

MIT WPU Campus Goa_Acadamic Building

SUMMARY SHEET FOR FIRE FIGHTING WORKS

SR. NO.	DESCRIPTION OF WORKS	TOTAL AMOUNT
A	SUM OF FIRE PUMPS, EQUIPMENT, PIPING, VALVES & ACCESSORIES CARRIED OVER TO SUMMARY PAGE	-
B	SUM OF FIRE HYDRANT & SPRINKLER SYSTEM CARRIED OVER TO SUMMARY PAGE	-
C	SUM OF COMPREHENSIVE MAINTENANCE CONTRACTCARRIED OVER TO SUMMARY PAGE	-
D	SUM OF NON-COMPREHENSIVE MAINTENANCE CONTRACTCARRIED OVER TO SUMMARY PAGE	-
	TOTAL COST OF TENDER	-
	Add GST @ ____%	
	GRAND TOTAL OF FIRE FIGHTING WORKS	-

MIT WPU Campus Goa_Acadamic Building

BILL OF QUANTITIES (Fire Fighting)		AD25122_12-01-2026_R0			
Important Points to be noted by Tenderers					
1	The following Quantities are based on the tender drawings, and it may vary with final drawings and Client's / Architect's requirements.				
2	Fire hydrant, sprinkler and wet riser system is considered for the entire Building, Any change in the requirement of the Client will result into variation of the quantities and the tenderer shall consider the same while quoting for this tender.				
3	Being a Educational Project , the tenderer shall be prepared for the variation in the quantities of the BOQ here in under, considering the variation in the requirement of the tenants. The tenderer shall absorb any increase or decrease in the final quantities being executed under the scope of this tender.				
Sr.No.	Item Description	Unit	Quantity	Rate	Amount
A)	FIRE PUMPS, EQUIPMENT, PIPING, VALVES & ACCESSORIES				
1	Supplying, installation, testing and commissioning of Electric driven main fire Hydrant pump/Sprinkler pump suitable for automatic operation and consisting of following: complete in all respect as required.	set	1		-
a)	Horizontal type centrifugal back pull out pump of cast iron body and bronze impeller with cs shaft, mechanical seal to ensure a minimum pressure of 3.5 kg/sq.cm. at highest and farthest outlet at specified flow of 137 m3/Hr at 80m . head conforming to IS 1520.				
b)	Suitable HP, SQ cage induction motor, TEFC, synchronous speed 2900 RPM, suitable for operation on 415 ± 6% volts, 3 phase 50 Hz. AC with IP 55 protection for enclosure with Class-'F' insulation, conforming to IS-325.				
c)	M.S.fabricated common base plate, coupling, coupling guard, Vibration emanating pads, foundation bolts etc. as required.				
2	Supplying, installation, testing and commissioning of Diesel engine driven fire pump suitable for automatic operation and consisting of following: complete in all respect as required.	set	1		-
a)	Horizontal type centrifugal back pull out pump of cast iron body and bronze impeller with cs shaft, mechanical seal to ensure a minimum pressure of 3.5 kg/sq.cm. at highest and farthest outlet at specified flow of 137 m3/Hr at 80m head conforming to IS 1520.				
b)	Suitable HP, 2100 RPM with air cooled radiator, diesel engine conforming to relevant BS & IS standard complete with auto starting mechanism, 12 volts/24 volts electric starting equipment, battery charger with 2-rate trickle charger, diesel tank 200 litre, exhaust pipe extended upto 1 m. outside pump house duly insulated with 50 mm. thick glass wool with 1.0 mm. thick aluminium sheet cladding, residential silencer, instruments and protection as per specification, stop solenoid for auto stop in the event of fault with audio indications, painted with post office red colour etc. as required.				
c)	M.S.fabricated common base plate, coupling, coupling guard, Vibration emanating pads, foundation bolts etc. as required				
3	Supplying, installation, testing and commissioning of electric driven Pressurisation pump (Jockey Pump) suitable for automatic operation and consisting of following: complete in all respect as required.	set	1		-
a)	Horizontal type, centrifugal pump of cast iron body and bronze impeller with stainless steel shaft, mechanical seal and flow of 10.8 m3/Hr at 80m head conforming to IS: 1520.				
b)	Suitable HP, SQ cage induction motor TEFC type suitable for operation on 415 volts, 3 phase 50 Hz. AC with IP 55 protection for enclosure, horizontal foot mounted type with class 'F' insulation, conforming to IS: 325.				
c)	M.S.fabricated common base plate, coupling, coupling guard, Vibration emanating pads, foundation bolts etc. as required				
4	Supplying, installation, testing and commissioning of Electric driven main fire Curtain pump suitable for automatic operation and consisting of following: complete in all respect as required.	set	QRO		
a)	Horizontal type centrifugal back pull out pump of cast iron body and bronze impeller with cs shaft, mechanical seal to ensure a minimum pressure of 1.4 kg/sq.cm. at highest and farthest outlet at specified flow of 97 m3/Hr at 50m . head conforming to IS 1520.				
b)	Suitable HP, SQ cage induction motor, TEFC, synchronous speed 2900 RPM, suitable for operation on 415 ± 6% volts, 3 phase 50 Hz. AC with IP 55 protection for enclosure with Class-'F' insulation, conforming to IS-325.				
c)	M.S.fabricated common base plate, coupling, coupling guard, foundation bolts etc. as required.				

5	Supplying, installing, testing and commissioning of Control Panels fabricated from 14 guage CRCA sheet steel with reinforcement of suitable size angle iron, channel 'T' sections irons and/or flats wherever necessary. cable gland plates shall be provided on top as well as at the bottom of the panel. Panel shall be treated with all anti corrosive process before painting as per specification with 2 coats of red oxide primer and final approved shade of powder coated paint. lifting hooks shall be provided in panel. approval shall be taken for panel before fabrication. cadmium plated hardware shall be used in fabrication of panel. The panel shall have saperate compartments for bus bar and cable alleys.	Nos	1		
a)	Common Control Panel suitable for 1 no. of Electric Motor Driven Fire pump and 1 no. of jockey pump.				
b)	Auto control Panel for Diesel Engine Driven Stand By Fire Pump.				
c)	Common Control Panel suitable for 1 no. of Electric Motor Driven Fire pump.(Curtain pump if required.)				
6	Supplying, installing, testing and commissioning of Cabling and Earthing within Pump House from Control Panel to drives and instrumentation. (Power and Control cable from panel to motor. & instruments) Wiring & Cable Tray : Lumpsum	Lot	1		
6.1	3.5 C X 35 Sqmm Aluminium Armoured (Main Electrical pump)				
6.2	4C X 6 Sqmm Copper Armoured. (jockey electrical Pump)				
6.3	2 C X 1.5 Sqmm Copper Armoured. (For Instrument etc.)				
6.4	Perforated G.I.sheet Cable Tray (100X50mm)				
6.5	Perforated G.I.sheet Cable Tray (200X50mm)				
7	Supplying, installing, testing and commissioning of precharged air vessel (approx. size 450 mm dia & 2000 mm height) fabricated shell from 8 mm thick & dished end 10 mm thick M.S. Plate for pressurization of hydrant / sprinkler system complete with adequate pressure switches (as per design / requirement) with valve to operate as per operating sequences including 25 mm dia drain valve, air release valve with ball cock on top, 50 mm dia inlet with isolating valve duly painted from inside and out side complete as required. (Pump Room)	Nos	1		
8	Supplying, installing, testing and commissioning of dial type glycerin filled Pressure Gauge having 150 mm dial & range of 0-15 Kg/cm2 with isolation ball valve.(Internal). Complies with IS Approved etc complete as required.	Nos	4		
9	Supplying, installing, testing and commissioning of Pressure Switch having range of 0-15 Kg/cm² with appropriate cable (additional if required), cock etc complete as required.	Nos.	3		
10	Supplying, installing, testing and commissioning of above ground G.I "C" class heavy duty pipes as per IS: 1239 (upto 150 mm dia.) and IS: 3589 (upto 200 mm dia. And above) including cutting, screwing, welding etc. and providing all fittings like flanges, bends, tees, elbows, reducers, clamps, hangers, angles, channels, anchor fastners etc. including cutting holes and chases in brick / RCC walls / slabs complete with painting of one coat of primer and 2 or more coats of synthetic enamel paint of approved make / shade complete as per specification.				
a)	400 mm dia	RM	QRO		
b)	350 mm dia	RM	QRO		
c)	250 mm dia	RM	QRO		
d)	200 mm dia.	RM	9		-
e)	150 mm dia.	RM	12		-
f)	100 mm dia.	RM	12		-
g)	80 mm dia.	RM	3		-
h)	65 mm dia.	RM	3		-
11	Supplying, installing, testing and commissioning of Under Ground G.I. "C" class heavy duty pipes as per IS: 1239 (upto 150 mm dia.) and IS: 3589 (upto 200 mm dia. And above) including cutting, screwing, welding etc. with providing all fittings like flanges, bends, tees, elbows, reducers, clamps, hangers etc. laid in under ground (buried) which shall be provided with anti corrosive treatment with 2 coats of asphaltic primer and wound with polymeric tap of thickness 4 mm 150/250mm wide shall then be wound in a spiral fashion as per IS: 10221 with support of 250 x 250 x 200 mm PCC supports at intervals of 3.5 m with necessary clamps, air valves etc. as required.				
a)	250 mm dia.	RM	QRO		
b)	200 mm dia.	RM	QRO		
c)	150 mm dia.	RM	QRO		
d)	100 mm dia.	RM	QRO		
e)	80 mm dia.	RM	QRO		
f)	65 mm dia.	RM	QRO		

12	Supplying, installing, testing and commissioning of CI Basket type strainer with SS screen double flanged Complete with matching flange gasket nut bolt etc complete as required. (Pump Suction)				
a)	250 mm dia	Nos	QRO		
b)	200 mm dia.	Nos	2		-
c)	150 mm dia.	Nos	QRO		
d)	100 mm dia.	Nos	QRO		
e)	80 mm dia.	Nos	1		-
f)	65 mm dia.	Nos	QRO		
13	Supplying, installing, testing and commissioning of CI Sluice valve cast iron double flanged solid wedge, inside screw, non-rising stem, bolted bonnet Construction. The valves shall have renewable screwed body seat. Pressure rating shall be PN 16 and valve shall be as per IS: 14846, etc complete as required. (Pump Suction)				
a)	400 mm dia	Nos	QRO		
b)	350 mm dia	Nos	QRO		
c)	250 mm dia	Nos	QRO		
d)	200 mm dia.	Nos	4		-
e)	150 mm dia.	Nos	QRO		
f)	100 mm dia.	Nos	QRO		
g)	80 mm dia.	Nos	QRO		
h)	65 mm dia.	Nos	QRO		
14	Supplying, installing, testing and commissioning of CI butterfly valve (PN 16) as per BS 5155/IS:13095 with integrally moulded linear of nitrile or EPDM. Stainless steel Disc & Steam Lever operated / gear operated with ISI Marked etc complete as required. . (Pump Delivery.)				
a)	400 mm dia (Gear Operated)	Nos	QRO		
b)	350 mm dia (Gear Operated)	Nos	QRO		
c)	250 mm dia (Gear Operated)	Nos	QRO		
d)	200 mm dia. (Gear Operated)	Nos	QRO		
e)	150 mm dia. (Leaver Operated)	Nos	2		-
f)	100 mm dia. (Leaver Operated)	Nos	3		-
g)	80 mm dia. (Leaver Operated)	Nos	1		-
h)	65 mm dia. (Leaver Operated)	Nos	1		-
15	Supplying, installing, testing and commissioning of Expansion / Flexible bellow (PN 16), MOC stainless steel, complete with matching flange gasket nut bolt etc complete as required.. (Pump Suction & Delivery line)				
a)	400 mm dia	Nos	QRO		
b)	350 mm dia	Nos	QRO		
c)	250 mm dia	Nos	QRO		
d)	200 mm dia.	Nos	2		-
e)	150 mm dia.	Nos	2		-
f)	100 mm dia.	Nos	QRO		
g)	80 mm dia.	Nos	1		-
h)	65 mm dia.	Nos	1		-
16	Supplying, installing, testing and commissioning of dual plate Non-return valve with C.I. body and bronze / brass internals and following sizes conforming to API: 594 complete with rubber gasket, GI bolts, nuts, washers etc. as required. The valves shall be PN 16 rating etc complete as required.				
a)	200 mm dia.	Nos	QRO		
b)	150 mm dia.	Nos	2		-
c)	100 mm dia.	Nos	QRO		
d)	80 mm dia.	Nos	QRO		
e)	65 mm dia.	Nos	1		-
17	Supplying, installing, testing and commissioning of approved make 25mm dia. automatic air release valve with unions etc complete as required.	Nos	QRO		
18	Supplying, installing, testing and commissioning of Electronic type water level indicator with LED Panel & all control wiring etc complete as required.	Set	3		-
19	Supplying, installing, testing and commissioning of Flow meter with digital display, Range 0-10000 lpm , size 150 mm dia complete with rubber gasket , GI bolts , nuts, washers etc. Complete. MOC stainless steel and should be comply with IS etc complete as required. (Pump test line)	Nos	1		-
20	Supplying, installing, testing and commissioning of CI Pressure release valve set (PN-16) , size 150 mm dia complete with rubber gasket , GI bolts, nuts, washers etc. Complete. should be comply with IS approved etc complete as required. (Pump test line)				

a)	Pressure range 8-15 kg/cm2	Nos	1		-
b)	Pressure range 12-20 kg/cm2	Nos	QRO		
SUM OF FIRE PUMPS, EQUIPMENT, PIPING, VALVES & ACCESSORIES CARRIED OVER TO SUMMARY PAGE					-

B)	FIRE HYDRANT & SPRINKLER SYSTEM				
1	Providing, fixing, testing and commissioning of Above Ground GI. "C" class heavy duty pipes as per IS: 1239 (upto 150 mm dia.) and IS: 3589 (upto 200 mm dia. And above) including cutting, screwing, welding etc. and providing all fittings like flanges, bends, tees, elbows, reducers, clamps, hangers, angles, channels, anchor fastners etc. including cutting holes and chases in brick / RCC walls/ slabs complete with painting of one coat of primer and 2 or more coats of synthetic enamel paint of approved make / shade complete as per specification.				
a)	250 mm dia	RM	QRO		
b)	200 mm dia.	RM	QRO		
c)	150 mm dia.	RM	796		-
d)	100 mm dia.	RM	614		-
e)	80 mm dia.	RM	504		-
f)	65 mm dia.	RM	520		-
g)	50 mm dia.	RM	596		-
h)	40 mm dia.	RM	572		-
i)	32 mm dia.	RM	478		-
j)	25 mm dia.	RM	3286		-
2	Supplying, installing, testing and commissioning of Under Ground GI. "C" class heavy duty pipes as per IS: 1239 (upto 150 mm dia.) and IS: 3589 (upto 200 mm dia. And above) including cutting, screwing, welding etc. with providing all fittings like flanges, bends, tees, elbows, reducers, clamps, hangers etc. laid in under ground (buried) which shall be provided with anti corrosive treatment with 2 coats of asphaltic primer and wound with polymeric tap of thickness 4 mm 150/250mm wide shall then be wound in a spiral fashion as per IS: 10221 with support of 250 x 250 x 200 mm PCC supports at intervals of 3.5 m with necessary clamps, air valves etc. as required.				
a)	200 mm dia.	RM	QRO		
b)	150 mm dia.	RM	444		-
c)	100 mm dia.	RM	12		-
d)	80 mm dia.	RM	QRO		
3	Supplying, installing, testing and commissioning of SS single headed (Type-A) ISI marked oblique pattern hydrant landing valves as per IS: 5290 with 80 mm dia flanged inlet & 63 mm dia female outlet complete with gun metal cap with Orifice Plate fabricated from SS 304 plate with minimum 6mm thickness to restrict the operating pressure to 3.5 kg/cm2 and discharge 900LPM etc complete as required.	Each	42		-
4	Supplying, installing, testing and commissioning of 63 mm dia (2 nos in single box) & 15 m long RRL hose pipe of type -A, ISI marked with SS wire binding and 63 mm SS 304. Male and female couplings duly binded with SS wire, rivets etc. conforming to IS 636 etc complete as required.	Each	40		-
5	Supplying, installing, testing and commissioning of Standard SS 304 branch pipe with nozzle of 20 mm nominal bore outlet as per IS:903 suitable to fit with standard instantaneous type 63 mm dia coupling etc complete as required.	Each	40		-
6	Supplying, installing, testing and commissioning of First Aid hose reel with MS construction spray painted in post office red, conforming to IS 884 with upto date amendments, etc complete as required.	Each	40		-
a)	40 m. long 25 mm (nominal internal) dia water hose thermoplastic (textile reinforced) type-2 as per IS: 12585				
b)	25 mm (nominal internal) dia gun metal globe valve & 6.35 mm nozzle.				
c)	Drum and brackets for fixing the equipments on wall.				
d)	Connections from riser with stop valve (gun metal) & M.S. pipe.				
7	Supplying, installing, testing and commissioning of Weather proof standard fire hose cabinet stand mounting type (750 mm x 600 mm x 250 mm deep) having single or double opening with M.S. Fabricated Stand, necessary locking arrangement by allan key suitable for housing 2 nos. hose pipe, 1no. Branch pipe & nozzle spaner etc complete as required. (External)	Each	QRO		
8	Supplying, installing, testing and commissioning of Weather proof standard fire hose cabinet wall mounting type (750 mm x 600 mm x 250 mm deep) having single or double opening with necessary locking arrangement by allan key suitable for housing 2 nos. hose pipe, 1no. Branch pipe & nozzle spaner etc complete as required. (Internal)	Each	40		-
9	Supplying, installing, testing and commissioning of CI butterfly valve (PN 16) as per BS 5155/IS:13095 with integrally moulded linear of nitrile or EPDM. Stainless steel Disc & Steam Lever operated / gear oprated with ISI Marked etc complete as required.				
a)	250 mm dia (Gear Oprated)	Each	QRO		
b)	200 mm dia. (Gear Oprated)	Each	QRO		
c)	150 mm dia.	Each	32		-

d)	100 mm dia.	Each	2		-
e)	80 mm dia.	Each	7		-
f)	65 mm dia.	Each	42		-
g)	50 mm dia.	Each	10		-
10	Supplying, installing, testing and commissioning of SS BALL valve Lever operated with ISI Marked etc complete as required.				
a)	40 mm dia.	Each	QRO		
b)	32 mm dia.	Each	QRO		
c)	25 mm dia.	Each	QRO		
11	Supplying, installing, testing and commissioning of Flow Indicating Switch with fittings, Flanges, nut-bolts, washers etc complete as required of sizes:				
a)	200 mm dia.	Each	QRO		
b)	150 mm dia.	Each	9		-
c)	100 mm dia.	Each	1		-
d)	80 mm dia.	Each	QRO		
e)	65 mm dia.	Each	QRO		
f)	50 mm dia.	Each	QRO		
12	Supplying, installing, testing and commissioning of ISI Listed Deluge valve , diaphragm sealing weir type valve of following size conforming to flanged ANSI class 150 FF complete with GI, Basic Wet Pilot Trim with Test & Alarm Trim, Drain and Drip Valve, Supplied Loose in a box, gong and solenoid valve etc complete as required.				
a)	100 mm dia.	Each	QRO		
b)	150 mm dia.	Each	QRO		
13	Supplying, installing, testing and commissioning of ISI Listed Alarm valve , valve shall comprise of a cast iron body with gunmetal trim, double seated clapper check valve with grooved seat type valve of following size conforming to flanged ANSI class 150 FF complete with GI, Basic Wet Pilot Trim with Test & Alarm Trim, Drain, Gong Supplied Loose in a box etc complete as required.				
a)	150 mm dia.	Each	QRO		
14	Supplying, installing, testing and commissioning of dual plate Non-return valve with C.I. body and bronze/ brass internals and following sizes conforming to API: 594 complete with rubber gasket, GI bolts, nuts, washers etc. as required. The valves shall be PN 16 rating etc complete as required.				
a)	150 mm dia.	Each	5		-
b)	100 mm dia.	Each	1		-
15	Supplying, installing, testing and commissioning of 4 way fire brigade connection of cast iron body with 4 nos. SS-304 instantaneous inlet couplings complete with cap and chain as required for 150 mm dia MS pipe connection, conforming to IS 904 etc complete as required.	Each	QRO		
16	Supplying, installing, testing and commissioning of SS-304 two way fire brigade inlet as per IS:904 having 63 mm dia inlet with blank cap and chain with necessary fittings, flanges, nutbolts etc complete as required.	Each	QRO		
17	Supplying, installing, testing and commissioning of 100 mm dia. SS-304 fire brigade suction hose coupling of (SS-304, draw off connection) with 100 mm dia. G.I 'C' class suction pipe with 100 mm dia C.I. foot valve. (pipe max. 10m long). With required accessories etc complete as required.	Each	QRO		
18	Supplying, installing, testing and commissioning of dial type glycerin filled Pressure Gauge having 150 mm dial & range of 0-15 Kg/cm ² with isolation ball valve. (Internal). Complies with IS Approved etc complete as required.	Each	QRO		
19	Providing and laying brick masonry valve chamber of inside dimension 1.2M x 1.2M x 1.4M deep with 9" thick wall 20mm thick plastered from inside and 6mm thick MS cover with handle. Top cover to be painted with Red oxide primer and shall be capable of with stand 20 tone load etc complete as required.	Each	QRO		
20	Getting Approval of Fire Hydrant and Sprinkler system from local fire authority and any other relevant statutory authority at initial and various other stages of work, including preparation of report/drawings as per fire authority. Contractor shall include cost of all liaison work which are not explicitly mentioned above but are mandatory to have fire authority approval (*any statutory charges will be paid extra).	job	1		-
21	Supplying, installing, testing and commissioning of inspection & testing assembly with Control valve, by pass valve, drain connection & Sight Glass etc complete as required.				
a)	25mm dia.	Each	9		-
22	Supplying, installing, testing and commissioning of approved make 25mm dia. automatic air release valve with unions etc complete as required.	Nos	8		-
23	Supplying, installing, testing and commissioning of sprinkler heads of the following type :				

	Sprinkler heads shall be provided at approximate spacing so as to cover 9 / 12 M ² per sprinkler head as per the application of area. All Sprinklers shall be brass castings polished / chrome OR white (polyester) unless stated otherwise and rated for 7.0 Kg/CM ² WG and factory tested for 15.0 Kg/CM ² etc complete as required.				
a)	Pendent type sprinklers of 57°C temperature	Each	2150		-
b)	Side wall type sprinklers of 57°C temperature	Each	QRO		
c)	Upright type sprinklers of 57°C temperature	Each	QRO		
d)	Pendent type sprinklers of 79°C temperature	Each	QRO		
24	Supply, Installation, testing and commissioning of S.S Flexible pipes of SS 304 with maximum working pressure of 175psi & testing pressure of 875psi with 0.4mm thickness shall be installed for sprinkler drops. The flexible pipe shall be of IS approved. Flexible Pipes should be of Braided Type, welded reducer on one end to directly accommodate sprinkler, ring, square bar, brackets, nuts, nipple etc. complete as per NFPA 13/13D and 13R for limited flexible application etc complete as required of following sizes: (For Commercial area)				
a)	1000 mm long	Nos.	QRO		
b)	1500 mm long	Nos.	QRO		
25	Supply, Installation, testing and commissioning of adjustable rosette plate for sprinkler head of 15mm dia in white/chrome plated finish wherever false ceiling or required Rosette plate should UL Listed etc complete as required. (For Commercial area)	Nos.	QRO		
26	Supplying, installing, testing and commissioning Fire Extinguishers , Hand appliances:				
a)	ABC Extinguisher of capacity 6 kg. as per IS 15683 with hanging bracket & accessories etc complete as required.	Each	40		-
b)	Carbon Dioxide type Fire Extinguisher of capacity 4.5 kg. as per IS 15683 with squeeze grip type operation with swivel horn, hanging bracket & accessories etc complete as required.	Each	40		-
c)	4 kg Clean Agent Fire Extinguisher filled with "Chemours "make UL listed & FM Approved FE-36(HFC-236 fa) gas, Electrically nonconductive non corrosive, colorless and non-residual gas, Applicable for Classes A, B, C, and electrical fires, approved with US EPA (environmental protection agency), listing under USA Signification New Alternative Policy (SNAP) & also approved by UL, compliant with ASTM -D6541-11. UGTS Pressure Gauge, Gross Weight 6.7 Kg, empty Weight 2.7 Kg, Can Height 490mm, Diameter 140 ± 10mm, Discharge Time 14 Sec, Controllable discharge mechanism, Jet Range 3.5 Meters, Average Discharge is 95%, Deep Drawn with MIG Welding technology, EPDM Rubber Hose with Special Aluminum Discharge Nozzle, External Coating Pure Polyester Powder (UV resistant), CE Mark Valve with Safety Release Provision & Safety pin is of SS material, Helium Leak Detection Tested, Fire rating 2A : 34B (Factory tested as per UL rating of 1A, 10B:C). FE-36 having zero ozone depletion potential, and Welding Procedure approved by TPI with 6 G certification. Confirms to IS 15683, ISI & CE marked etc complete as required.	Each	11		-
d)	6 ltr. Fire Extinguisher K Class Kitchen Wet chemical (Blend of Potassium Acetate, Potassium citrate or Potassium carbonate), Smooth and Polished Stainless Steel body, Applicable fire class K, UGTS Pressure Gauge, Can Height 550 mm, Diameter 150 ± 10mm, Discharge Time 13 Sec, Jet Range 2 Meters, Average Discharge is 90%, Controllable discharge mechanism with EPDM Hose & Specially designed Nozzle that allows a broad, dispersed discharge of agent that delivers a high volume, low velocity delivery of wet chemical which doesn't cause the cooking oil to splash. CE Marked Valve with inbuilt NRV & Safety Release Provision and safety Pin is of SS material, Sheet metal thickness : 0.9 to 1 mm. CE Marked etc complete as required.	Each	QRO		
27	Supplying, installing, testing and commissioning of annunciator panel for flow control switch, providing Audio/Visual indicating of actuation of automatic sprinkler system for each zone complete as per specifications with provision for 15 zones . The panel shall have but not limited to the following arrangement etc complete as required.	Nos.	1		-
a)	Indication of zone fire				
b)	Indication of zone fault				
c)	Fire/Fault hooter				
d)	Alarm cancel for fire/fault				
e)	Battery for emergency				
f)	Facility for connecting to Master Control Panel/Fire Alarm/BMS System.				
g)	Cabling for flow switches (from flow switch to master control panel) with 2 core 1.5 sq.mm. copper cable.				

28	Supplying, installing, testing and commissioning of fire alarm system as per requirement and specification consisting of following items etc complete as required.	set	40		-
a)	Manual call point: 1 nos per set				
b)	Hooters: 1 nos per set				
c)	Wiring with PVC pipes and hardware: Lumpsum				
29	Supplying, installing, testing and commissioning of pump trigger system as per requirement and specification consisting of following items etc complete as required.	set	40		-
a)	Pump On / Off switch: 1 nos per set				
b)	Wiring with PVC pipes and hardware: Lumpsum				
30	Supplying, installing, testing and commissioning of Window/Water Curtain Nozzles	Nos.	QRO		
a)	Water/Window Curtain Nozzle, CN, Brass, nickel chrome plated, 1/2" BSPT/NPT, K-factor as per catalogue No. HD276, UL Listed				
b)	Water/Window Curtain Nozzle, CNS, Stainless Steel, 1/2" BSPT/NPT, K-factor as per catalogue No. HD276, UL Listed				
31	Supplying, installing, testing and commissioning of AUTOGLOW Signages in Block / Small Letters of Specified Sizes:				
a)	Fire lift size: 4" X 12"	Nos.	14		-
b)	Emergency exit size: 4" X 12" (Power operated with battery operated)	Nos.	112		-
c)	Fire Hydrant: 4" X 12"	Nos.	40		-
d)	Fire Extinguisher: 8" X 4"	Nos.	51		-
e)	Assembly Point: 12" x 12"	Nos.	2		-
f)	In case of Fire, do not use lift, use staircase: 8" x 8"	Nos.	14		-
g)	Fire Escape route Signage minimum 12" x 8"	Nos.	26		-
	SUM OF FIRE HYDRANT & SPRINKLER SYSTEM CARRIED OVER TO SUMMARY PAGE				-
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C	COMPREHENSIVE MAINTENANCE CONTRACT				
	1ST YEAR		4		
	2ND YEAR		4		
	3RD YEAR		4		
	SUM OF COMPREHENSIVE MAINTENANCE CONTRACT CARRIED OVER TO SUMMARY PAGE				0
D	NON-COMPREHENSIVE MAINTENANCE CONTRACT				
	1ST YEAR		4		
	2ND YEAR		4		
	3RD YEAR		4		
	SUM OF NON-COMPREHENSIVE MAINTENANCE CONTRACT CARRIED OVER TO SUMMARY PAGE				0

MIT WPU Campus Goa_Acadamic Building

Fire Fighting work Make & Material List			AD25122_12-01-2026
Sr.No.	Items	AUDMPL's Approved Makes (ISI marked)	Client/Contractor's consideration
1	Fire Pumps	KBL / M&P / Grundfos / Kirloskar / Lubi / KSB / CRI / Xylem	
2	Electric Motor	KEC / CG / ABB / Siemens	
3	Diesel Engine	Greaves / Cummins / KEOL / Perkins / Caterpillar	
4	G.I. / M.S. Pipes	Jindal / Tata / Zenith / Asian / Suryaprakash / Apollo	
5	Valves	Zoloto / Audco / Leader / Intervolve / Sant/ NVR / C&R / Castle / H Sarkar / Kartar/ KBL	
6	Strainers	Audco / RB / Intervolve /Zoloto / Normex / NVR/Armor	
7	Pressure Switch	Danfoss / Indfoss / Potter / Switzer / Thermax / Omicron	
8	Pressure Gauge	H Guru / Fiebig / Pricol / Bells	
9	Anticorrosive Material	IWL / Rustech / IPL / Pypkote	
10	Hydrant Valves	Shah Bhogilal / Newage / Swati / Winco / Armor / Shubham Technocast	
11	Branch Pipe with Nozzle	Shah Bhogilal / Newage / Swati / Winco / Armor / Shubham Technocast	
12	Fire Hoses	Shah Bhogilal / Newage / Swati / Winco / Armor / Shubham Technocast	
13	Hose Couplings	Shah Bhogilal / Newage / Swati / Winco / Armor / Shubham Technocast	
14	Hose Reel & Drum	Shah Bhogilal / Newage / Swati / Winco / Armor / Shubham Technocast	
15	Hose Boxes	Shah Bhogilal / Newage / Swati / Winco / Armor / Shubham Technocast	
16	Fire Extinguishers	Safex / Kanex / Cease Fire / Minimax/Armor	
17	Flow Switch	Potter / HD Fire / Danfoss / System Sensor / Switzer / Honeywell	
18	Paints	Asian / Berger / Nerolac / J&N/ Jotun	
19	Air Release Valve	Audco / RB / Intervolve /Zoloto / Normex / Sant / Varie / Impact by honeywell / Leader	
20	Anchor Fastner	Intello Tech/G.M.G.R / Hilti / Mupro / Shaivi	
21	Siemess Connection	Shah Bhogilal / Newage / Swati / Winco	
22	Fire Alarm Control Panel / Repeater Panel	Honeywell / Siemens / Ravel / Simplex / Bosch	
23	Hooters / Sounder / Fault Isolators / Detectors	Honeywell / Siemens / Ravel / Simplex / Bosch	
24	Manual Call Points	Agni/Honeywell / Siemens / Ravel / Simplex / Bosch	
25	Addressable Modules	Agni/Honeywell / Siemens / Ravel / Simplex / Bosch	
26	Level switch for water tank	Pune Techtrol / Johnson controls / Gelco / Danfoss / Indfoss / Potter / Switzer / Thermax / Omicron	
27	Cables	KEI / RR kabel / Finolex / Polycab / Torrent	
28	Water Flow Meters	Forbes Marshall / Omicron / ABB / Schneider/ Kemstrup	
29	S.S Flexible Pipes	NewAge / Tyco / Safex / Monsher/Armor	
30	Test drain assembly with sight glass	Tyco / HD Fire / Viking / Victaulic	
31	Auto Glow Signages	Prolite / Glowlite / Autoglow	
32	Passive Fire Protection	Hilti / Promat/ 3M / Fisher	
33	Sprinklers	HD Fire / Newage / Tyco / Safex / Armor	
34	Gas Suppression	Kanex / Tyco / Kalpex / Siemens / Swastik Synergy / Ansul	
35	Fire Trace System	Kanex / Tyco / Kalpex / Siemens / Swastik Synergy / Ansul	
36	Deluge & Alarm Valve	HD Fire /Newage / Tyco / Safex/Armor	

37	Welding electrodes	Advani / Maruti / Cosmos	
38	Pressure release valve	Darling Muesco / Lehri / Sant / L&T / Leader / V-TECH	