

**Schedule - B**

**Construction of 130 cm telescope building at Devesthal (jadapani) Tehsial- Dhari Distt- Nainital (Uttarakhand).**

**Estimated cost :**

**Tender cost: 1000.00**

**Earnest money : 50,000.00**

**Allowed Time: 6 Month**

S.N.	Description	Unit	Qty	Rate		Amount
				In Figure	In Words	
1	<b>Earthwork</b>					
1.1	Earth work. in excavation over areas (exceeding 30 cm in depth. 1.5 m in width as well as 10 sqm on plan) including disposal of excavated earth, for all leads within the campus and lift upto 1.5m, disposed earth to be levelled and neatly dressed.					
a)	All kinds of soil	Cum	101.15			
b)	Ordinary Rock	Each	10			
1.2	Filling available excavated earth (excluding rock) in: trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth: consolidating each, deposited layer by ramming and watering, All lead: and lift up to 1.5m.	Cum	35			
1.3	Extra for every additional lift of 1,5 m or part thereof in					
a)	All kinds of soil	Cum	10			
b)	Ordinary Rock	Cum	10			
1.4	Supplying and filling in piinth with sand under floor including, watering, ramming consolidating and, dressing complete		20			
1.5	Supply and stacking of good earth including royalty and carriage upto site all leads. ( earth measured In stack will be reduced by 20%.for payment)	Cum	20			
2	<b>concrete work</b>					
2.1	Providing and laying in position cement concrete ofl specified grade excluding the cost of centering and shuttering - up to plinth level.					
a)	1:2:4 ( 1Cement:2 coarse sand : 4 graded stone aggregate 40 mm nominal size )	Cum	3.48			
b)	1:5:10 ( 1 Cement: 5 coarse sand : 10 graded stone aggregate 40 mm nominal size )	Cum	49.17			
2.2	Providing and laying damp-proof course 40mm thick with cement concrete 1: 2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 12.5 mm nominal size) in horizontal / vertical surface	Sqm	10			
2.3	Extra for providing and mixing' water proofing material in cement concrete work in the proportion recommended by the manufacturers. (Impermo. or equivalent )	50 kg ba	50			
	<b>Subhead Total</b>					
3	<b>R. C. C. Work</b>					

3.1	Providing and laying In position machine batched, machine mixed and machine vibrated design mix cement concrete of specified grade for reinforced cement concrete structural elements, excluding the cost of centring, shuttering, finishing and reinforcement					
	a) All work up to plinth level	Cum	30.478			
	b) All work from plinth level upto floor V level					
	i) Walls, columns, pillars, posts and struts	Cum	24.652			
	ii) Beams, plinth beams, griders, bressumers, cantilevers, suspended floors linteJs roofs and staircases including spiral staircases, shelves etc.	Cum	69			
3.2	Add or deduct for providing richer or leaner mixes respectively at all floor level.					
	a) Providing M - 25 grade RCC instead of M - 20 grade RCC	Cum	124.13			
	b) Providing M - 30, grade RCC instead of M - 20 grade, RCC	Cum	124.13			
3.3	Centring and shuttering including strutting, propping etc. and removal of form for:					
	a). Foundations, footings, bases of columns etc. for mass concrete	Sqm	76.71			
	b) Suspended floors, including inclined roofs, landings, balconies and access platform	Sqm	189.43			
	c) Lintels, beams, plinth beams, griders, bressumers and cantilevers	Sqm	352			
	d) Columns, Pillars, Piers, Abutments, Posts	Sqm	253.78			
	e) Stairs, (excluding landings) except spiral-staircases	Sqm	10			
	<b>Subhead Total</b>					
	<b>Steel Reinforcement</b>					
3.4	Reinforcement for R,C.C work including straightening, cutting, banding,					
	placing in position and binding all complete					
	Thermo mechanically treated bars	Kg	14000			
	<b>Subhead Total</b>					
4	<b>Brick work</b>					
4.1	Brick work with bricks of class designation 75 foundation and plinth in cement mortar 1: 6 (1 cement : 6 coarse sand)	Cum	77.58			
	in super structure above plinth upto floor V level over cement mortar 1: 6 (1 cement : 6 coarse sand)	Cum	60.61			
	<b>Subhead Total</b>					
5	<b>Stone Work</b>					
5.1	25 mm thick Kota stone shelves (Semi polished) fixed in walls in cement mortar 1: 3 (1 cement : 3 coarse sand) including finishing complete.	Sqm	10			

5.2	Random rubble masonry with hard stone in foundation and plinth including levelling with cement concrete 1: 6 : 12 (1 cement: 6 coarse sand: 12 graded stone aggregate 20 mm nominal size) at plinth level with:					
	Cement mortar 1:6 ( 1 cement:6 Course sand)	Cum	50			
5.3	Extra for random rubble masonry with hard stone in superstructure above plinth level and upto floor five level, including levelling up with cement concrete 1:6: 12 (1 cement: 6 coarse sand: 12 graded stone aggregate 20 mm nominal size) at window sills ceiling					
		Cum	10			
<b>Subhead Total</b>						
<b>6 Wood Work / Aluminum Work</b>						
6.1	Providing wood work in frames of doors, windows,; clerestory windows and other frames, wrought framed and fix in position					
	sal wood	Cum	1.67			
6.3	Providing and fixing paneled or paneled and glazed shutters for doors, windows and clerestory windows' including ISI marked black inameled butt hinges with necessary screw excluding, paneling which will be: paid for separately					
	a) 40 mm thick					
	l) Second class teak wood	Sqm	19.51			
6.4	Providing and fixing 35 mm thick glazed shutters for doors, windows and clerestory windows using 10. Kg/square meter (4mm thick) glass panes including ISI marked M .S. butt hinges with necessary screws and cutting rebate where ever required as per archite					
	.a) Second class teak wood	Sqm	15			
6.5	Providing and fixing 35 mm thick wire gauze shutters using galvanized MS wire gauze of average width of aperture 1.4mm with wire of dia 0.63 mm for doors, windows and clerestory windows including IS1 marked MS. butt hinges with necessary screws and cutt					
	.a) Second class teak wood	Sqm	33.67			
6.6	P/F ISI marked flush door shutter decorative type, core of black board construction with frame of first class hard wood and well matched teak 3 ply veneering with vertical grains of cross bands and face veneers on both faces of shutters					
	35mm thick including ISI marked stainless steel butt hinges with necessary screws	Sqm	17.93			
6.7	Providing and fixing IS:3564 marked aluminium die cast body tubular type universal hydraulic door closer, Hardwyn make (classic queen) or Everite with necessary accessories all screws etc. complete.					
		Each	5			

6.8	Providing and fixing aluminium sliding door bolts anodised (anodic coating not less than grade AC 10 as per IS: 1868) transparent or dyed to required colour or shade with nuts and screws etc. complete;					
	300x16mm	Each	10			
6.9	Providing and fixing aluminium handles anodised (anodic coating not less than grade AC 10 as per IS: 1868) transparent or dyed to required colour or shade with necessary screws etc. complete					
	.a) 300 x 10 mm	Each	24			
	b) 250 x 10mm	Each	21			
	.c) 150 x 10 mm	Each	30			
	b) 100 x 10mm	Each	18			
6.10	Providing and fixing aluminium handles anodised (anodic coating not less than grade AC 10 as per IS: 1868) transparent or dyed to required colour or shade with necessary screws etc. complete					
	a) 125mm .	Each	10			
	b) 100mm	Each	5			
6.11	Providing and fixing' aluminium hanging floor door stopper anodised (anodic coating not less than grade AC 10 as per IS ; 1868) transparent or dyed to required colour and shade with necessary screws etc. complete.					
	Twin rubber stopper	Each	20			
6.12	Providing and fixing aluminium casement. stays anodised (anodic coating not less than grade AC 10 as per IS ; 1868) transparent or dyed to required colour and shade with necessary screws etc. complete.	Each	10			
6.13	Providing and fixing bright finished brass night latch including necessary screws etc. complete (Godrej Make)	Each	3			
6.14	Providing and fixing bright finished brass 100mm mortice latch and lock with six levers and a pair of anodised (anodic coating not less than grade AC 10 as per IS: 1868) aluminium lever handles with necessary screws etc. complete (best make of approved quality)					
	a) For fixed portion. frames	Each	5			
6.15	Providing and fixing plain glass panes on wooden frame including teak wood beading complete in all respect.					
	a) 5 mm thick	Sqm				
6.16	Providing and fixing wooden moulded beading size 50 mm x 12 mm to door and window / frames with iron. screws, plugs and priming coat on unexposed surface etc. complete	Meter	500			
6.17	P& F M.S Grills of required pattern framed of windows etc. With M.S. flats , square or round bars etc.					

	Fixed to opening /Wooden frames with rawl plug screw etc.	Kg	300			
	<b>Subhead Total</b>					
<b>7.0</b>	<b>Flooring</b>					
7.1	Cement Concrete flooring 1:2:4 (1 cement: 2 coarse sand: 4-) finished with a floating coat of neat cement including cement slurry but excluding the cost of nosing of steps e.t.c. complete.					
	50 mm th with 20 mm nominal size stone aggregate	Sqm	122			
7.3	Providing and fixing matt finish ceramic tiles confirming to IS : 13753 of minimum thickness of 7.00mm of approved make like KAJARIA, SOMANY, NITCO , ORIENT in flooring and walls over 12mm thick bed of cement mortar 1: 3(1cement: 3coarse sand) and jointi	Sqm	64.46			
7.4	Providing and fixing 18mm thick mirror polished machine cut for kitchen platforms, vanity counters facias and similar locations of required size of approved shade, colour and texture laid over 20mm thick base cement mortar 1:4 (1 cement : 4 coarse sand)					
	a) :Grgnite stone - black	Sqm	2			
	b) Udaipur green marble	Sqm	5			
7.5	Extra for providing edge moulding to 18 mm thick stone counters vanities etc. over the above item including machine polishing to edge to give high gloss finish etc. complete as per design approved by ProjectEngineer.					
	a) :Grgnite stone - black	Meter	5			
	b) Udaipur green marble	Meter				
7.6	Extra for providing opening of required size & shape for wash basins/kitchen sink in kitchen platform, vanity counters and similar location in marble/stone work Including necessary holes for pillar taps etc. including rubbing and polishing of cut edges et	Each	5			
7.7	Extra for finishing the side of terrazzo tiles in stair case to give the matching appearance of tiles.	Sqm	5			
	<b>Subhead Total</b>					
<b>8.0</b>	<b>Roofing Work</b>					
8.4	Providing and fixing UPVC soil waste rainwater (SWR). pipe with none end plain and other and integrally socketed and provided with square grooves and along with V shaped rubber ring including fittings bend, tees etc. and making good wall and nooring					
	a) 110 mm outer diameter	Meter	40			
	b) 160mm outer diameter	Meter	10			

8.5	Providing and fixing MS holder bat clamps of approved: design to C.I or SCI rain water pipes embedded in and including cement concrete blocks 10x10x10cm of 1 :2:4 mix (1 cement: 2 coarse sand: 4 graded stone aggregote 20mm nominal size) and cost of cuttin					
	a) 110 mm diameter	Each	20			
8.6	Providing and fixing to the inlet mouth of rain water pipe cast iron grating					
	a) 15 cm diameter and weightlmg not less than 440gm	Each	4			
	<b>Subhead Total</b>					
9.0	<b>Finishing work</b>					
9.1	12 cm Cement plaster of mix:					
	1:6 (1 Cement : 6 fine sand )	Sqm	300			
9.2	15 cm cement plaster on the rough side of single or					
	1:6 (1 Cement : 6 fine sand )	Sqm	325			
	<b>Description</b>					
9.6	Distempering with dry distemper of approved brand. and manufacture (two or more coats) and of required shade on new work, over andincluding priming coat of whitening to given an even shade.	Sqm	325			
9.7	<b>Applying priming coat:</b>					
	a) With ready mixed pink or grey primer of approved brand and manufacture on wood work (hard and soft, wood)	Sqm	100			
9.8	Painting with synthetic enamel paint of approved brand and manufacture of required colour to give an even shade					
	Two or mOre coats on new work manufacture.	Sqm	100			
9.10	Finishing walls with water proofing cement paint					
	"Snowcem-Plush" of M/s. Snowcem India Ltd, orequivalent of required shade:					
	New work (Two or more coats applied @ 3.84 kg/10 Sqmn)	Sqm	300			
9.11	Wall painting two or more coats on new work with acrylic emulsion paint approved brand and:					
	manufacture to give an <i>even shade</i> .	Sqm	10			
	<b>Subhead Total</b>					
	<b>(A) SANITARY INSTALLATION</b>					
1	Providing and fixing white vitreous china water closet squatting pan (Indian type WC pan) with 100 mm sand cast iron P or Strap, 10 litre low level PVC flushing cistern with manually controlled device (handle liner) conforming to IS 7231					

	a) Orissa pan WC of size 580 )( 440 mm with integral type foot rests flush pipe and overflow arrangement.	Each	1			
2	Providing and fixing white vitreous china pedestal type water closet (European type) with seat and lid, with C.P. brass hinges and rubber buffers 10 litre low level flushing cistern with fittings & CL I M.S. brackets, 40mm flush bend, overflow arrangement					
	a) W.C. pan with white solid plastic seat and lid with white vitreous china flushing cistern & C.P. flush bend.	Each	2			
4	Providing and fixing vitreous chinaware urinal comprising a. Large flat back wall hung urinal in white glazed vitreous china 610mm x 400mm x 380mm 1 Each	Each	3			
4a	providing and fixing white vitreous china wash basin with C.I/M.S. brackets, 15 mm c.p. brass pillar taps 32 mm c.P. brass waste of standard pattern including painting of fittings and brackets, cutting and making good the wall wherever required.					
	a) Flat back wash basin size 550 x 400 mm with a pair of 15 mm c.p. brass pillar tap	Each	4			
5	Providing and fixing stainless steel kitchen sink as per IS 13983 with c.i. brackets and stainless steel plug 40mm including painting of fittings and brackets, cutting and making good the wall wherever required.					
	a) 535x460 mm depth 178mm	Each	1			
6	Providing and fixing 600X450mm bevelled edge mirror of superior glass (of approved quality) complete with 6mm thick hard board ground fixed to wooden cleats with CP brass screws and washers complete	Each	3			
7	Providing and fixing towel rail complete with brackets  fixed to wooden cleats with c.p. brass screws.  600x200mm size.	Each	3			
8	Providing and fixing CP soap dish fixed to wall plug of approved design with CP brass screws.  a) c.p. brass.	Each	4			
9	Providing and fixing toilet paper holder,  a) c.p. brass	Each	2			
10	Providing and fixing CP brass twin coat hooks fixed to wooden cleats with CP brass screws, hooks or approved equivalent	Each	4			

11	Providing and fixing wall mounting type push-type liquid soap dispenser with 1000 ml bulk volume, with pump suitable for operation on less than 5 PSI complete in all respects. (DATARICA Economaster; Black Model)	Each	3			
12	Providing and fixing ball valve (brass) of approved quality complete, High or low pressure with plastic floats.					
	25 mm nominal bore	Each	2			
13	Providing and Fixing in position 25 mm diameter mosquito proof coupling of approved municipal design					
14	Providing and fixing C. P. brass long body bib cock of (Improved quality conforming to IS standards and weighting not less than 690 gms.					
	15 mm dia nominal bore.	Each	2			
15	Providing and fixing c.p.brass bib cock of approved Quality conforming to IS 8931 standards and weighing not less than 810 gms					
	15 mm dia nominal bore.	Each	3			
16	Providing and fixing c.p.brass angle valve for basin mixture and geyser points of approved Quality conforming to IS :8931.					
	15 mm dia nominal bore.	Each	20			
17	Providing and fixing C.P. brass concealed stop cock of,	Each	3			
	approved .quality for shower assembly complete In all respect.					
18	Providing and fixing CP brass connection pipe With					
	brass union 45cm length.					
	15 mm dia nominal bore.	Each	20			
19	Providing and fixing shower set RELAXA	Each	3			
20	Providing , fixing, testing and commissioning of storage type electric water heater with automatic thermostatic control electric element; pressure release valve, brackets fixed to expansion fasteners with M.S. nuts and bolts all complete including cutting					
	a) 25 litres capacity					
21	providing, fixing, testing and commissioning of Twin; Solar panel of 300 litres capacity of TATA or approved equivalent complete in all respects .					
22	Providing and fixing CP brass bottle trap for wash basin and sink of approved make complete in all respect.					
	a) 32 mm dia	Each	1			
23	Providing and fixing stainless steel twin coat hook with, CP brass screws					
24	Providing and fixing CP brass cockroach trap of approved make complete,					

	<b>Subhead Total (A)</b>					
(B)	<b>SOIL WASTE &amp; RAIN WATER PIPE</b>					
1	Providing and fixing soil, waste and vent pipes					
	a) .100 mm dia centrifugally cast (spun) iron S&S	Metre	100			
2	Providing and fixing M.S. holder-bat clamps of approved design to sand cast iron / cast iron (spun) pipe embedded in and including cement concrete blocks 10X10X10 cm of 1 :2:4 mix (1 cement : 2-coarse sand 4 graded stone aggregate 20mm; nominal size) in					
	a) For 100 mm dia pipe.	Each	45			
3	Providing and fixing plain bend of required degree					
	a) 100 mm centrifugally cast (spun) iron S&S	Each	10			
4	Providing and fixing plain bend of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete					
	a) 100 mm centrifugally cast (spun) iron S&S	Each	3			
5	Providing and fixing heel rest sanitary bend.					
	a) Centrifugally cast (spun) iron. S&S (100 mm dia)	Each	4			
6	Providing and fixing single equal plain junction of required degree with access door, insertion rubber washer 3 mm thick, bolts and nuts complete.					
	a) 100 x 100 x 100 mm centrifugally cast (spun) iron S&S.	Each	4			
7	Providing and fixing terminal guard					
	a) 100 mm centrifugally cast (spun) iron S&S	Each	1			
8	Providing lead caulked joints to sand cast iron / centrifugally cast. (spun) iron pipes and fittings of diameter					
	a) 100 mm	Each	45			
9	Providing and fixing MS stays and clamps for sand cast iron centrifugally cast (spun) iron pipes of diameter.					
	a) 100 mm	Each	45			
10	Providing and fixing sand cast iron trap of self-cleansing design with sand cast screwed down or; hinged grating with or without vent arm complete, including cost of cutting and making good the walls, and floors.					
	a) 100 inlet and 100 mm outlet	Each	10			
11	Providing and fixing single equal plain junction of required degree					
	Plain equal tee 100 X 100 X 100 sand cast iron S&S	Each	2			
12	Providing and fixing single unequal equal plain junction of required degree					

13	Providing and fixing stainless steel Jali (grating) with or without hole for waste pipe for floor / Nahani trap.					
	a) 100 mm dia weight not less than 100 qms	Each	10			
14	Painting sand cast iron! centrifugally cast (spun) iron soil, waste vent pipes and fittings with paint of any colour such as chocolate grey, or buff etc, over a coat of primer (of approved quality) for new works.					
	a) 100 mm diameter pipe	Metre	100			
15	Providing and fixing cast brass dean out plug with suitable insert keys for opening male threaded joint fixed to G.I.socket complete (cleanout to be flushed with floor finish)					
	a) 100 mm dia					
16	Providing and fixing flanged deanout plug with M.S. flanged tail pieces, blind (lang, 6mm dia nut & bolts, gasket and washers fixed to CL Pipe with drip seal, joint complete in all complete including cutting and making good the walls and floor whereve					
	100 mm dia					
17	Providing and fixing G.I. Inlet fitting of suitable size! with 2 & 3 nos. G.I. Socket 32 & 40 welded G.I. Pipe complete in all respect					
	a) 100 mm diameter pipe					
18	Cutting holes upto 30X30cm In walls Including making good the same .					
	With FPS Bricks					
19	Providing and fixing wall face SCI rain water pipes including filling the joints with spun yarn, soaked in neat cement slurry and cement mortar 1: 2 (1 cement:2 fine sand)					
	a) 100 mm dia					
20	Providing and fixing floor drain points formed out of 63 mm dia GI elbow, including with 75mm dia Stainless Steel grating with frame embedded in floor, all complete as directed.					
	Subhead Total (B)					
<b>(C)</b>	<b>WATER SUPPLY</b>					
1	Providing and fixing of concealed GI pipe complete with GI fittings including chasing and making good extra for internal work.					
	a) 15 mm dia. nominal bore	Metre	100			
	b) 20 mm dia. nominal bore	Metre	50			
	c) 25 mm dia. nominal bore	Metre	50			
	d) 32 mm dia, nominal bore	Metre	10			
	e) 40 mm dia, nominal bore	Metre	10			
3	Providing and fixing GI pipes complete with GI fittings					
	a) 25 mm dia. nominal bore	Metre	50			
	b) 50 mm dia. nominal bore	Metre	50			

4	Painting G.I. pipes and fittings with white paint over a ready					
	mixed priming coat, both of approved Quality for new work.					
	a) 15 mm dia. nominal bore	Metre	100			
	b) 20 mm dia. nominal bore	Metre	50			
	c) 25 mm dia. nominal bore	Metre	50			
	d) 32 mm dia. nominal bore	Metre	10			
	e) 40 mm dia, nominal bore	Metre	10			
9	Painting G.I. pipes and fittings with two coats of anti corrosive bitumastic paint of approved quality					
	b) 20 mm dia. nominal bore	Metre	50			
	c) 25 mm dia. nominal bore	Metre	50			
7	Constructing masonry chamber 30X30X50cm inside					
	with 75 class designation brick work in cement mortar 1: 5 (1 cement: 5 fine sand) for stop cock, with CI surface box 100x100x75 mm (inside) with hinged cover fixed in cement concrete slab 1:2:4 mix .	Each	3			
	a) With F.P.S. brick					
8	Providing and fixing brass ball valve with C.I. wheel of approved quality (screwed end).					
	a) 15 mm dia. nominal bore	Each	6			
	b) 20 mm dia. nominal bore	Each	3			
	c) 25 mm dia, nominal bore	Each	2			
5	Constructing brick masonry manhole with 75 class designation bricks in cement mortar 1:4 (1 cement: 4. coarse sand), RCC top slab in 1 :2:4 mix (1 cement :1 2 coarse sand 4 graded stone aggregate 20 mm nominal size) foundation concrete 1:4 :8					
	a) Inside size 90 x 80 cm and 45 cm deep including CI cover with frame (light duty) 455 x 610 mm internal dimensions total weight of cover and frame to be not less than 38 kg (wt. of cover 23 kg and wt of frame 15 kg with F.P.S. bricks	Each	3			

Grant Total

I/We do hereby tender to execute the **Costruction work of Scientist Rest Rooms, Devasthl (Jadapani) Tehsial- Dhari, Distt - Nainital (Uttarakhand)**, during the year 2007. The complete detail of the work has been received by me/us. The NSC/KVP/FDR No-----  
 ----- Dated----- for Rs------(Rs-----)  
 purchased by me/us from the post offices/bank at -----as earnest money is being enclosed . I understand that this earnest money may be forfeited to the Director,ARIES.If I/We fail to sign the contract, the form of which I/ We have inspected within the time specified in the notice calling for tenders.

Signature of Tendrer

Full Name

Address

Date