#### P.W.D.

# Buildings (C&M) Division,

# Ramanathapuram.

#### SCHEDULE - A

### Name of work: Construction of Veterniray Dispensary Building at Soorankottai in Ramanathapuram District.

S1. No.	Quantity	Description	TNBP No.	Rate in Figures and in words	Unit	Amount in Rs.
1	2	3	4	4	5	6
1	299.00 M <sup>3</sup> [ Two Hundred and Ninety Nine point Zero cubic metre only]	Earth work Excavation for foundation in all soils and sub soils and to full depth as may be directed except rock requiring blasting inclusive of shoring, strutting and baling- out of water wherever necessary, re-filling the sides of foundation with excavated earth in layers of 15cm thick well rammed and compacted, depositing the surplus earth within the compound in places shown by the Departmental Officers with an initial lead of 10 meters and lift of 2 meters lift etc., complete with standard specifications.			1 M <sup>3</sup> (One cubic metre)	
2	24.50 M <sup>3</sup> [Twenty Four point Five Zero Cubic metre only]	Earth work open excavation in all soils and sub soil and to full depth as may be directed except in hard rock requiring blasting but including shoring, strutting and balling out water wherever necessary and depositing the surplus earth within the compound with an initial lead of 10 metres and lift of 2 metres in places shown by the departmental officers clearing, leveling the site etc., complete complying with standard specification.			1 M <sup>3</sup> (One cubic metre)	

1	2	3	4	4	5	6
3	8.60 M <sup>3</sup> [Eight point Six Zero Cubic metre only]	Cement Concrete 1:5:10 (One Cement, Five sand and Ten hard broken stone jelly) using 40 mm gauge hard broken granite stone jelly for foundation including dewatering wherever necessary and laid in layers of not more than 15 cm thick well rammed, consolidated and curing etc. complete complying with standard specification	23 & 24		1 M <sup>3</sup> (One cubic metre)	
4		Brick work in following Cement Mortar using best quality of country bricks of size $8-3/4$ " x $4-1/4$ " x $2-3/4$ " in cement mortar 1:5 for foundation and basement including curing, etc., complete complying with standard specifiction.	23 & 24			
a	14.00 M <sup>3</sup> [Fourteen point Zero Cubic metre only]	In Foundation and Basement	23 & 24		1 M <sup>3</sup> (One cubic metre)	
5		Brick work in cement mortar 1:6 (one cement and six sand) using Country bricks $8-3/4$ " x $4-1/4$ " x $2-3/4$ for the following items including curing etc., complete complying with standard specification.	23 & 24			
a	28.50 M <sup>3</sup> [Twenty Eight point Five Zero Cubic metre only]	In Foundation and Basement	23 & 24		1 M <sup>3</sup> (One cubic metre)	

1	2	3	4	4	5	6
b	54.00 M <sup>3</sup> [Fifty Four point Zero Cubic metre only]	In Ground Floor	23 & 24		1 M <sup>3</sup> (One cubic metre)	
6	0.60 M <sup>3</sup> [Zero point Six Zero Cubic metre only]	Supplying and filling in foundation, basement, etc with filling sand in layers of not more than 15 cm thick well watered, Without consolidation etc. complete complying with standard specification and as directed by the departmental officers.	23 & 24		1 M <sup>3</sup> (One cubic metre)	
7	30.10 M <sup>3</sup> [Thirty point One Zero Cubic metre only]	Supply and filling in foundation and basement with Gravel	23 & 24		1 M <sup>3</sup> (One cubic metre)	
8	28.50 M <sup>3</sup> [Twenty Eight point Five Zero Cubic metre only]	Supplying and filling in foundation, basement, etc with filling stone dust in layers of not more than 15 cm thick well watered, rammed and consolidated etc. complete complying with standard specification and as directed by the departmental officers.	23 & 24		1 M <sup>3</sup> (One cubic metre)	
9	45.50 M <sup>3</sup> [Forty Five point Five Zero Cubic metre only]	Supplying and filling in foundation and basement with Conveyed earth other than sand in layers of not more than 15cm thick, well rammed watered and consolidated etc., complete complying with standard specifications.	23 & 24		1 M <sup>3</sup> (One cubic metre)	

1	2	3	4	4	5	6
10	21.00 M <sup>3</sup> [Twenty One point Zero Cubic metre only]	Refilling with excavated earth other than sand with an initial head load of 100 mts. and depositing the earth as shown by the departmental officers in layers of not more than 15 cm thick well rammed, watered and consolidated etc. complete complying with standard specification	23 & 24		1 M <sup>3</sup> (One cubic metre)	
11	82.10 M <sup>2</sup> [ Eighty Two point One Zero square metre only]	Supplying and erecting steel centering for sides and soffits including supports for plain surfaces for reinforced cement concrete work such as column footing, plinth beam, grade beams, staircase steps, pedestals, bed block covers etc., using mild steel sheets of size 90mm x 60mm of B.G.10 stiffened with welded mild steel angles of size 25 mm x 25 mm x 3 mm boarding laid over silver oak (or) country wood joists of size 10 cm x 6.5 cm spaced at about 90 cm centre to centre and supported by casuarinas props of 10cm to 13 cm dia spaced at 75 cm centre to centre at suitable intervals etc., complete complying standard specifications.	23 & 24		1 M <sup>2</sup> (One square metre)	
12		Supplying and erecting centering for sides and soffits including supports and strutting upto 3.29m high for plain surfaces such as RCC slab, beams, TEE or Ell beams, Lintels staircase beams etc., with all cross bearings using mild steel sheets of size 90mm x 60mm of B.G.10 stiffened with welded mild steel angles of size 25 mm x 25 mm x 3 mm boarding laid over silver oak (or) country wood joists of size 10 cm x 6.5 cm spaced at about 90 cm centre to centre and supported by casuarinas props of 10cm to 13 cm dia spaced at 75 cm centre to centre at suitable interval. etc., complete complying standard specifications.	23 & 24			

2	3	4	4	5	6
$a = 237.50 \text{ M}^2$	Centering for RCC floor slab, roof slab, recta	angular, 23 & 24		$1 \text{ M}^2$	
[ Two Hundred and Thirty Seven point Five Zero square metre only]	slab, landing slab, landing beam, portico beam,			(One square metre)	

b		Centering for such as RCC square or rectangular 23 & 24	$1 \mathrm{M}^2$
		column, top and bottom slab of sunshade, boxing sill	(One square
	and Seventy Nine	slab etc.,	metre)
	poin Zero square		
	metre only]		

1	2	3	4	4	5	6
3		Providing and laying in position, standardised concrete Mix M- 25 Grade in accordance using 20mm with IS:456-2000, and down graded hard broken granite stone jelly for all RCC items of works with minimum cement content of 325 kg/ms and maximum water cement ratio of 0.55, including admixture (plasticiser / super plasticiser) in recommended proportions as per IS:9103 to accelerate, reta?d setting of concrete, improve workability without impairing strength and durability with about (5 cu.m.) 7730 kg. of 20mm machine crushed stone jelly and with about (3.3 cu.m.) 5156 kg. of 10-12mm machine crushed stone jelly and with about (4.79 cu'm') 7670 kg. of sand, but excluding cost of reinforcement grill and fabricating charges, centering and shuttering and also including laying, vibrating with mechanical vibrators, finishing, curing, etc. and providing fixtures like fan clamps in the RCC floor/ roof slabs wherever necessary without claiming extra, etc., complete complying with standard specification and as directed by the departmental officers. The coarse and fine aggregates to be used should comply with the requirements of IS standards. (No separate payment will be made by the Department for the excess usage of materials).	23 & 24			
a	59.00 M <sup>2</sup> [ Fifty Nine point Zero square metre only]	For Foundation and basement	23 & 24		1 M <sup>2</sup> (One square metre)	
b	34.00 M <sup>2</sup> [ Thirty Four point Zero square	In Ground floor.	23 & 24		1 M <sup>2</sup> (One square metre)	

1	2	3	4	4	5	6
14	81.00 Qtl. [ Eighty One point Zero Quintal Only]	Supplying, fabricating and placing in position Mi Steel / Ribbed Tor Steel grills for all RCC works as po design given including cost of steel and G.I. bindir wire in all floors etc. complete complying with standar specification. (Contractor has to make his ow arrangements for the supply of steel and binding wire)	er ng rd		1 Qtl. (One Quintal)	
15	15.50 M <sup>3</sup> [Fifteen point Five Zero Cubic metre only]	Plain cement concrete 1:5:10 (one cement, five sam and ten broken stone) for flooring using hard broke granite stone jelly 40mm gauge for flooring includir dewatering if found necessary and laid in layers of more than 15cm thick in the case of foundation et complete complying with standard specification	en ng ot		1 M <sup>3</sup> (One cubic metre)	
16	7.50 M <sup>3</sup> [Seven point Five Zero Cubic metre only]	Weathering course in brick jelly lime concrete usin best quality broken brick jelly of size 20mm unifor- gauge in pure slaked lime (no sand to be used) in the proportion of brick jelly to lime being 32:12.5 by volum and laid over the RCC roof slab in a single layer required design, slope and consolidated to the required finished thickness by beating the concrete with woode beaters of approved pattern, keeping the surface constantly wet by sprinkling lime jaggery water, etc complete complying with standard specification and a directed by the departmental officers.	m ne of ed en ee e.,		1 M <sup>3</sup> (One cubic metre)	

1	2	3	4	4	5	6
17	147.00 M <sup>2</sup> [ One Hundred and Forty Seven point Zero square metre only]	Finishing the top of roof with one course of approved first quality machine pressed tiles of size 230mm x230mm x 20m thick laid in Cement Mortar 1:3 (One Cement and Three Sand) 12mm thick mixed with water proofing compound conforming IS as approved by the departmental officer at 2% by weight of cement used and the joints pointed neatly to full depth of tiles with the same cement mortar mixed with red oxide and water proofing with standard specification and as directed by departmental officers.	23 & 24		1 M <sup>2</sup> (One square metre)	
18		Brick partition walls of 10.80cm thickness using best quality country bricks of size $8-3/4$ " x $4-1/4$ " x $2-3/4$ " in Cement Mortar 1:3 (One Cement and Three Sand) using hoop iron reinforcement if found necessary including curing etc. complete and as directed by the departmental officers. (Hoop iron reinforcement will be measured and paid for separately)	23 & 24			
a	3.00 M <sup>2</sup> [ Three point Zero square metre only]	Foundation and Basement	23 & 24		1 M <sup>2</sup> (One square metre)	
b	24.00 M <sup>2</sup> [Twenty Four point Zero square metre only]	Ground Floor.	23 & 24		1 M <sup>2</sup> (One square metre)	

1	2	3	4	4	5	6
19		Supplying and fixing in position best approved of BIS quality PVC rain water down fall pipes having a pressure of 4 kg. / sq.cm including cost of necessry PVC shoe, PVC bend, cast iron gratings of required diameter and special clamps, brass screws, nails, etc., and fixing of cast iron gratings at junction of parapet and the RCC roof slab including finishing neatly etc., complete. The rate shall be inclusive of cast of removable cast iron grating. The PVC pipe shall be fixed in wall with special type of "U" clamp at the centre of the pipe line in addition to those for more than 3.0 metre pipe length, etc., complete complying with standard specification. 110 mm Dia	23 & 24		1 RM (One Running metre)	
20	[om manaroa ana	Plastering with cement mortar 1:5 (one cement and five sand) 12mm thick in all floors are including finishing neatly curing etc., complete complying with standard specification.	23 & 24		1 M <sup>2</sup> (One square metre)	
21	Twenty Six point	Stucco plastering 12mm thick using blue granite chips of size 10mm and below over the existing base plastering with cement mortar 1:5, 12mm thick, etc., complete complying with standard specifications	23 & 24		1 M <sup>2</sup> (One square metre)	

1	2	3	4	4	5	6
22	277.57 M <sup>2</sup> [Two Hundred and Seventy Seven point Five Seven square metre only]	Special ceiling plastering and finishing the exposed surface of RCC items of work such as slab, beam, sunshade, staircase waist slab, landing slab etc., with cement mortar 1:3 (one cement and three sand) 10mm thick including hacking the surfaces and providing cement mortar nosing, beading for sunshade, staircase step, landing slab neat and finishing and curing etc., complete.	23 & 24		1 M <sup>2</sup> (One square metre)	
23	57.00 M <sup>2</sup> [Fifty Seven point Zero square metre only]	Plastering with Cement Mortar 1:3 (One Cement and Three Sand) 12mm thick mixed with water proofing compound conforming to BIS at 2% by weight of cement used including finsihing, curing, etc., complete in all floors complying with standard specification and as directed by the departmental officers.	23 & 24		1 M <sup>2</sup> (One square metre)	
24	105.50 M <sup>2</sup> [One Hundred and Five point Five Zero square metre only]	Flooring with Vitrified Tiles of size $600 \times 600 \times 8$ mm laid over 20 mm thick cement mortar 1:3 (One Cement and Three Sand) base mortar over the existing slab / floor including cutting the tiles to the required size with special cutter wherever necessary, laying in position and pointing with white cement mixed with colouring pigment at the rate of 0.3 Kg. / sq.m. etc., complete complying with standard specification. (The make and brand of the tiles should be got approved by Executive Engineer before use on works)	23 & 24		1 M <sup>2</sup> (One square metre)	

1	2	3	4	4	5	6
25	8.00 M <sup>2</sup>	Flooring with Anti skid Self Designed Colour Ceramic	23 & 24		$1 \text{ M}^2$	
	[Eight point Zero	Tiles of size 305 x 305 x 6mm ceramic tiles $% 10^{-1}$ laid over 20 $^{-1}$			(One square	
	square metre	mm thick cement mortar 1:3 (One Cement and Three			metre)	
	only]	Sand) base mortar over the existing slab / floor				
		including cutting the tiles to the required size with				
		special cutter wherever necessary, laying in position				
		and pointing with white cement mixed with colouring				
		pigment at the rate of 0.3 Kg. / sq.m. etc., complete				
		complying with standard specification. (The make and				
		brand of the tiles should be got approved by Executive				
		Engineer before use on works)			2	
26	9.00 M <sup>2</sup>	Paving the floor with pre-polished concrete anti-skid	23 & 24		$1 \text{ M}^2$	
	[Nine point Zero	step tiles (Required shape and design) of 20mm thick of			(One square	
	square metre	approved quality and colour laid in Cement Mortar 1:3			metre)	
	only]	(One Cement and Three sand) 20mm thick and pointed				
		with white cement mixed with colouring pigment at the				
		rate of 0.40 Kg. / sq.m., curing, etc., complete				
		complying with standard specification and as directed				
		by the departmental officers. (The make and brand of				
		the tiles should be got approved by Executive Engineer before use on works)				
		beiore use on works)				
27	$23.00 \text{ M}^2$	Paving the floor with Cement based Hydraulically	23 & 24		$1 \text{ M}^2$	
	[Twenty Three	pressed Anti skid tiles (pattern design) of 600 x 600 x			(One square	
	point Zero square	20 mm thick of approved quality and colour laid in			metre)	
	metre only]	Cement Mortar 1:3 (One Cement and Three sand)				
	51	$20 \mathrm{mm}$ thick and pointed with white cement mixed with				
		CO				

1	2	3	4	4	5	6
28	0.40 M <sup>3</sup> [Zero point Four Zero Cubic metre only]	Plain Cement Concrete 1:2:4 (one cement, two sand and four hard broken stone jelly) using 20mm jelly for wearing coat including laying, compacting, finishing and curing, etc., complete as per standard specificatins and as directed by the departmental officers.	23 & 24		1 M <sup>3</sup> (One cubic metre)	
29		Manufacturing, supplying and fixing Precast Reinforced Cement Concrete slabs of following thickness in RCC 1:2:4 (one cement, two sand and four aggregates), using following HBGS jelly excluding cost of reinforcement steel in position but including cost of moulding charges, casting of slab, finishing, curing and fixing in position in all floors etc., complete complying with standard specification and as directed by the departmental officers				
a	7.00 M <sup>2</sup> [Seven point Zero square metre only]	50mm thick precast slab using 20mm HBGS jelly	23 & 24		1 M <sup>2</sup> (One square metre)	
30	18.00 M <sup>2</sup> [Eighteen point Zero square metre only]	Manufacturing, supplying and fixing in position plain cement concrete precast pavement slab of size 450mm x 450mm of 50mm thick in Cement Concrete 1:2:4 (One cement, Two sand and Four jelly) using 20mm HBG stone jelly including cost of moulding charges	23 & 24		1 M <sup>2</sup> (One square metre)	

1	2	3	4	4	5	6
31	$29.00 \text{ M}^2$	Supplying and fixing fine polished cuddapah stone slab	23 & 24		$1 \text{ M}^2$	
	[Twenty Nine	of 40mm thick for cupboard laid over Cement Mortar			(One square	
	point Zero square	1:3 (One Cement and Three Sand) 20mm thick over the			metre)	
	metre only]	existing bed of Cement Concrete 1:5:10, (One Cement,				
	51	Five Sand and Ten aggregate) and pointing the joints to				
		full depth of slabs with same mortar mixed with black				
		oxide and the top surface rendered smooth, curing,				
		etc., The cuddapah stone slabs and other materials to				
		be used shall be got approved by the Executive				
		Engineer concerned before use on work, etc., complete				
		complying with standard specification.				

32	32.00 RM	Supplying and fixing of Hallow pressed steel door 23 & 24
	[Thirty Two point	frames for single leaf and double leaved door using
	Zero running	pressed steel frame of size 105X60mm using mild steel
	metre only]	sheet of 1.25mm thick(18 gauge) special profile
		extruded section. The pressed steel frame should as
		per IS 4351/1976. The rate in inclusive of bottom the
		hold fasts and provision to aldrip tower bolt hinges and
		lock plate etc., with a one coat of zinc chromate yellow
		primer and filling the inside hallow portion with cement
		concrete 1:2:4 etc., complete complying with standard
		specification.

1 RM (One Running metre)

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1	2	3	4	4	5	6
33	12.50 RM	Supplying and fixing in position of MDF Shutter 35mm	23 & 24		1 RM	
	[Twelve point Five	thick (ISI) for door (single leaf) with commerical solid			(One Running	
	Zero running	core with commerical veneering 3mm thick on both			metre)	
	metre only]	sides hot pressed bonded with liquid phenol for				
		maldehyde with resin and teak wood internal (35 x				
		12mm) lipping as per IS 2202/Part-I/1991.The shutter				
		will be supplied with ISI mark and fixed in steel frames.				
		Necessary furniture fitting such as Alu.anodised butt				
		hings 100mm - 3Nos with Nylon washers, Alu.anodised				
		tower bolt 300mm - 1No, Alu.anodised aldrop 300mm -				
		1No, Alu.handle 100mm - 1No, will be supplied and				
		fixed etc., complete as per standard specification.				
34		Manufacturing, supplying and fixing of steel doors with				
		the following specification M.S angles of a size				
		40x40x6mm are used for the outer frames and M.S.				
		angles of size 35x35x5mm for the shutter frames				
		stiffeners with 32x6mm M.S. flat is provided at required				
		intervals in the shutter frames 18 gauge C.R. sheet is				
		laid as panel in the shutter and welded intact for $1/3$				
		bottom portion of the shutter. M.S. flat 18x5mm is				
		welded over the 32x6mm M.S. flat sand witching the				
		CR sheet in between. Additional stiffener with 18x5mm				

M.S. flat is provided diagonally at the rear side of the shutter. The balance 2/3 portion at top is provided with grill at an average weight of 20kg/sq.m and 6 Nos hinges for double leaves shutter to be provided 6nos of

holdfasts 120mm in length made of angle

1	2	3	4	4	5	6
		section spliced at the ends are welded to the outer frame of the door. Tower bolts 2nos. one at top and the other at the bottom arte provided one aldrop is provided at on appropriate place in the door. A Tie bar is provided at the bottom of the outer frame to prevent twisting of frame during transportation or fixing. All members are given one coat of red oxide primer as directed by the departmental officers. The rate includes cost of all meterials, labour charges,taxes, transportation to site of work , loading, unloading and all other incidental charges etc.,complete.				
a	3.20 M <sup>2</sup> [Three point Two Zero square metre only]	Double leaf -Door size 1.5 X 2.1M	23 & 24		1 M <sup>2</sup> (One square metre)	
35	919.00 Kg [ Nine Hundred and Nineteen point Zero Kilogram only]	supplying and fixing Ms grills for doors, windows and ventilators of approved design and as directed by the departmental officers including cost of ms grills labour charges and cost of one of red oxide primer coat etc., complete complying with std. specification	23 & 24		1 Kg (One Kilogram)	

1	2	3	4	4	5	6
86	3.80 M <sup>2</sup>	PVC DOOR	23 & 24		$1 \text{ M}^2$	
	[Three point Eight	Specification:			(One square	
	Zero square metre				metre)	
	only]	plain FPVC (Foamed Polyvinyl Chloride) door frame of			,	
	51	the size 105 x 40mm with a wall thickness of 10mm				
		made out of extruded rigid FPVC profile mitre joined				
		with 10 Nos. of 50mm long screw. The door frame shall				
		be fixed to the wall by using $80 \text{mm}$ long screws through				
		the frame with the help of PVC fasteners to be provided				
		for each vertical member, stiffeners of ("U" Channel of				
		size 29 x 9 x 1mm, 150mm long) 3 Nos. at hinge point,				
		frame reinforcement of ("U" GI Channel of size 46 x 22 x				
		0.06mm), bottom tie rod of ("U" GI Channel size of 15 x				
		15 x 1mm), the ABS Shutter of 35mm thick factory				
		made plain pre-laminated. ABS (Acrolynitrile Butadiene				
		Styrene) door shutter moulded in different designs,				
		consisting of all round Frame made out of water proof				
		solid foam PVC bar of size 20x32mm, reinforced by 32 x $$				
		32mm - $2$ Nos. for vertical made out of LVL (Laminated				
		Veneer Lumber), core material of 32mm thick high				
		density craft paper honey comb board, sandwiched on				
		both sides with pre-laminated ABS sheet thickness of				
		1.5mm. PVC edge banding of size 0.45mm on he				
		vertical sides. Hardware made out of ball bearing				
		butterfly hinges - 3 Nos. for each shutter and ISI make				
		SS round lock complete, including cost of Materials,				
		conveyance and all other incidental charges and labour				
		charges for fixing the Door neatly etc., complete				
		complying with the standard specification. The door				

Executive Engineer, PWD., Buildings [C&M] Division, Ramanathapuram

1 2	3	4	4	5	6
7 12.50 м <sup>2</sup>	UPVC Window	23 & 24		$1 \mathrm{M}^2$	
7 12.50 M <sup>2</sup> [Twelve point Five Zero square metre only]	DPVC Window Specification: Supplying and fixing UPVC (Un-Plasticized Polyvinyl Chloride) Windows of casement type (open) from the profile the size of outer frame 60mm x 58mm and shutter profile are reinforcement with GI/1mm 125GSM and 100% corrosion free, the profiles are multi chambered sections with wall thick of 2mm. The EPDM rubber (black colour) covered with over all the edges of frame and shutter the shutter will be provided with Espag multi power point locks and also it operates as handle. The corners and joints should be welded and cleaned. Radiations free pin headed plain or brown colour glass 4mm thick should be provided to the shutter and it should not allow leakage of water even at most ranging storms and should have key lockable action, security protective hinges, strong locking systems and as per size for arresting noise and energy loss. The connecting mechanism between sash and outer frame that enables opening of the window. The window should be fixed to the wall with 100% packing with screws and silicon packing all round the frames. The window should be got approved from the Executive Engineer before use on work	23 & 24		1 M <sup>2</sup> (One square metre)	

1	2	3	4	4	5	6
38	oniyj	supplying and fixing in position Glazed steel ventilator with Side/Central hung shutters( Two Leaves) frames and made shutter frame made out of steel section conforming to IS 7452 /1990. The outer frame made out of z section (F7D) of size 33 x22 x3 mm conforming to IS 7452/1990. The mullions are made out of (F4B) section of size $46x25x3$ mm and conforming to IS7452/1990. The shutters are individual and each of them can be operated separately. Sash bars are made of T section (T2) of size $25 \times 22 \times 3mm 2$ nos of sturdy hinges and one number of handle cum latch of special type are fixed are each openable shutter with suitable opening in left for its easy operation, ,one member of adjustable strings with fixing brackets of sufficient length are provided for each shutter 4 nos of $40 \times 40 \times 3mm$ angle hold fast 230mm length are welded with the frame at appropriate point M.S Square bars of 12 mm dia is welded to the inner face of the ventilator at equal intervals not exceeding 10 cm spacing 3mm pin headed glass is used for Glazing with good quality and fixed with 15 x 12 mm teak wood beadings with screws for fixing . The shutters are to open outside. All the section are given with one coat of red oxide primeretc., complete complying with standard specification. The sample of materials and fittings shall be got approved by the departmental officers before use on work. (The rate shall inclusive of cost all materials labour charges one coat of primer, weld charges, including cost of welding electrodes, transportation to site work, loading, unloading and incidental charges etc., complete complying with standard specification.	23 & 24		1 M <sup>2</sup> (One square metre)	

1	2	3	4	4	5	6
39	42.50 M <sup>2</sup> [Forty Two point Five Zero square metre only]	Painting new iron works such as steel doors,windows,ventilators,window bars,balustrates etc., with two coats of best approved first quality and colour of synthetic enamel paint over the existing red oxide priming coat in all floors. The rate is inclusive of all materials,brushes and scaffolding charges etc., complete complying with standard specification. (The make, quality and colour of Paint should be got approved by the Executive Engineer before use on work)	23 & 24		1 M <sup>2</sup> (One square metre)	
40	26.70 M <sup>2</sup> [Twenty Six point Seven Zero square metre only]	Painting new wood work with two finishing coats of synthetic enamel ready mixed paint of approved quality and colour over one coat priming coat in all floors including the cost of primer etc., complete complying with standard specification. (The make, quality and colour of paint should be got approved by the Executive Engineer before use on works.)	23 & 24		1 M <sup>2</sup> (One square metre)	
41	133.00 M <sup>2</sup> [One Hundred and Thirty Three point Zero square metre only]	White washing three coat with freshly burnt white shell lime in all floors including cost of lime, blue powder, fevicol type gum, brushes, scaffolding charges, etc., complete complying with standard specification and as directed by the departmental officers.	23 & 24		1 M <sup>2</sup> (One square metre)	
42	290.00 M <sup>2</sup> [Two Hundred and Ninety point Zero square metre only]	Painting two coats of newly plastered wall surface with ready mixed plastic Exterior emulsion paint of first class quality and of approved colour over a priming coat including thorough scrapping, clean removal of dirt, and including necessary plaster of paris putty, wherever required etc., complete complying with standard specification.	23 & 24		1 M <sup>2</sup> (One square metre)	

1	2	3	4	4	5	6
43	$379.00 M^2$	Painting two coats of newly plastered wall surface with	23 & 24		$1 \text{ M}^2$	
	[Three Hundred	ready mixed plastic Interior emulsion paint of first class			(One square	
	and Seventy Nine	quality and of approved colour over a priming coat			metre)	
	point Zero square					
	metre only]	and including necessary plaster of paris putty,				
		wherever required etc., complete complying with				
11	1.00 Nos	standard specification.	02 8-04		1 No	
44		Supplying and fixing in positon European Water Closet (Oriya type) of size 580 x 440mm white glazed earthern	23 & 24		1 No (One Number)	
	[One Number	ware of approved quality and brand with "P" or "S" trap			(One number)	
	only]	conforming to BIS with sand cushion and forming				
		flooring alround the closet using 40mm bro				
45	1.00 Nos [One Number only]	Supplying and fixing in positon Indian Water Closet (Oriya type) of size 580 x 440mm white glazed earthern ware of approved quality and brand with "P" or "S" trap conforming to BIS with sand cushion and forming flooring alround the closet using 40mm broken brick jelly in lime concrete 1:2:5 (One lime, Two sand and Five brick jelly) 100mm thick and finishing the top to the required slope and including giving necessary connection to CI soil pipes (including the cost of 100mm dia CI pipe for a length of 600mm) by	23 & 24		1 No (One Number)	
		dismantling brick masonry wall / reinforced cement concrete roof / floor slab and making good the dismantled portion to the original condition with leakages etc., complete complying with standard specifications and as directed by the departmental				
		officers (The water closet should be got approved by				

1	2	3	4	4	5	6
6	1.00 Nos [One Number only]	Supplying and fixing in position best quality and approved make Indian made white glazed earthernware wash hand basin With out Pedestal of size 550 x 400mm with a pair of cast iron brackets, including cost 15mm dia brass CP pillar tap, 32mm dia "B" class GI waste pipe with rubber plug and chain, 15mm dia GM wheel valve, 15mm brass nipple, 15mm dia nylone connection, 32mm dia CP brass waste coupling including fixing of wash basin using CI brackets on to the wall in position with TW plugs and screws, rubber washers, white lead and giving necessary water supply connection and painting the brackets with two coat of painting over a priming coat of anti-corrosive paint including testing for leakages etc., complete complying with standard specification and as directed by the departmental officers. (The wash hand basin and specials should be got approved by the Executive Engineer before use on works).	23 & 24		1 No (One Number)	
17	2.00 Nos [Two Numbers only]	Supplying and fixing in position best quality cuddapah sink of 600mm x 450mm x 200mm sizes including cost of 32mm dia CP waste coupling, 32mm dia PVC waste pipe with rubber plug and chain, 15mm dia brass nipple including fixing the sink in position and testing for leakages etc., complete complying with standard specifications excluding CI brackets. [The sink and specials should be got approved by the Executive Engineer before use on works]	23 & 24		1 No (One Number)	

1	2	3	4	4	5	6
48	2.00 Nos	Supplying and fixing in position indian make beveled	23 & 24		1 No	
	[Two Numbers only]	edge mirror of approved quality and brand of size 600x450x5.5mm PVC shelf type frame in necessary ply			(One Number)	
		wood baking, urbber buttons, brass CP screws T.W. plugs etc complete complying in standard specification and as directed by the departmental officers (The minor should be got approved by the Executive Engineer				
		before use on)				
49	2.00 Nos [Two Numbers only]	Supplying and fixing approved best quality brass CP towel rail 600mm long and 20mm dia with brackets of same materials including cost of teak wood plugs and CP screws, etc., complete complying with standard specifications. (The tower rail should be got approved by Executive Engineer before use on works).			1 No (One Number)	
50	2.00 Nos [Two Numbers only]	Supplying and fixing in position best approved quality Aluminum C.P. brass soap tray of size 150x150mm including cost of teak wood plugs, brass screws, etc., complete complying with standard specification and as directed by the departmental officers.	23 & 24		1 No (One Number)	

1	2	3	4	4	5	6
51		Supplying and fixing in position best quality PVC soil / waste pipes of various dia having 6 kg / sq.cm. pressure BIS mark and providing leak proof joints using PVC adhesives including fixing to the wall with special PVC / MS clamp, teak wood plugs, brass screws, etc., and making connection to all sanitary fittings, dismantling masonry / RCC works wherever found necessary and making the good dismantled portion to the original condition, including testing for any leakages, etc., complete complying with standard specifications. (The PVC pipes should be got approved by the Executive Engineer before use on works). The rate for earth work excavation will be measured and paid separately in the cases where the pipe lines are proposed to laid below ground level				
a	9.00 RM [Nine running metre only]	110mm dia PVC soil pipe	23 & 24		1 RM (One Running metre)	
b	4.00 RM [Four running metre only]	75 mm dia PVC soil pipe	23 & 24		1 RM (One Running metre)	

1	2	3	4	4	5	6
52		Supplying and fixing in position PVC specials of the following dia and types of approved quality confirming to BIS and providing leak proof joints including fixing to the walls and giving connection to the PVC soil stacks, dismantling the masonry or RCC works and re-doing the dismantled portion to original condition etc., complete complying with standard specifications. (The PVC specials should be got approved by the Executive Engineer before use on works).				
a	5.00 Nos [Five Numbers only]	110mm dia PVC plain Elbow	23 & 24		1 No (One Number)	
b	4.00 Nos [Four Numbers only]	110mm dia PVC door Elbow	23 & 24		1 No (One Number)	
с	6.00 Nos [Six Numbers only]	110mm dia PVC Tee Elbow	23 & 24		1 No (One Number)	
d	5.00 Nos [Five Numbers only]	75mm dia PVC plain Elbow	23 & 24		1 No (One Number)	

1	2	3	4	4 5	6
e	4.00 Nos [Four Numbers only]	75mm dia PVC door Elbow	23 & 24	1 No (One Number)	
f	4.00 Nos [Four Numbers only]	75mm dia PVC door Elbow	23 & 24	1 No (One Number)	
g	4.00 Nos [Four Numbers only]	75mm dia PVC door Tee	23 & 24	1 No (One Number)	
h	6.00 Nos [Six Numbers only]	110mm dia PVC door Bend	23 & 24	1 No (One Number)	
i	6.00 Nos [Six Numbers only]	75mm dia PVC door Bend	23 & 24	1 No (One Number)	
j	5.00 Nos [Five Numbers only]	110mm dia PVC door Y	23 & 24	1 No (One Number)	
k	4.00 Nos [Four Numbers only]	75mm dia PVC door Y	23 & 24	1 No (One Number)	

1	2	3	4	4	5	6
53	4.00 Nos	Supplying and fixing position PVC Nahani Trap of size	23 & 24		1 No	
	[Four Numbers	100 x 75mm with PVC gratings with best stainless steel			(One Number)	
	only]	gratings of approved brand and quality, fixed over a bed				
		of brick jelly lime concrete 1:2:5 (One part of lime, two				
		part of sand and five part of 40mm gauge brick jelly)				
		and finished with Cement Mortar 1:3 (One Cement,				
		Three sand) including dismantling masonry works				
		wherever found necessary and making good the				
		dismantled portions to the original condition and giving				
		connection to the CI / PVC pipes, etc., complete				
		complying with standard specification. (The Nahani				
		Trap should be got approved by the Executive Engineer before use on works)				
54		Supplying, laying and jointing PVC pipes (having				
		working pressure 10 kg. / sq.cm) of approved quality				
		and best variety conforming to BIS of the following dia				
		including cutting, threading and fixing PVC specials				
		using PVC adhesives (but excluding cost of such				
		specials) and fixing into wall with teak wood plugs, PVC				
		clamps and screws making holes on the wall (or)				
		drilling holes in the roof and making good the				
		dismantled portion to original condition with necessary				
		brick work / cement concrete and plastering neatly				
		wherever necessary with necessary scaffolding charges				
		upto 4 metre height above ground level, etc., complete				

complying with standard specifications. The PVC pipes shall be got approved by Executive Engineer before use

on works.

1	2	3	4	4	5	6
		Internal-Above Ground Level				
a	15.00 RM [Nine running metre only]	25 mm dia	23 & 24		1 RM (One Running metre)	
b	20.00 RM [Four running metre only]	20 mm dia	23 & 24		1 RM (One Running metre)	
		External -Below Ground Level				
с	15.00 RM [Nine running metre only]	40 mm dia	23 & 24		1 RM (One Running metre)	
		External - Above Ground Level				
d	10.00 RM [Four running metre only]	40 mm dia	23 & 24		1 RM (One Running metre)	
55		Supplying and fixing in position the following PVC Specials of heavy type and approved quality and good variety of various sizes excluding fixing charges but including necessary cutting and threading of PVC Pipes jointing the PVC Specials and paining two coats with good variety and best quality synthetic enamel paint over a coat of red oxide primer in case of pipe line above ground level and one coat of tarring in case of pipe below ground level for both internal and external water supply arrangements etc. complete complying with standard specification and as directed by the departmental officers. (The G.I. Specials used on the work shall be got approved by the Executive Engineer				

1	2		3	4	4	5	6
a	5.00 Nos [Five Numbers only]	40 mm dia PVC Elbow		23 & 24		1 No (One Number)	
b	3.00 Nos [Three Numbers only]	40mm dia PVC Tee		23 & 24		1 No (One Number)	
с	4.00 Nos [Four Numbers only]	40mm dia PVC Coupler		23 & 24		1 No (One Number)	
d	4.00 Nos [Four Numbers only]	40mm dia PVC bend		23 & 24		1 No (One Number)	
e	5.00 Nos [Five Numbers only]	40mm dia PVC Endcap		23 & 24		1 No (One Number)	
f	6.00 Nos [Six Numbers only]	25 mm dia PVC Elbow		23 & 24		1 No (One Number)	
g	3.00 Nos [Three Numbers only]	25mm dia PVC Tee		23 & 24		1 No (One Number)	
h	3.00 Nos [Three Numbers only]	25mm dia PVC Coupler		23 & 24		1 No (One Number)	

1	2	3	4	4	5	6
i	5.00 Nos [Five Numbers only]	25mm dia PVC bend	23 & 24		1 No (One Number)	
j	4.00 Nos [Four Numbers only]	25mm dia PVC Endcap	23 & 24		1 No (One Number)	
k	4.00 Nos [Four Numbers only]	25mm x 20mm dia PVC Reducer	23 & 24		1 No (One Number)	
1	5.00 Nos [Five Numbers only]	25mm x 20mm dia PVC Tee	23 & 24		1 No (One Number)	
m	4.00 Nos [Four Numbers only]	20 mm dia PVC Elbow	23 & 24		1 No (One Number)	
n	3.00 Nos [Three Numbers only]	20mm dia PVC Tee	23 & 24		1 No (One Number)	
0	3.00 Nos [Three Numbers only]	20mm dia PVC Coupler	23 & 24		1 No (One Number)	
р	2.00 Nos [Two Numbers only]	20mm dia PVC bend	23 & 24		1 No (One Number)	

1	2	3	4	4	5	6
q	5.00 Nos [Five Numbers only]	20mm dia PVC Endcap	23 & 24		1 No (One Number)	
r	4.00 Nos [Four Numbers only]	20mm x 15mm dia PVC Reducer	23 & 24		1 No (One Number)	
S	3.00 Nos [Three Numbers only]	20mm x 15mm dia PVC Tee	23 & 24		1 No (One Number)	
t	4.00 Nos [Four Numbers only]	20mm x 15mm Reducer Elbow	23 & 24		1 No (One Number)	
u	6.00 Nos [Six Numbers only]	25mm dia PVC Jet nipple	23 & 24		1 No (One Number)	
56	6.00 Nos [Six Numbers only]	Supplying and fixing in position 15mm dia brass CP screw down tap / Pillar tap (heavy duty) of approved make conforming to BIS specifications and quality including cost of shellac, thread, etc., complete complying with standard specification and including cutting and threading wherever necessary. (Taps should be got approved by the Executive Engineer before use on the works)			1 No (One Number)	

1	2	3	4	4	5	6
57		Supplying and fixing in position first quality and approved variety of Gun metal Gate Valve / Wheel Valve with BIS make of the following dia including cost of shellac, thread balls, etc., complete complying with standard specifications (for both internal and external water supply arrangements). The valves to be used on work shall be got approved by the Executive Engineer before use on work.				
a	1.00 Nos [One Numbers only]	25 mm dia	23 & 24		1 No (One Number)	
b	1.00 Nos [One Numbers only]	40mm dia	23 & 24		1 No (One Number)	
58		Supplying and fixing in position first quality and approved variety of G.I.Union with BIS make of the following dia including cost of shellac, thread balls, etc., complete complying with standard specifications (for both internal and external water supply arrangements). The valves to be used on work shall be got approved by the Executive Engineer before use on work.				
a	1.00 Nos [One Numbers only]	25 mm dia	23 & 24		1 No (One Number)	

1	2	3	4	4	5	6
b	1.00 Nos [One Numbers only]	40mm dia	23 & 24		1 No (One Number)	
59	1.00 M <sup>3</sup> [One Cubic metre only]	Supplying and filling following sizes of ISS metal for filteration pits and perculation pits	40 mm 23 & 24		1 M <sup>3</sup> (One cubic metre)	
60	1.00 M <sup>2</sup> [One Square metre only]	Supplying and filling following sizes of ISS metal for filteration pits and perculation pits	20 mm 23 & 24		1 M <sup>2</sup> (One square metre)	
61	1.00 Nos [One Numbers only]	Supplying and fixing PVC ventilating shaft of dia (having working pressure 4 kg. / sq.cm) metre height including cost of PVC cylindrical best approved quality etc., complete complyi standard specifications and as directed departmental officers	with 3 cowl of ng with		1 No (One Number)	
62	155.71 M <sup>2</sup> [One Hundred and Fifty Five point Seven One Square Metre Only]	Providing pre construction anti termite treatr the building work at different stages as furnishe conforming to IS 6313 (part II) ,2001etc comp as directed by the departmental officer. Chlorop 1%(by weight) in aqueous emulsion	d below lete and		1 M <sup>2</sup> (One square metre)	

1	2	3	4	4	5	6
63	1.00 Nos [One Numbers only]	Supplying and fixing the New stored Pressure type 6 kg capacity (ABC) Fire Extinguisher - powder coated MS body squeeze type valve, pressure gauge, filled width Mono Ammonium phoshate powder as per IS: 14609 with ISI mark suitable for class A, B, C & Elec	23 & 24		1 No (One Number)	
64		Drilling of Borewells anywhere in Tamilnadu including transportation from one place to another with in Tamilnadu in alluvial soil sedimentary strata of clay and sand stone shale pebbles boulders etc. By first taking a pilot bore of 140 mm/150mm dia and then enlarging to required dia direct or reverse rotary mud circulation method using rotary rigs, fuel, labour and drilling bentonite and water required for drilling at site ( Site will be shown by the TWAD Board Officers) including construction of mud pit.				
a	35.00 RM [Thirty Five running metre only]	Upto 60 m Depth ending below ground level	23 & 24		1 RM (One Running metre)	
65		Reaming 140/150 mm dia pilot bore to 300mm dia bore as directed by the TWAD Board Officers.	23 & 24			

1	2	3	4	4	5	6
a	35.00 RM [Thirty Five running metre only]	Upto 60 m Depth ending below ground level	23 & 24		1 RM (One Running metre)	
66	20.00 RM [Twenty running metre only]	Supply of PVC Plain casing pipes of 160mm dia vertical 10Kg/Cm2 in sedimentary depth as directed by the departmental officers etc., complete.	23 & 24		1 RM (One Running metre)	
67	10.00 RM [Ten running metre only]	Supply of PVC Slotted casing pipes of 160mm dia vertical 10Kg/Cm2 in sedimentary depth as directed by the departmental officers etc., complete.	23 & 24		1 RM (One Running metre)	
68	30.00 RM [Thirty running metre only]	Labour Charges for inserting PVC Casing pipes assembly (with slots or without slots) in the drilled hole including jointing the pipes with PVC Couplers with Cement paste etc., complete, supply and packing the annular space with pebbles of size and quality as approved by the executive Engineers of TWAD Board	23 & 24		1 RM (One Running metre)	
69	1.00 Nos [One Numbers only]	Bore cap 150mm dia size using M.S. Flat of size 1 cm x 3 mm and M.S. sheet on top with bolting arrangements for securing the cap in position (Bore caps with M.S. Couplings need not be made)	23 & 24		1 No (One Number)	
70	1.00 Nos [One Numbers only]	Supply of 1.0HP jet motor with ISI Mark	23 & 24		1 No (One Number)	

1	2	3	4	4	5	6
71		Supply and delivery of single phase panel board with two level guard and auto start direct online starter confirming to IS13947 and IEC 947 suitable KW rating for operation in AC/single Phase/50HZ(± 5%) and 230 V(±10%) including Ammeter, Voltmeter, Thermal Overload relay, 16 Amps 2 pole Magnetic Contactor with under Voltage protection, Indication lamp, starting capacitor, running capacitor and On/Off Push button switches, 5 way connector, wiring with 1 sq. mm/1.5 sq. mm copper PVC insulated cable, powder coated vermin proof box including the capacitor (the cost of capacitor is to be taken separately).	23 & 24			
a	1.00 Nos [One Numbers only]	1.00 HP	23 & 24		1 No (One Number)	
72	1.00 Nos [One Numbers only]	Supply of 65mm MS clamp of 0.75m lenth nos, with boit and nuts -8nos of heavy type as directed by the departmentel officers ect.,complete	23 & 24		1 No (One Number)	

1	2	3	4	4	5	6
73	1.00 Nos	Supplying and fixing in position of best Indian make 23	3 & 24		1 No	
	[One Numbers	PVC Water Tank of 1000 litres capacity conforming to			(One Number)	
	only]	ISI standards as directed by the departmental officers				
		including cost of material and conveyance charges of				
		material to work site etc., complete complying with				
		standard specifications. <b>Sub Total</b>				
		Provision for CGST (6%) + SGST (6%)				
		No. of Items: 73 [Seventy Three items Only ]				
	Total					