

CENTRE FOR PERFORMING ARTS AT VARKALA					
PLUMBING WORKS					
PART - II					
Item No	Details of Item	Qty	Unit	Rate Rs (in figures & words)	Amount in Rs
	App.D- Sanitary Installation				
1.01	Supplying and fixing Wash Basin with one pair mounting brackets, EWC & Cistern complete with fittings & seat cover, hinged rail, grab rails and one no of faucet for WB with Rack Bolt, Flexible Tube for pillar Tap & Waste Coupling Designed for people with special needs (Handicapped/ Physically disabled People) P trap, Angle valve, including fittings and brackets, cutting and making good the walls wherever required, including cost & conveyance of all materials, labour charges, sundries etc complete as directed by the Engineer in charge.(Materials should be selected by Engineer in charge).(Make(Sanitary Ware): Toto/Kohler/Cera; Make(CP Fittings): Grohe/Toto/Kohler). Lowest Retail price Should not be l				
	ess than, Rs. 52327 for Wash Basin with one pair mounting brackets, EWC & Cistern complete with fittings & seat cover, hinged rail, grab rails and one no of faucet for WB ,Rs.1357 for P Trap; Rs.531 for Angle valve.	2	No		
1.02	Supplying and fixing European type wall mounted white glazed WC with trap including seat cover, with CP brass hinges and rubber buffers, concealed flushing tank with wall plate, Including all fittings and brackets, 40mm dia PVC flush bend, with all necessary fittings complete including cutting and making good the walls and floors etc. complete as directed by the Engineer-in-Charge.(Materials should be Selected By Engineer in Charge). (Make(Sanitary Ware): Toto/Kohler/Cera; Make(CP Fittings): Grohe/Toto/Kohler). Lowest Retail price Should not be less than, Rs. 16796 for EWC, Rs. 4599 for Concealed Flush Tank, Rs 1751 for Flush Plate of Concealed Tank.	1	No		

Item No	Details of Item	Qty	Unit	Rate Rs (in figures & words	Amount in Rs
1.03	Providing and fixing Health faucets with Angle Valve long flexible tube and wall hook with all fittings and fixtures complete including cutting and making good the walls and floors wherever required including cost and conveyance of all materials, labour charges, sundries etc complete as directed by the Engineer in charge at all levels. .(Materials should be selected by Engineer in charge.) (Make: Grohe/ Toto/ Kohler) Lowest Retail price Should not be less than, Rs. 3070 for Health faucets with Angle Valve long flexible tube and wall hook	3	No		
1.04	Providing & fixing white vitreous china water less urinal having antibacterial /germs free Ceramic surface, fixed with cartridge having debris catcher and hygiene seal. .(Materials should be selected by Engineer in Charge).(Make: Toto/ Kohler/Cera) Lowest Retail price Should not be less than, Rs. 24548	3	No		
1.05	Providing and fixing stone slab (white agaria marble stone) with table rubbed, edges rounded and polished, of size 120 X75 cm and 1.8 cm thick, fixed in urinal partitions by cutting a chase of appropriate width with chase cutter and embedding the stone in the chase with epoxy grout or with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 6 mm nominal size) as per direction of Engineer-in-Charge and finished smooth.(Materials should be selected by Engineer in charge).	3	No		

Item No	Details of Item	Qty	Unit	Rate Rs (in figures & words	Amount in Rs
1.06	Providing and fixing counter mount wash basin with C.I. brackets, Sensor Tap, Waste Coupling, Flexible Tube connector, Ptrap, angle valve, including fittings and brackets, cutting and making good the walls wherever required including cost and conveyance of all materials, labour charges, sundries etc complete as directed by the Engineer in charge. (Materials should be selected by Engineer in charge.) (Make (Sanitary Ware): Toto/Kohler/Cera; Make (CP Fittings): Grohe/Toto/Kohler) Lowest Retail price Should not be less than, Rs.5615 for Wash Basin with Rack Bolt, Rs. 29064 for Sensor Tap, Rs. 1357 For P Trap	4	No		
1.07	Providing and fixing CP Toilet paper holder with flap of approved make including cost and conveyance of all materials, labour charges, sundries etc complete as directed by the Engineer in charge at all levels. (Materials should be selected by Engineer in charge.) Make: Grohe/Toto/Kohler. Lowest Retail price Should not be less than, Rs2503	3	No		
1.08	Providing and fixing CP Towel rail of approved make including cost and conveyance of all materials, labour charges, sundries etc complete as directed by the Engineer in charge at all levels. (Materials should be selected by Engineer in charge.) (Make: Grohe/ Toto/ Kohler). Lowest Retail price Should not be less than, Rs. 3226	2	No		
1.09	Providing and fixing brass stop cock of approved quality & make including cost and conveyance of all materials, labour charges, sundries etc complete as directed by the Engineer in charge at all levels. (Materials should be selected by Engineer in charge.) (Make: Grohe/ Toto/ Kohler). Lowest Retail price Should not be less than, Rs.2255	6	No		

Item No	Details of Item	Qty	Unit	Rate Rs (in figures & words	Amount in Rs
1.10	Providing and fixing mirror of superior glass (of approved quality) and of required shape and size with plastic moulded frame of approved make and shade with 6 mm thick hard board backing.(Rectangular shape 1500x450 mm)(Materials should be selected by Engineer in charge.)	2	No		
	App.E - Water Supply				
2.01	Providing and fixing 3 layer PP-R (Poly propylene Random copolymer) pipes PN 16 U V stabilized & anti - microbial fusion welded, having thermal stability for hot & cold water supply, including all PP-R plain & brass threaded polypropylene random fittings, i/c fixing the pipe with clamps at 1.00 m spacing. This includes testing of joints complete as per direction of Engineer-in-Charge.. Make & Model : Blueopal/SFMC				
2.01.a	20mm diameter	25	mtr		
2.01.b	25mm diameter	15	mtr		
2.01.c	32mm diameter	10	mtr		
2.01.d	40mm diameter	10	mtr		

Item No	Details of Item	Qty	Unit	Rate Rs (in figures & words	Amount in Rs
2.01.e	50mm diameter	50	mtr		
2.02	Making chases up to 7.5x7.5 cm in walls including making good and finishing with matching surface after housing pipe etc.	38	mtr		
2.03	Providing and fixing 3 layer PP-R Poly propylene Random copolymer) pipes U V stabilized & anti - microbial fusion welded, having thermal stability for hot & cold water supply, including all PP-R plain & brass threaded polypropylene random fittings, including trenching ,refilling & testing of joints complete as per direction of Engineer-in-charge.(External Work)				
2.03.a	25 mm Dia	40	mtr		
2.03.b	50 mm Dia	50	mtr		
2.03.c	75 mm Dia	30	mtr		

Item No	Details of Item	Qty	Unit	Rate Rs (in figures & words	Amount in Rs
2.04	Supplying, installing Testing & Commissioning at site in position Forged Brass Valve. (Make : RB/ITAP)				
2.04.a	25mm Nominal Bore(RB/ITAP)	3	No		
2.04.b	40mm Nominal Bore(RB/ITAP)	1	No		
2.04.c	50mm Nominal Bore(RB/ITAP)	4	No		
2.05	Supplying, installing Testing & Commissioning at site in position CI Butterfly valve (Make : Intervale/Audco/RB)				
2.05.a	3" (75mm) Nominal Bore	1	No		
2.06	Providing and fixing gun metal non-return valve of approved quality (Flap Type). Make : RB/ITAP				

Item No	Details of Item	Qty	Unit	Rate Rs (in figures & words	Amount in Rs
2.06.a	25 mm nominal bore	3	No		
2.06.b	50 mm nominal bore	3	No		
2.07	Water Meter				
2.07.a	Constructing masonry chamber 60x45x50 cm inside, in brick work in cement mortar 1:4 (1 cement : 4 coarse sand) for water meter complete with C.I. double flap surface box 400x200x200 mm (inside) with locking arrangement and RCC top slab 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), i/c necessary excavation, foundation concrete 1:5:10 (1 cement : 5 fine sand :10 graded stone aggregate 40 mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12 mm thick, finished with a floating coat of neat cement complete as per standard design. With common burnt clay F.P.S. (non modular) bricks of class designation 7.5.	1	No		
2.07.b	Providing and fixing water meter complete with bolts, nuts, rubber insertion etc. As per Kerala Water Authority Norms	1	No		

Item No	Details of Item	Qty	Unit	Rate Rs (in figures & words	Amount in Rs
2.08	Constructing masonry Chamber 30x30x50 cm inside, in brick work in cement mortar 1:4 (1 cement :4 coarse sand) for stop cock, with C. I. surface box 100x100 x75 mm (inside) with hinged cover fixed in cement concrete slab 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), i/c necessary excavation, foundation concrete 1:5:10 (1 cement : 5 fine sand : 10 graded stone aggregate 40mm nominal size) and inside plastering with cement mortar 1:3 (1 cement : 3 coarse sand) 12mm thick, finished with a floating coat of neat cement complete as per standard design With common burnt clay F.P.S.(non modular) bricks of class designation 7.5	1	No		
2.09	Submersible pump for Water Transfer from Treated Water Tank UG to Overhead Reservoir Pumpset complete with Accessories (5 HP) includeing control panel/Starter- 200lpm@32m Make : Grundfos/Wilo/KSB	1	No		
2.10	Providing and fixing ball valve (brass) of approved quality, High or low pressure, with plastic floats complete.(25mm Nominal Bore)	1	No		
	App F - Drainage				

Item No	Details of Item	Qty	Unit	Rate Rs (in figures & words	Amount in Rs
3.01	Supplying, laying, jointing and hydrostatically testing ISI marked PVC pipes as per IS 4985 Class 3 (6Kgf/cm ²) and specials such as Tees, elbows,bends,flanges, reducers, end caps,saddles, plugs,coupling, etc. as per IS 7834 or IS 10124as the case may be including cost of all jointing materials like solvent cement, bolts, nuts, rubber washers,ferrule, cost of extra wastage of fittings during laying of pipe line such as rectification and recharging of the existing line as and when required etc.hire of tools and plant, cost and conveyance of water for testing after connecting to mains including all testing charges,rectifying any leakage or defects, etc. complete.as directed by Engineer-in-Charge for concealed lines for water supply. (Concealed work, including cutting chases and making good the wall etc. not included, rate for these work included seperately)(Internal Works) Make : Astral/Supreme				
3.01.a	50 mm nominal outer dia pipes.	20	mtr		
3.01.b	75 mm nominal outer dia pipes.	50	mtr		
3.01.c	110 mm nominal outer dia pipes.	30	mtr		

Item No	Details of Item	Qty	Unit	Rate Rs (in figures & words	Amount in Rs
3.02	Supplying, laying, jointing and hydrostatically testing ISI marked PVC pipes as per IS 4985 Class 3 (6Kgf/cm ²) and specials such as Tees, elbows,bends,flanges, reducers, end caps,saddles, plugs,coupling, etc. as per IS 7834 or IS 10124as the case may be including cost of all jointing materials like solvent cement, bolts, nuts, rubber washers,ferrule,pipe supports, cost of extra wastage of fittings during laying of pipe line such as rectification and recharging of the existing line as and when required etc.hire of tools and plant, cost and conveyance of water for testing after connecting to mains including all testing charges,rectifying any leakage or defects , trenching, refilling & testing of joints etc. complete.as directed by Engineer-in-Charge.(External Work) Make : Astral/Supreme				
3.02.a	75 mm nominal dia pipes.	20	mtr		
3.02.b	110mm nominal dia pipes.	20	mtr		
3.02.c	160 mm nominal dia pipes.	10	mtr		
3.03	Supply and fixing 4" Multi Floor trap, including 150 mm square Cockroach proof SS Grating for Traps , Make(MFT) : Astral / Supreme, Make (Cockroach trap) : Chilly/Moti	5	No		

Item No	Details of Item	Qty	Unit	Rate Rs (in figures & words	Amount in Rs
3.04	Constructing brick masonry manhole in cement mortar 1:4 (1 cement : 4 coarse sand) with R.C.C. top slab with 1:2:4 mix (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size), foundation concrete 1:4:8 mix (1 cement : 4 coarse sand : 8 graded stone aggregate 40 mm nominal size), inside plastering 12 mm thick with cement mortar 1:3 (1 cement : 3 coarse sand) finished with floating coat of neat cement and making channels in cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size) finished with a floating coat of neat cement complete as per standard design				
3.04.a	Inside size 90x80 cm and 45 cm deep including C.I. cover with frame (light duty) 455x610 mm internal dimensions, total weight of cover and frame to be not less than 38 kg (weight of cover 23 kg and weight of frame 15 kg).With common burnt clay F.P.S.(non modular) bricks of class designation 7.5.	1	No		
3.04.b	Extra for depth for manholes, Size 90x80 cm., With common burnt clay F.P.S.(non modular) bricks of class designation 7.5.	1	No		
3.05	Constructing brick masonry road gully chamber 50x45x60 cm with bricks in cement mortar 1:4 (1 cement : 4 coarse sand) including 500x450 mm pre-cast R.C.C. horizontal grating with frame complete as per standard design.With common burnt clay F.P.S.(non modular) bricks of class designation 7.5	1	No		
3.06	Constructing soak pit 1.20x1.20x1.20 m filled with brickbats including drainpipe 100 mm diameter and 1.20 m long complete as per standard design.	1	No		
	App - G - Storm Water & OHT				

Item No	Details of Item	Qty	Unit	Rate Rs (in figures & words	Amount in Rs
4.01	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.	140.00	cum		
4.02	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level : 1:2:4 (1 Cement : 2 coarse sand : 4 graded stone aggregate 40 mm nominal size)	12.75	cum		
4.03	Centering and shuttering including strutting, propping etc. and removal of form for :Foundations, footings, bases of columns, etc. for mass concrete	60.00	sqm		
4.04	Centering and shuttering including strutting, propping etc. and removal of form for :Columns, Pillars, Piers, Abutments, Posts and Struts	66.30	sqm		
4.05	Centering and shuttering including strutting, propping etc. and removal of form for :Suspended floors, roofs, landings, balconies and access platform	122.50	sqm		

Item No	Details of Item	Qty	Unit	Rate Rs (in figures & words	Amount in Rs
4.06	Providing and laying in position machine batched and machine mixed design mix M-25 grade cement concrete for reinforced cement concrete work, using cement content as per approved design mix, including pumping of concrete to site of laying but excluding the cost of centering, shuttering, finishing and reinforcement, including admixtures in recommended proportions as per IS: 9103 to accelerate, retard setting of concrete, improve workability without impairing strength and durability as per direction of Engineer-in-charge. (Note :- Cement content considered in this item is @ 330 kg/cum. Excess/less cement used as per design mix is payable/recoverable separately). All works upto plinth level	70.05	cum		
4.07	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete . Thermo-Mechanically Treated bars	7407.25	Kg		
4.08	Providing anti-corrosive treatment to steel reinforcement with Fusion Bonded Epoxy Coating (FBEC).	7407.25	Kg		
4.09	Providing & Fixing of CI Channel Gratings with frames(300mm X 600mm) . Make : Necco or Equivalent	60	mtr		

Item No	Details of Item	Qty	Unit	Rate Rs (in figures & words	Amount in Rs
4.10	Supplying, laying, jointing and hydrostatically testing ISI marked PVC pipes as per IS 4985 Class 3 (6Kg/cm ²) and specials such as Tees, elbows, bends, flanges, reducers, end caps, saddles, plugs, coupling, etc. as per IS 7834 or IS 10124 as the case may be including cost of all jointing materials like solvent cement, bolts, nuts, rubber washers, ferrule, pipe supports, cost of extra wastage of fittings during laying of pipe line such as rectification and recharging of the existing line as and when required etc. hire of tools and plant, cost and conveyance of water for testing after connecting to mains including all testing charges, rectifying any leakage or defects, trenching, refilling & testing of joints etc. complete as directed by Engineer-in-Charge. (External Work) Make : Astral/Supreme				
	160mm Dia	140	mtr		
	App H - Water Body & Lotus Pond Filtration System				
5.01	Lotus Pond Filtration System Including Biological Filtration & Mechanical Filtration with Biological Filter, UVC Clarifier, Oxygenerator, Filter of 9000 LPH, Multi port Valve, Silex Sand, Recirculating pump 1HP, Prefilter, Eye Ball inlets, Suction nozzles, Suction skimmer Etc. Complet for Filtering the Water at 9000 LPH	1	LOT		
5.02	Water Body Filtration System with 9000LPH Filter, Multi port valve, Silex Sand, Recirculating pump, Pre Filter, Automatic Chlorine Doser, Floor inlets, Suction nozzles etc. Complet for Filtering the Water at 9000 LPH	1	LOT		
	<u>App I - Irrigation</u>				

Item No	Details of Item	Qty	Unit	Rate Rs (in figures & words	Amount in Rs
6.01	Supply & Fixing of POP UP SPRINKLER 1.7 MTR RADIOUS (Make: Rain Bird or Equivalent)	70	No		
6.02	Supply & Fixing of Irrigation Submersible pump for Sprinkler.Pumpset complete with Accessories 8000lph@15m,including Control panel/Starter. Make: Grundfos/Wilo/KSB	1	No		
6.03	Supply & Fixing of HDPE PIPE 20 MM 10 KG PE-63 (Make: Jain or Equivalent)	220	mtr		
6.04	Supply & Fixing of HDPE PIPE 40 MM 10 KG PE-63 (Make: Jain or Equivalent)	30	mtr		
6.05	Supply & Fixing of HDPE PIPE 50 MM 10 KG PE-63 (Make: Jain or Equivalent)	100	mtr		
6.06	Supply & Fixing of HDPE PIPE 63 MM 10 KG PE-63 (Make: Jain or Equivalent)	20	mtr		

Item No	Details of Item	Qty	Unit	Rate Rs (in figures & words	Amount in Rs
6.07	Supply & Fixing of VALVE BOX 10" ROUND (Make: Rain Bird or Equivalent)	5	No		
	Total for Plumbing Works				