sqm	
43	17.90 a)	30mm thick factory manufactured panelled door or glazed window, shutters of commercial hard wood, such as hollock, champ,chikrassy and chaplash,etc.,(non-coniferous timber other than teak,conforming to I.S.specification No.1003,kiln-seasoned),with 100 mm wide verticle styles,150 mm wide lock rail, 200 mm wide bottom rail and 100 mm wide other rails, with panels of15 mm thick, tongued and grooved of commercial hard wood and including cost of ironhinges, screws, chocks / cleats, stops,nails etc.,complete,fixed in position (excluding the cost ofany fittings,other than specified above,but including labour for fixing the same in position).	258.3	88 Sqm	
44	17.72	Cost of aluminium fittings complete for doors and windows, such as tower bolts,handles,etc., and screws for these fittings (excluding sliding bolt)			
	b)	Double leaf Door & window	879.1	2 Sqm	
	a)	for single leaf shutter	208.5	50 Sqm	
45	17.83	Providing and fixing sliding bolt with nuts and screws, etc, complete-			
	ii)	Size 250mm x 16mm	64.0	00 Each	
46	17.73	Providing and fixing six-levers brass 10 cm mortice latch and lock, and a pair of lever handles with necessary screws, etc., complete (Indian make of reputed firm, such as Godrej or equivalent)	156.0	00 Each	
47	17.79				
	b)	Providing and fixing helical door spring 150 mm (superior quality) including necessary screws, complete. Iron	156.0	00 Each	
48	17.92	Factory manufactured wire gauze door and window shutters of commercial hard wood such as hollock, champ, chikrassy and chaplash,etc.,(non-coniferous timber other teak,conforming to I.S.specification No.1003, kiln-seasoned),with 100 mm wide verticle styles, 150 mm wide lock rail, 200 mm wide bottom rail, and wire gauze of 140G or 120G designation including cost of iron hinges, screws,chocks/cleats,stops nail etc.,complete fixed in position (excluding the cost of any fittings,other than specified above,but including labour for fixing the same in position)- (style and rails of windows shutter shall be 75 mm wide)			
	i) ii)	30 mm thick 35 mm thick		00 Sqm 00 Sqm	

Sr. No.	HSR Ref. No	Description of item	Qty	Unit	Each Rate to be quoted by the Contractor (Rs.)
49	17.75	Providing and fixing 150mm floor brass door stoppers, with rubber cushion, screws, etc, to suit shutter thickness complete - $^{\circ}$	156.0	0 Each	
50	18.12	Wrought iron and mild steel (using angles, flats, square bars, tees and channels) ladders, grills, gratting frames, window guards, iron doors open able or fixed stair case or parapet or any other type of railing, gates and tree guards etc., including cost of screws and welding rods or bolts and nuts complete fixed in position.	54.9	5 Qtl	
51	18.11	Iron-grated doors, including pintle hinges and arrangements	12.2	4 Qtl	
		PAINTING - POLISHING			
52	16.10	Applying priming coat on steel work consisting of genuine red lead mixed with linseed oil and turpentine oil in equal proportions.	1578.9	6 Sqm	
53	16.17	Painting two coats excluding priming coat with ready-mixed paint for metallic surfaces in all shades on new steel or iron work.	1578.9	6 Sqm	
54	16.2	Applying pink primer or aluminium priming coat on wood work including preparation of surface, knotting and stopping, etc. $ \\$	2302.0	0 Sqm	
55	16.3	Painting two coats excluding priming coat with synthetic enamel paint in all shades on new wood work or matallic or plastered or concrete surfaces to give an even shade.	2302.0	0 Sqm	
6	18.13 / a)	Stair case railing of 40mm internal dia G.I. pipe class 'B' as per I.S. No. 1239 as hard rail using flats and square bars as supporting members and base plate welded as per design specified includingcutting, wellding rods and complete fixed in position.	3.6	7 Qtl	
	b)	Parapet railing of 40 mm internal dia G.I. Pipe class 'B' as per I.S. No.1239 as hand rail using flats and square bars as supporting members and base plate welded as per design specified including cutting, welding rods and fixed in position complete in all respect.	19.9	9 Qtl	
3		PUBLIC HEALTH SANITARY INSTALLATION			
57	30.84	Providing and fixing in position HCI soil waste vent or antisyphonage pipes to ISI specification of E.L.C. manufacture or of any other reputed firm including cutting and wastage etc. and cutting holes in walls, roofs or floor etc. and making good to its original condition but excluding cost of lead jointing.			
	a)	100mm internal diameter	152.0	0 Mtr	
	b)	75mm internal diameter	284.0	0 Mtr	
58	30.87	Providing lead caulked joints to HCI pipes and specials conforming to ISI specification of E.L.C. manufacture or any other reputed firm including cost of lead yarn, fuel and tools etc.			
	a)	100mm internal diameter (1.13kg)	140.0	0 Each	
	b)	75mm internal diameter (0.91 kg)	208.0	0 Each	
59	30.88	Providing and fixing in position M.S. or heavy flat iron clamps made out of M.S. flat not less than 5mm of the approved design for fixing C.I. Soil waste vent or anti pipes to walls complete in all respects including cutting and making good the walls and floors etc. and painting.			
	a)	For 100mm internal diameter pipes.	60.0	0 Each	
	b)	For 75mm internal diameter pipes.	88.0	0 Each	

Sr. No.	HSR Ref. No	Description of item	Qty	Unit	Each Rate to be quoted by the Contractor (Rs.)
60	30.89	Providing and fixing HCI floor trap ISI marked of the self cleaning design with CP brass hinged grating with frame with or without vent arm and including cement concrete 1:2:4 under and around the floor trap where required upto floor level complete in all reapects including cutting and making good the walls and floors etc. minimum depth of water should be 150 mm with a minimum seal of 50mm.			
	b)	with 75mm i/d out let	60.0	0 Each	
61	30.91 a)	Providing and fixing in position HCI specials for soil, waste, vent or anti-syphonage pipes to ISI marked including cutting and wastage etc. cutting holes in walls roofs or floors etc. and making good to its original condition but excluding cost of lead jointing. For 100mm I/D pipes			
	I)	Heal rest bend.	32.0	0 Each	
	iv)	Single junction with door 100mm x 100mm x 100mm	16.0	0 Each	
	xvi)	Cowls	8.0	0 Each	
	xvii)	Door piece	2.0	0 Each	
	xxii)	Collars	8.0	0 Each	
	b)	For 75mm I/D pipes.			
	xviii)	Collars	12.0	0 Each	
	iv)	Single junction with door 75mmx75mm x75mm	24.0	0 Each	
	xvii)	Cowls	12.0	0 Each	
	i)	Heal rest bend	12.0	0 Each	
62	NS	Providing and fixing in position high quality ISI marked Indian make white vitreous chinaware European water closet suite P or S - trap including one no. superior quality white solid plastic seat and lid (seat cover) 8 Litre capacity PVC low level cistren, 40 mm size, CP brass flush bend and coupling of approved municipal design including cutting and making good the walls and floors with cement concrete 1:2:4 wherever required complete complete to the entire satisfaction of the Engineer-in-Charge.	24.0	0 Each	
63	NS	Providing and fixing CP brass spray jet for EWC including CP brass hexa nipple etc. complete to the entire satisfaction of the Engineer-in-Charge.	24	1 Each	
64	30.41	Providing and fixing in position best indian make (Ordinary) lavatory suites consisting of of Lavatory in VITREOUS CHINAWARE size as give below (to the approval of the Engineerin-charge) including china plug for tap hole where necessary; R.S. or C.I.BRACKETS for building into wall including painting; 32mm C.P.BRASS WASTE WITH C.P. brass chain and rubber plug; 15mm C.P.BRASS SCREW DOWN PILLAR TAP WITH jam nuts or couplings best design (as approved by the Engineer-in-charge) ALL FITTINGS BEST INDIAN MAKE and; to the approval of the Engineer-in-charge. ALL brass work chromium plated and COMPLETE in all respects INCLUDING cutting and MAKING GOOD THE WALLS, FLOORS AND PAINTING OF FITTINGS ETC.			
	(a)	White			
	(iv)	Size 550mm x 450mm with one no. tap	24.0	0 Each	
65	NS	Providing and fixing in position best quality stainless steel sink built in draining board of size 600mm x 450mm complete to the entire satisfaction of the Engineer-in-Charge.	12.0	0 Each	
66	30.71	Providing and fixing in position best Indian make bevelled edge 5.5mm thick mirror mounted on asbestos sheet ground fixed in position by means of 4 nos chromium plated brass screws & washers over rubber washers and rawl plug embedded in the wall or chromium plated brass clamps with C.P. brass screws (as required by the Engineer-in-charge) complete including cutting and making good the walls etc.			

Sr. No.	HSR Ref. No	Description of item	Qty	Unit	Each Rate to be quoted by the Contractor (Rs.)
	a)	Indian make			
	ii)	600 mm x 450 mm	24.0	00 Each	
67	30.68	providing and fixing in position best indian make towel rail fixing in with rwls lugs embedded in wall with c.p brass scerws, complete in all respect including cutting and making good the walls etc.			
	b	20mm dia C.P brass adjustable towel ring	24.0	00 Each	
	е	C.P brass towel ring	12.0	00 Each	
68	30.77	Providing and fixing CP brass liquid soap container of best quality complete	24.0	00 Each	
69	NS	Providing and fixing in position high quality heavy pattern CP brass (concealed) stop cock of standard design and of approved make conforming to IS:8931 complete to the entire satisfaction of the Engineer-in-Charge.			
	i)	15 mm nominal bore	48.0	00 Each	
70	NS	Providing and fixing in position approved make PVC pipe connections 375mm long with CP brass nuts and rubber washers complete to the entire satisfaction of the Engineer-in-Charge.	48.0	00 Each	
71	30.114	Providing and fixing in position gully traps fixed in cement concrete 1:4:8 complete with H.C.I. Grating 150mm x 150mm cast iron cover weighing approximately 7.26 kg frame clear opening 399mm x 300mm and outside size 330mm x 330mm and chamber including cost of all brick work in cement mortar 1:5 cement concrete 1:8:16 in foundations and cement concrete 1:2:4 in coping around C.I. cover and frame superior paint of approved manufacture on all C.I. work as per standard design, minimum depth of water should be 150mm with a minimum seal 50mm.			
	d)	150mm internal diameter HCI gully trap.	12.0	00 Each	
72	29.84	Constructing brick masonry inspection chamber size as given below upto 0.60 metre average depth in cement mortar 1:5 lime concrete with 40 percent lime mortar 2:3 in foundation cement concrete 1:2:4 benching 12mm thick cement plaster 1:2 with a floating coat of 1mm thick of neat cement RCC 1:2:4 slab 100mm thick /C.C. topping 50mm thick with 455 mm x455mm /455mm x 610mm inside light duty C.I. inspection chamber cover and frame weight as per ISI specifications painted with 3 coats of black bitumastic superior paint complete as per standard design.			
	c)	Size 600 $$ x 900mm inside (with 455m x455mm cover and frame light duty single seal weighing 20 kgs with RCC slab)	12.0	00 Each	
73	29.85 C)	Extra for every 0.30 mtr depth of Inspection Chamber 600x900mm	12.0	00 Each	
	в.	INTERNAL WATER SUPPLY			
74	NS	Providing and fixing GI pipe complete with GI fittings and clamps including cutting and making good the walls etc. complete to the entire satisfaction of the Engineer-in-Charge.			
	ii)	32 mm dia nominal bore	24.0	00 Mtr	
	iii)	25 mm dia nominal bore	16.0	00 Mtr	
	iv)	20 mm dia nominal bore	576.0	00 Mtr	
	v)	15 mm dia nominal bore	132.0	00 Mtr	
75	NS	Providing and fixing in position 15 mm internal diameter CP brass bib cocks of high quality and conforming to IS specifications with CP brass cap complete to the entire satisfaction of the Engineer-in-Charge.			

Sr. No.	HSR Ref. No	Description of item	Qty	Unit	Each Rate to be quoted by the Contractor (Rs.)
	i)	15 mm nominal bore short body	24.00) Each	
	ii)	15 mm nominal bore long body	72.00) Each	
76	30.119	Providing and fixing HDPE WATER STORAGE TANKS of sintex, Diplast , O.K. Supreme make with covers/lids marked with IS:12701 on roof top of buildings including cost of hoisting and placing in position, making connections with inlet and outlet pipes, providing overflow and scour provisions with suitable plug on scour pipe including cost of nipples, washers, flanges for connections in tanks complete in all respects to the satisfication to the Engineer-in-charge.(Expect civil work). 3 No's = 1000 lt) Each	
77	NS	Providing and fixing in position heavy pattern gun metal peet valve ISI marked with hand wheels, on GI			
		pipe lines laid in ground or inside building as per approved drawings, specifications complete to the entire satisfaction of the Engineer-in-Charge.			
	ii)	32mm dia nominal bore	12.00) Each	
	iv)	20mm nominal bore	12.00) Each	
78	NS	Providing and fixing GI union in GI pipe including cutting and threading the pipe and making long screws etc. complete to the entire satisfaction of the Engineer-in-Charge.			
	ii)	32mm dia nominal bore	4.00) Each	
	iii)	25mm dia nominal bore	4.00) Each	
79	30.110	Providing and fixing inposition automatic brass ball valve in tanks			
	b)	With Plastic ball			
	iv)	32 mm dia nominal bore	12.00) Each	
80	NS	Providing and fixing in positiong approved make CP brass stop cock with large size CP brass cap / flange complete to the entire satisfaction of the Engineer-in-Charge.			
	a)	15mm i/d angle valve	24.00) Each	
81	NS	Providing and fixing shower complete to the entire satisfaction of the Engineer-in-Charge.	24.00) Each	
82	31.12 (c)	ELECTRICAL WORKS Moulded Case Circuit Breakers			
		Supply and erection of Moulded case circuit breakers on wall or on existing pedestal including bonding to earth and necessary connections :-			
	(i)	15 amp. To 60 amp . 415 V 10 K.A. 3 phase	13 nos.	Each	
	(iv)	300 amp. To 400 amp. 415 V 35 K.A. 3 phase	01 no.	Each	
83	31.13	Supply and erection of M.S. angle iron frame duly welded for housing M.S. sheet & main switches etc. on it. On it, fixed on wall by means of suitable size of rag bolts with cement concrete, duly painted with three coats of approved paint including one coat of red oxide.			
	(ii)	Size 40 mm x 40 mm x 6 mm	36 mtrs.	Mtr	

Sr. No.	HSR Ref. No	Description of item	Qty	Unit	Each Rate to be quoted by the Contractor (Rs.)
84	31.14	Supply and erection of 3 mm thick mild steel sheet duly welded on exiting M.S. angle iron frame for fixing the main switches etc. as required, duly painted with three coats of approved paint including one coat of red oxide	05 sqm	Sqm	
85	31.15	Supply and erection of sheet steel enclosure 2 pole/3 pole with earth plug and socket suitable for incorporating single pole/triple pole MCB on wall/on exiting pedestal complete with necessary connections etc:-			
	(ii)	S.P.N. enclosure for single pole MCB 20 amp.	24 nos.	Each	
86	31.16	Supply and erection of blanking sheet in exiting distribution board.	12 nos.	Each	
87	31.17	Supply and erection of miniature circuit breaker/isolator 240/415 V in the exisiting distribution board including making necessary connections :-			
	(a)	Miniature Circuit Breakers of 9 K.A. breaking capacity			
	(ii)	6 amp. To 32 amp. SPMCB	300 nos.	Each	
	(iii)	40 amp. To 63 amp. TPNMCB	12 nos.	Each	
	(iii)	40 amp. To 63 amp. TPMCB	04 nos.	Each	
88	31.18 (M)	Supply and erection of Fittings and Accessories			
	(vii)	Call bell 220/230 Volts A.C. bakelite with double coil.	12 nos.	Each	
	xi)	Bakelite angle / straight button holder large size.	444 nos.	Each	
	xxvi)	Supply and erection of hexagonal M.S. box 1.60 mm thick having each side 8 cms, 7.5 cms deep, top covered with M.S. lid by means of screws including 10 mm dia 30cm long mild steel rod made into suitable suspension hook and erected in RCC slab for erection of fan, the bottom covered with 3 mm thick bakelite sheet with suitable holes, painting etc. complete with all labour and material required to complete the job.		Each	
89	31.21	Supply and erection of pipe for wiring purposes including bends inspection boxes etc. where necessary			
	xxi)	and painting as required. Heavy gauge welded conduit pipe 20 mm dia 1.60 mm thickness flushed.	320 mtrs.	Mtr	
	xxii)	Heavy gauge welded conduit pipe 25 mm dia 1.60 mm thickness flushed.	1000 mtrs.	Mtr	
	xxx)	Supply and erection of PVC pipe of 6 kg pressure, laid 1 metre below ground level complete, including digging refilling of the trench with jointing etc.			
	a)	PVC pipe 120 mm dia	50 mtrs.	Mtr	
	b)	PVC pipe 80 mm dia	70 mtrs.	Mtr	
90	31.22 i)	Earthing with G.I., earth pipe 4.5 m long and 40 mm dia with masonry enclosures on the top etc. as required.	26 nos.	Each	
	ii)	Extra for using salt and charcoal/coke for pipe earth electrode as required.	26 nos.	Each	
	iv)	Earthing with tinned copper earth plate 600 mm \times 600 mm \times 6 mm thick including accessories and providing masonary enclosures with cover plate having locking arrangement and watering pipe etc. (but without charocal or coke and salt) etc. complete as required.	02 nos.	Each	

Sr. No.	HSR Ref. No	Description of item	Qty	Unit	Each Rate to be quoted by the Contractor (Rs.)
	v)	Extra for charcoal or coke and salt for GI plate or copper plate earth electrode.	02 nos.	Each	
	x)	Providing and fixing 25 mm x 5 mm copper strip in 40 mm dia G.I. pipe from earth electrode as required.	20 mtrs.	Mtr	
	xiii)	Providing and laying earth connections from earth electrode with 4.00 mm dia copper wire in 15 mm dia $_{ m G.I.}$ pipe from earth electrode as required.	300 mtrs.	Mtr	
	xiv)	Providing and fixing 25 mm x 5 mm copper strip on surface or in recess for connections etc. as required with all labour and material.	10 mtrs.	Mtr	
	xvii)	Providing and fixing 4.00 mm dia copper wire on surface or in recess for loop earthing as required.	320 mtrs.	Mtr	
91	31.24 ii)	Excavation earth pit 180 cm round at top and 90 cm at bottom 4.5 metres deep and refilling the same in plains including supply of necessary charcoal / coke and salt mixture.	05 nos.	Each	
	iv)	Supply and erection of 60 cm \times 60 cm \times 6 mm thick galvanised iron plate including necessary bolts and nuts	05 nos.	Each	
	v)	Providing standard watering tank including down pipe and C.I. cover with locking arrangement etc.	05 nos.	Each	
	vi)	Providing and erection of 20 mm \times 3 mm thick lighting conductor G.I. tape fixed with suitable G.I. stapples of same size.	200 mtrs.	Mtr.	
	vii)	Supply and erection of G.I. tape 32 mm x 6 mm thick from earth electrode directly in ground and surface fixed with G.I. stapples of same size.	200 mtrs.	Mtr.	
	viii)	Supply and erection of 25 mm dia-meter 1.5 metre long lighting G.I. tube rod tapered into a point at the top with 16 cm \times 16 cm \times 3 mm thick G.I. base plate and necessary nuts and bolts with washers.	05 nos.	Each	
	ix)	Providing and fixing testing jhoints made of 20 mm x 3 mm thick G.I. strips 125 mm long with 4 Nos. bolts and nuts with washers complete.	05 nos.	Each	
92	31.26	Supply and erection of under ground cable, loose in existing pipe or trenches complete with necessary connections.			
	xxxiii)	240 Sqmm 3.1/2 Core Cable (Armoured)	200 mtrs.	Mtr.	
	<u>xI)</u>	16 Sqmm 4 core cable (Armoured)	200 mtrs.	Mtr.	
	xli)	25 Sqmm 4 core cable (Armoured)	600 mtrs.	Mtr.	
93	31.28	Supply and erection of suitable compression type brass cable glands for underground cable:-			
	ii)	10 Sqmm to 16 Sqmm Cable 2 to 4 Core	01 no.	Each	
	iii)	25 Sqmm to 50 Sqmm Cable 2 to 4 Core	24 nos.	Each	
	vi)	240 Sqmm Cable 3 to 3.1/2 Core	01 no.	Each	
94	31.35 ix)	Supply and erection of aluminium lugs heavy duty including crimping etc. upto the entire satisfaction of the Engineer-in-charge of the work.			
	d)	16 Sqmm	32 nos.	Each	
	e)	25 Sqmm	192 nos.	Each	
	j)	120 Sqmm	01 no.	Each	

Sr. No.	HSR Ref. No	Description of item	Qty	Unit	Each Rate to be quoted by the Contractor (Rs.)
	m)	240 Sqmm	03 nos.	Each	
95	31.36	Wiring in 1.5 sqmm PVC insulated copper conductor cable in 1.6 mm thick conduit pipe.			
	i)	Fan point			
	b)	Medium point	108 nos.	Each	
	c)	Long point	24 nos.	Each	
	ii)	Light Point			
	a)	Short Point	132 nos.	Each	
	b)	Medium point	12 nos.	Each	
	c)	Long point	216 nos.	Each	
	iii)	Twin Control light point with 2 ways, 5 amp. Single pole switch.			
	b)	Medium point	72 nos.	Each	
	c)	Long point	72 nos.	Each	
	vi)	Call bell point including MS box of size 180 mm x100 mm x 60 mm deep for call bell			
	c)	Long point	12 nos.	Each	
	vii)	3-pin 5 amp plug point including earthing the 3rd pin etc.			
	a)	Short Point	228 nos.	Each	
	b)	Medium point	12 nos.	Each	
	c)	Long point	60 nos.	Each	
	viii)	3-pin 15 amp plug point with 4 sqmm PVC insulated copper conductor cable including earthing the 3rd pin etc.			
	a)	Short Point	12 sqm	Sqm	
	b)	Medium point	12 sqm	Sqm	
	c)	Long point	120 sqm	Sqm	
96	31.40	Supply and erection of PVC unsheathed copper conductor cable single core 1100 Volts grade in pipe of suitable size excluding cost and erection of pipe.			
	i)	Cable size 1.5 Sqmm (3/0.81mm)	5000 mtrs.	Mtr.	
	ii)	Cable size 2.5 Sqmm (3/1.05mm)	5000 mtrs.	Mtr	
	iii)	Cable size 4 sqmm (7/0.85 mm)	3500 mtrs.	Mtr	
	iv)	Cable size 10 sqmm (7/1.35mm)	20 mtrs.	Mtr	

Sr. No.	HSR Ref. No	Description of item	Qty	Unit	Each Rate to be quoted by the Contractor (Rs.)
97	31.41	Supply and erection of double door sheet steel enclosure distribution board suitable for MCBs and ELCBs etc. recessed in wall including bonding to earth with all labour and material required to complete the job in all respect upto the entire satisfaction of the Engineer-in-charge of the work.			
	vi)	8-way, TP&N (Horizontal) (8+24)	12 nos.	Each	
98	31.42	Supply and erection doule pole/ Four pole Residual current circuit breaker (RCCB/ELCB) suitable for operation on 240/415 V, 5Hz. A.C. supply installed in existing sheet steel enclosures including making necessary connections and bonding to earth with all labour and material required to complete the job in all respect upto the entire satisfaction of the Engineer-in-charge of the work.			
	xv)	63A/415V FP ELCB with 30mA sensitivity.	12 nos.	Each	
99	31.44	Supply and erection of PVC conduit pipe ISI marked (medium) recessed in wall/ceiling etc. including cost of PVC bends, inspection box and all other material required to complete the job in all respect upto the entire satisfaction of Engineer-in-charge of work.			
	b)	25 mm dia	300 mtrs.	Mtr	
100	31.45	Supply and erection of copper lugs including crimping etc. upto the entire satisfaction of Engineer-incharge of the work.			
	a)	1.5 sqmm to 2.5 sqmm	264 nos.	Each	
	b)	4 sqmm to 6 sqmm	288 nos.	Each	
	c)	10 sqmm	96 nos.	Each	
101	31.48	Supply and erection of MS saddles and clamps on wall/ RCC parapit for fixing underground cable at a distance of 0.60 metre centre to centre fixed by means of rawl plug including the cost of all labour and material required to complete the job in all respect.	150 nos.	Each	
102	31.55	Supply and erection of socket size rotary step type Electronic regulator for A.C. ceiling fan Anchor make Deluxe model No. 50440 ISI/SSK make PC 561 operated on 120 / 280 V.A.C supply complete including cutting of existing bakelite sheet and making necessary connection etc. upto the entire satisfaction of the Engineer-in-charge of the work.		Each	
103	31.61	Supply and erection of street light luminer			
		M.H. 150 watt shreet light.	04 nos.	Each	
104	31.63	Supply installation testing & commissioning of wall free standing floor mounted etc. complete in all respect.	25 sqm	Sqm	
105	31.64	Supply and fixing of copper bus bar	90 kg.	Kg	
106	31.65	Providing and fixing difiting metering .	01 set	set	

Sr. No.	HSR Ref. No	Description of item	Qty	Unit	Each Rate to be quoted by the Contractor (Rs.)
107	31.68	providing and fixing 9 mtr long pole with top dia etc.	04 nos.	Each	
108	6.6	Earth work in excavation in foundations, trenches, etc.in all kinds of soils, not exceeding 2 metres depth including dressing of bottom and sides of trenches, stacking the excavated soil, clear from the edge of excavation and subsequent filling around masonry, in 15 cm layers with compaction, including disposal of all surplus soil, as directed within a lead of 30 metres		%cum	
109	10.26	Cement Concrete 1:8:16 with brick ballast 40mm nominal size in foundation and plinth.	12 cum	Cum	
110	11.4	First class brick laid in cement sand mortar 1:4 in foundation and plinth.	45 cum	Cum	
111	15.5	12 mm thick cement plaster 1:4	500 sqm	Sqm	
112	NS	Supply of 3 phase 4 wire watt house meter 10-60 Amp services make in existing pannel with necessary connection approved in U.H.V.B.N. (H.S.E.B.) complete to the entire satisfaction of the Engineer-in-Charge.		Each	
113	NS	Cutting of road by machine / manual means for require of size of pipe complete to the entire satisfaction of the Engineer-in-Charge.	30 mtrs.	Mtr.	
114	NS	Supply & filing river sand in existing pucca trenches complete to the entire satisfaction of the Engineer-in-Charge.	100 cum	cum	
115	NS	Supply & erection of 1st class brick on existing cables in pucca trench complete to the entire satisfaction of the Engineer-in-Charge.	6000 nos.	Each	

Note:-

- 1 The underground chale will be used of Havells/Polycabe make. No extra payment will be allowed on this account.
- 2 PVC pipe of 6 Kg. pressure Kasta/Swastik/Supreme make of HSR item no. 31.21 will be used if required. No extra payment will be allowed on this account.
- 3 The materials used for HSR item no. 31.12, 31.15, 31.17 and 31.41 will be used of Standard/Havells make if required and no extra payment will be allowed on this account.
- 4 PVC copper wire 31.38, 31.39 and 31.40 will be used of Havells/Polycable make if required and no extra payment will be allowed on this account.

DETAILED NOTICE INVITING TENDER

NAME OF THE WORK:-ROHTAK'

'CONSTRUCTION OF CAMPUS BOUNDARY WALL TOWARDS RAILWAY SIDE AT MDU

APPROX. LENGTH = 1700 MTR

App. Amt. Rs.1.60 Crores Earnest Money Rs. 1,60,000/Rs. 3,20,000/ Time Limit: 02 months

Sr. No.	HSR Ref. No	Description of item	Qty	Unit	Rate to be quoted by the Contractor (Rs.)
Α.		EARTH WORK			
1	21.1	Providing under reamed cast in situ piles using controlled concrete grade M-20 designed mix, 3.5 m deep including boring and getting out the soil and disposal upto a lead of 100m including cost of steel reinforcement jointing the tiles with main bars with welding and also all T&P complete in all respects:-			
	3	250mm dia ubder reamed pile	374.00	Each	
	III)	Extra For Every Additional 1 mt Length of Pile, over length mentioned in item no. 21.1			
	(b)	250mm dia	561.00	Each	
2	NS	Extra Ever item no 21.1 for Providing Additional Blub in Under Pile	748.00	Each	
3	10.79	cement conrete 1 : 2 : 4 with stone aggregate 20mm nominal size for reinforced conrete work but excluding steel-reinforcemnet centering and shuttering in foundation and plinth		Per Cum	

HSR Ref. No	Description of item	Qty	Unit	Rate to be quoted by the Contractor (Rs.)
10.86	Cement Concrete 1:2:4 with stone aggregate 20mm nominal size for reinforced concrete work for walls exceeding 20 cm thickness (straight and curved) beams, girders, stairs, columns, (square or rectangular) battens and lintels etc. excuding steel reinforcement but including centring and shuttering, laid in	384.03	Per Cum	
10.87	Cement concrete 1:2:4 with stone aggregate 20mm nominal size for reinforced concrete work for walls (10cm to 20 cm thickness) stright and curved excluding steel reinforcement but including centering and shuttering, laid in position, complete in all respects.	499.80	Per Cum	
10.95 (B)	Extra Over Item No. 10.79 to10.94 if 1:1.1/2:3 Mix Used Instead of 1.2.4	1,098.03	PerCum	
18.22	Cold Twisted Deformed (Ribbed / Tor Steel) Bars For RCC Works ,Where not included in the Complete Rate of R C C included Bending and Placing in Position Compllete	1,093.95	Per Qtl	
10.59	Cement concrte 1.2.4 with stone aggregate 20mm nominl size in first story upto 4 meters above plinth level	35.70	Per Cum	
9.1	Centering & Shuttring for flat surface s such as suspended floors, roofs, landings, chhajjas, shelves etc. inclination not exceeding 25 degree with horizental	357.00	Per Sqm	
	Ref. No 10.86 10.87 10.95 (B) 18.22	10.86 Cement Concrete 1: 2: 4 with stone aggregate 20mm nominal size for reinforced concrete work for walls exceeding 20 cm thickness (straight and curved) beams, girders, stairs, columns, (square or rectangular) battens and lintels etc. excuding steel reinforcement but including centring and shuttering, laid in 10.87 Cement concrete 1: 2: 4 with stone aggregate 20mm nominal size for reinforced concrete work for walls (10cm to 20 cm thickness) stright and curved excluding steel reinforcement but including centering and shuttering, laid in position, complete in all respects. 10.95 Extra Over Item No. 10.79 to10.94 if 1:1.1/2:3 Mix Used Instead of (B) 1.2.4 18.22 Cold Twisted Deformed (Ribbed / Tor Steel) Bars For RCC Works ,Where not included in the Complete Rate of R C C included Bending and Placing in Position Compllete 10.59 Cement concrte 1.2.4 with stone aggregate 20mm nominl size in first story upto 4 meters above plinth level 9.1 Centering & Shuttring for flat surface s such as suspended floors, roofs, landings, chhajjas, shelves etc. inclination not exceeding 25	Ref. No 10.86 Cement Concrete 1 : 2 : 4 with stone aggregate 20mm nominal size for reinforced concrete work for walls exceeding 20 cm thickness (straight and curved) beams, girders, stairs, columns, (square or rectangular) battens and lintels etc. excuding steel reinforcement but including centring and shuttering, laid in 10.87 Cement concrete 1 : 2 : 4 with stone aggregate 20mm nominal size for reinforced concrete work for walls (10cm to 20 cm thickness) stright and curved excluding steel reinforcement but including centering and shuttering, laid in position, complete in all respects. 10.95 Extra Over Item No. 10.79 to10.94 if 1:1.1/2:3 Mix Used Instead of 1.2.4 1.2.4 1.2.4 1.2.4 1.098.03 1.2.5 1.2	Ref. No

Sr. No.	HSR Ref. No	Description of item	Qty	Unit	Rate to be quoted by the Contractor (Rs.)
10	NS	Providing and laying cement blocks masonry size 600x300mm with 200mm thick ACC block in super structure above plinth level upto floor V level in cement motor 1:4 (1 cement : 4 coarse sand). The rate includes providing and placing in position 2 Nos 6mm dia M.S. bars at every third course of masonry work.		Per Cum	
11	26.25	Fixing glass pieces, on top of walls	1,700.00	Per Mtr	
12	6.26	Clearing jungle including uprooting of rank vegetation,grass brush wood,trees and saplings of girth upto 30cm measured at a height of 1 metre above ground		Per %Sqm	

DETAILED NOTICE INVITING TENDER

Name of the work "Providing and fixing Desk Bench in Lecture Theatres in various buildings in MDU, Rohtak"

App. Amt. Rs. 47,50,000/-Earnest Money Rs. 47,500/- / Rs. 95,000/-

Time Limit: 04 months

Sr. No.	H.S.R. Ref. No./N.S.	Description	Qty.	Unit	Rate with C.P. (Rs.)	Individual Rate to be quoted by the contractor (Rs.)
1.	N.S.	Supplying and fixing Desk (front row) frame of M.S. angle 40 mm x40 mm x5 mm Top made of 25 mm thick sheesham wood planks 350 mm wide. 100 mm wide, 25 mm thick facia of sheesham wood on three sides. On front 6 no., 100 mm wide planks of sheesham wood 25 mm thick shall be fixed with galvanized nut and bolts. Sheesham wood shall be polished with laquer polish and angle shall be painted with 1 st quality paint. Desk Bench shall be fixed by fastener in flooring complete to the entire satisfaction of Engineer-in-Charge. As per sample approved.	112 mtr.	Per mtr.	Rate to be quoted by the Contractor	
2.	N.S.	Supplying and fixing Desk Bench (middle row) frame work of M.S. angle 40 mm x40 mm x5 mm, Top of sheesham wood 350 x 25 mm and seat of sheesham wood 300 mm wide and 25 mm thick with gaps 100 mm wide, 25 mm thick facia of sheesham wood on three sides. Sheesham wood shall be polished with laquer polish and angle shall be painted with 1st quality paint. Sheesham wood shall be fixed with galvanized nut and bolts complete to the entire satisfaction of Engineer-in-Charge. As per sample approved.	658.83 mtr.	Per mtr.	Rate to be quoted by the Contractor	
3.	N.S.	Back seat made of M.S. angle 40 mm x 40 mm x 5 mm. 3 nos. sheesham wood planks 100 mm x 25 mm on seat & back. Planks shall be fixed	112 mtr.	Per mtr.	Rate to be quoted by the Contractor	

Sr. No.	H.S.R. Ref.	Description	Qty.	Unit	Rate with C.P. (Rs.)	Individual Rate to be
	No./N.S.					quoted by the
						contractor (Rs.)
		with galvanized nut & bolt with angle iron.				
		Sheesham wood shall be polished with laquer				
		polish and angle shall be painted with 1 st quality				
		paint. Angle iron shall be fixed with fastener in				
		flooring complete to the entire satisfaction of				
		Engineer-in-Charge. As per sample approved.				

Note:- Sheesham wood shall be well seasoned as per ISI standard with Moister contents should not be more than 8%. Length wise joints will not be allowed. However, width wise tongued and grooved joints can be allowed i.e. in 14" width two no. 7"/8" planks can be permitted. In 8' or 9' length joint is not allowed