## UNIVERSITY OF KERALA ENGINEERING UNIT, KARIAVATTOM

## Tender schedule for maintenance to the Centre for Gandhian studies building at SH campus.

Sl.No.	Quantity	Specification	Unit	Rate	Rate in words	Amount
1	90.45	Dismantling old plaster or skirting raking out joints and cleaning the surface for plaster including disposal of rubbish to the dumping ground within 50 metres lead		32.28	Rs.Thirty Two & ps. Twenty Eight only	2,919.73
2	4.60	Providing and laying in position cement concrete 1:2:4 ( 1 cement : 2 coarse sand : 4 graded stone aggregate 12.5 mm nominal size) up to floor five level excluding the cost of centering, shuttering, finishing for leveling coarse of floor and roof etc.		7,859.59	Rs.Seven thousand Eight hundred & Fifty Nine & ps. Fifty Nine only	36,154.11
3	91.00	12 mm cement plaster finished with a floating coat of neat cement of mix: 1:3 ( 1 cement : 3 fine sand)	m2	326.86	Rs.Three hundred & Twenty Six & ps. Eighty Six only	29,744.26
4	50.00	Repairs to plaster of thickness 12 mm to 20 mm in patches of area 2.5 sq meters and under, including cutting the patch in proper shape, raking out joints and preparing and plastering the surface of the walls complete, including disposal of rubbish to the dumping ground within 50 meters lead:  With cement mortar 1:4 ( 1 cement : fine sand)		381.63	Rs.Three hundred & Eighty One & ps. Sixty Three only	19,081.50
5	0.60	Demolishing cement concrete manually / by mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in-Charge.  Nominal concrete 1:3:6 or richer mix (i/c equivalent design mix)		1,436.95	Rs.One thousand Four hundred & Thirty Six & ps. Ninety Five only	862.17
6	5.80	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 (cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)		7,900.59	Rs.Seven thousand Nine hundred & & ps. Fifty Nine only	45,823.42

7	6.00	Providing and laying Ceramic glazed floor tiles of size 300x300 mm (thickness to be specified by the manufacturer), of 1st quality conforming to IS: 15622, of approved make, in colours such as White, Ivory, Grey, Fume Red Brown, laid on 20 mm thick cement mortar 1:4 (1 Cement: 4 Coarse sand), including pointing the joints with white cement and matching pigment etc., complete	m2	992.05	Rs.Nine hundred & Ninety Two & ps.Five only	5,952.30
8	20.00	Providing and fixing I st quality ceramic glazed wall tiles conforming to IS: 15622 (thickness to be specified by the manufacturer), of approved make, in all colours, shades except burgundy, bottle green, black of any size as approved by Engineer -in-Charge, in skirting, risers of steps and dados, over 12 mm thick bed of cement mortar 1:3 (1 cement: 3 coarse sand) and jointing with grey cement slurry @ 3.3 kg per sqm, including pointing in white cement mixed with pigment of matching shade complete.		1,073.41	Rs.One thousand & Seventy Three & ps. Forty One only	21,468.20
9	156.00	Taking out doors, windows and clerestory window shutters (steel or wood ) including stacking within 50 metres lead: Of area beyond 3 sq. metres	E	116.74	Rs.One hundred & Sixteen & ps.Seventy Four only	18,211.44
10	12.00	Providing and fixing factory made P.V.C. door frame of size 50x47 mm with a wall thickness of 5 mm, made out of extruded 5 mm rigid PVC foam sheet, mitred at corners and joined with 2 Nos. of 150 mm long brackets of 15x15 mm M.S. square tube, the vertical door frame profiles to be reinforced with 19x19 mm M.S. square tube of 19 gauge, EPDM rubber gasket weather seal to be provided through out the frame. The door fame to be fixed to the wall using M.S. screws of 65/100 mm size, complete as per manufacturer's specification and direction of Engineer-in Charge.	m	632.33	Rs.Six hundred &Thirty Two & ps.Thirty three only	7,587.96

- 44	2.20	Described on the second part of	2	2.000.20	D 71			42.766.05
11	3.20	Providing and fixing factory made panel PVC door shutter consisting	m2	3,989.39		thousand		12,766.05
		of frame made out of M.S. tubes of 19 gauge thickness and sized of 19				Eighty Nin	e & ps.	
		mm x 19 mm for styles and 15x15 mm for top & bottom rails. M.S.			Thirty Nine	e only		
		frame shall have a coat of steel primers of approved make and						
		manufacture. M.S. frame covered with 5 mm thick heat moulded PVC						
		'C' channel of size 30 mm thickness, 70 mm width out of whicj 50 mm						
		shall be flat and 20 mm shall be tapered in 45 degree angle on both						
		side forming styles and 5mm thick, 95 mm wide PVC sheet out of						
		which75 mm shall be tapered in 45 degree on th inner side to form						
		top and bottom rail and 115 mm wide PVC sheet out of which 75 mm						
		shall be flat and 20 mm shall be tapered on both sides to form lock						
		rail. Top, bottom and lock rails shall be provided both side of the						
		panel. 10 mm (5 mmx2) thick, 20 mm wide cross PVC sheet be						
		provided as gap insert for top rail & bottom rail. paneling of 5 mm						
		thick both side PVC sheet to be fitted in the M.S. frame welded						
		/sealed to the styles & rails with 7 mm (5 mm + 2 mm ) thick x 15 mm						
		wide PVC sheet beading on inner side, and joined together with						
		solvent cement adhesive. An additional 5 mm thick PVC strip of 20						
		mm width is to be stuck on the interior side of the 'C' Channel using						
		PVC solvent adhesive etc. complete as per direction of Engineer -in-						
		charge, manufacture's specification & drawing.						
		30 mm thick plain PVC door shutters						
		35 mm thek plant ve assi shatters						
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12	120.00	Providing and fixing M.S. Tubular frames for doors, windows, ventilators and cupboard with rectangular /L-Type sections, made of 1.60 mm thick M.S. Sheet, joints mitred, welded and grinded finish, with profiles of required size, including fixing of necessary butt hinges and screws and applying a priming coat of approved steel primer.  Fixing with 15x3 mm lugs 10 cm long embedded in cement concrete block 15x10x10 cm of C.C. 1:3:6 ( 1 Cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size)		178.78	Rs.One hundred &Seventy Eight & ps.Seventy Eight only	21,453.60
13	0.16	Providing wood work in frames of doors, windows, clerestory windows and other frames, wrought framed and fixed in position with hold fast lugs or with dash fasteners of required dia & length ( hold fast lugs or dash fastener shall be paid for separately) using good quality Pincoda wood		113,688.82	Rs.One Lakh Thirteen thousand Six Hundred Eighty Eight & ps. Eighty Two only	18,190.21
14	7.20	Providing and fixing panelled or panelled and glazed shutters for doors, windows and clerestory windows, 35 mm thick shutters including ISI marked M.S. pressed butt hinges bright finished of required sized with necessary screws, excluding panelling which will be paid for separately, all complete as per direction of Engineer in-charge using Pincoda wood		3,166.39	RsThree thousand One hundred & Sixty Six & ps. Thirty Nine only	22,798.01
15	7.10	Providing and fixing paneling or paneling and glazing in paneled or paneled and glazed shutters for doors, windows and clerestory windows (Area of opening for panel inserts excluding portion inside grooves or rebates to be measured). Paneling for paneled or paneled and glazed shutters 25 mm to 40 mm thick using good quality Pincoda wood		2,607.72	Rs.Two thousand Six hundred & Seven & ps. Seventy Two only	18,514.81
16	4.00	Supplying and fixing 300 mm Aluminium aldrop	Е	188.74	Rs.One hundred & Eighty Eight & ps. Seventy Four only	754.96
17	15.00	Providing and fixing iron hooks and eyes: 200mm.	E	16.78	Rs.Sixteen & ps. Seventy Eight only	251.70

18	20.00	Providing and fixing iron hooks and eyes: 100 mm	E	12.13	Rs.Twelve & ps. Thirteen only	242.60
19	50.00	Repairs to plaster of thickness 12 mm to 20 mm in patches of area 2.5 sq meters and under, including cutting the patch in proper shape, raking out joints and preparing and plastering the surface of the walls complete, including disposal of rubbish to the dumping ground within 50 meters lead:  Cement mortar 1:4 (1 cement: 4 coarse sand)		396.04	Rs.Three hundred & Ninety Six & ps. Four only	19,802.00
20	50.00	Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface: Water thinnable cement primer	m2	53.25	Rs.Fifty Three & ps. Twenty Five only	2,662.50
21	199.00	Finish walls with Acryllic Smooth exterior paint of required shade: Old work ( Two or more coats applied @ 1.67 ltr/10 sqm) on existing cement paint surface		99.37	Rs.Ninety Nine & ps. Thirty Seven only	19,774.63
22	355.00	Wall painting with plastic emulsion paint of approved brand and manufacture to give an even shade:  One or more coats on old work	m2	79.63	Rs.Seventy Nine & ps. Sixty Three only	28,268.65
23	60.00			73.93	Rs.Seventy Three & ps. Ninety Three only	4,435.80
24	5.20	Earth work in excavation by mechanical means (Hydraulic excavator)/manual means over areas (exceeding 30 cm in depth, 1.5 m in width as well as 10 sqm on plan) including disposal of excavated earth, lead up to 50 m and lift up to 1.5 m, disposed earth to be levelled and neatly dressed. All kinds of soil		181.52	Rs.One hundred & Eighty One & ps. Fifty Two only	943.90
25	52.00	Cement plaster 1:3 ( 1 cement : 3 coarse sand) finished with a floating coat of neat cement.  12 mm cement plaster	m2	338.25	Rs.Three hundred & Thirty Eight & ps. Twenty Five only	17,589.00

26	10.00	Providing and fixing PVC pipes, fittings including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step PVC solvent cement and testing of joints complete as per direction of Engineer-in-Charge. Concealed work, including cutting chases and making good the wall etc. 25 mm pipe 12 kgf/cm2	344.45	Rs.Three hundred & Forty Four & ps. Forty Five only	3,444.50
27	10.00	Providing and fixing PVC pipes, fittings including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step PVC solvent cement and testing of joints complete as per direction of Engineer-in-Charge. Concealed work, including cutting chases and making good the wall etc. 50 mm pipe 10 kgf/cm2	388.20	Rs.Three hundred & Eighty Eight & ps. Twenty only	3,882.00
28	10.00	Providing and fixing PVC pipes, fittings including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes with one step PVC solvent cement and testing of joints complete as per direction of Engineer-in-Charge. Concealed work including cutting chases and making good the wall etc. 63 mm pipe 6 Kgf/cm2	492.51	Rs.Four hundred & Ninety Two & ps. Fifty One only	4,925.10
29	20.00	Providing and fixing PVC pipes, fittings including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes with one step PVC solvent cement and testing of joints complete as per direction of Engineer-in-Charge. Concealed work, including cutting chased and making good the wall etc. 110 mm pipe 6kgf/cm2	605.91	Rs.Six hundred & Five & ps. Ninety One only	12,118.20
30	20.00	Providing and fixing PVC pipes includings jointing of pipes with one step PVC solvent cement, trenching, refilling & testing of Joints complete as per direction of engineer in charge.110 mm dia 6Kgf/cm2	445.80	Rs.Four hundred & Forty Five & ps. Eighty only	8,916.00
31	10.00	Providing and fixing PVC pipes includings jointing of pipes with one step PVC solvent cement, trenching, refilling & testing of joints complete as per direction of Engineer in Charge 25 mm dia 12Kfg/cm2	187.95	Rs.One hundred &Eighty Seven & ps. Ninety Five only	1,879.50

32	10.00	Providing and fixing PVC pipes includings of pipes with one step PVC solvent cement, trenching refilling & testing of joints	286.28	Rs.Two hundred & Eighty Six & ps. Twenty Eight only	2,862.80
		complete as per direction of Engineer in Charge. 63 mm dia 6Kgf/cm2			
33	10.00	Providing and fixing PVC pipes, fittings including fixing the pipe with clamps at 1.00 m spacing. This includes jointing of pipes & fittings with one step PVC solvent cement and testing of joints complete as per direction of Engineer-in-Charge 32 mm dia 10Kgf/cm2- Internal work - Exposed on wall	248.79	Rs.Two hundred & Forty Eight & ps. Seventy Nine only	2,487.90
34	2.00	Supplying and fixing Stainless steel soap dish including cost of materials and labour charges etc complete as per the direction of site Engineer-in-charge.	66.79	Rs.Sixty Six & ps.Seventy nine only	133.58
35	2.00	Supplying and fixing CP Towel rod 45cm or nearest available length including cost of materials and labour charges etc complete as per the direction of site Engineer-in-charge.	87.07	Rs.Eighty Seven & ps. Seven only	174.14
36	2.00	Supplying and fixing CP Health faucet good quality including cost of materials and labour charges etc. complete as per the direction of site engineer-in-charg	757.89	Rs.Seven hundred & Fifty Seven & ps. Eighty Nine only	1,515.78
37	6.00	Providing and fixing PVC moulded fittings/ accessories for Rigid PVC pipes, including jointing with PVC solvent cement - 63 mm dia Elbow	69.87	Rs.Sixty Nine & ps. Eighty Seven only	419.22
38	2.00	Providing and fixing PVC moulded fittings /accessories for Rigid PVC pipes, including jointing with PVC solvent cement - 63 mm dia Door Elbow	77.42	Rs.Seventy Seven & ps. Forty Two only	154.84
39	4.00	Providing and fixing PVC moulded fittings/ accessories for Rigid PVC pipes, including jointing with PVC solvent cement - 110 mm dia Elbow	104.18	Rs.One hundred & Four & ps.Eighteen only	416.72
40	4.00	Providing and fixing PVC moulded fittings / accessories for Rigid PVC pipes, including jointing with PVC solvent cement - 110 mm dia 45 degree Elbow	101.88	Rs.One hundred & One & ps.Eighty Eight only	407.52
41	4.00	Providing and fixing PVC moulded fittings/ accessories for Rigid PVC pipes, including jointing with PVC solvent cement-110 mm dia Door Elbow	128.58	Rs.One hundred & Twenty Eight & ps.Fifty Eight only	514.32

42	2.00	Providing and fixing PVC moulded fittings/ accessories for Rigid PVC pipes, including jointing with PVC solvent cement- 110 mm dia Bend		157.63	Rs.One hundred & Fifty Seven & ps.Sixty Three only	315.26
43	4.00	Providing and fixing PVC moulded fittings/ accessories for Rigid PVC pipes including jointing with PVC solvent cement 110x110x110 mm dia Tee		171.19	Rs.One hundred & Seventy One & ps.Nineteen only	684.76
44	4.00		E	183.99	Rs.One hundred & Eighty Three & ps.Ninety Nine only	735.96
45	2.00	Providing and fixing PVC moulded fittings /accessories for Rigid PVC pipes, including jointing with PVC solvent cement -110 mm dia Vent cowl		120.43	Rs.One hundred & Twenty & ps.Forty Three only	240.86
46	2.00	Providing and fixing PVC moulded fittings/ accessories for Rigid PVC pipes, including jointing with PVC solvent cement -110 mm dia offset		161.13	Rs.One hundred & Sixty one & ps. Thirteen only	322.26
47	4.00	Providing and fixing PVC moulded fittings/accessories for Rigid PVC pipes,including jointing with PVC solvent cement - 110 mm dia Socket/ coupling		107.68	Rs.One hundred & Seven & ps. Sixty Eight only	430.72
48	3.50	Providing and fixing fly proof stainless steel grade 304 wire gauge, to windows and clerestory windows using wire gauge with average width of aperture 1.4 mm in both directions with wire of dia 0.50 mm all complete.  With 2nd class teak wood beading 62x19 mm		1,936.32	Rs.One thousand Nine hundred & Thirty Six & ps. Thirty Two only	6,777.12
49	2.00	Providing and fixing fly proof stainless steel grade 304 wire gauge, to windows and clerestory windows using wire gauge with average width of aperture 1.4 mm in both directions with wire of dia 0.50 mm all complete.  With 12 mm mild steel U beading		1,576.89	Rs.One thousand Five Hundred & Seventy Six & ps. Eighty Nine only	3,153.78
50	300.00	Clearing jungle including uprooting of rank vegetation, grass, brush wood, trees and saplings of girth up to 30 cm measured at a height of 1 m above ground level and removal of rubbish up to a distance of 50 m outside the periphery of the area cleared		10.38	Rs.Ten & ps. Thirty Eight only	3,114.00

51	1.00	Demolishing brick work manually / by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-Charge.  In cement mortar		1,214.50	Rs.One thousand Two hundred & Fourteen & ps. Fifty only	1,214.50
52	1.00	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level in all shapes and sizes in:  Cement mortar 1:4 (1 cement: 4 coarse sand)		8,361.12	Rs.Eight thousand Three Hundred & Forty Six & ps. Forty Six only	8,361.12
53	0.50	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level in all shapes and sizes in:  Cement mortar 1:6 (1 cement : 6 coarse sand)		· ·	Rs.Eight thousand & Forty Six only	4,023.00
54	1,000.00	Providing and placing on terrace (at all floor levels) polyethylene water storage tank :ISI 12701 marked, with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank.		10.45	Rs.Ten & ps. Forty five only	10,450.00
55	2.00	Providing and fixing PTMT extension nipple for water thank pipe, fittings of approved quality and colour.  20 mm nominal bore, weighing not less than 40 gms	E	56.64	Rs.Fifty Six & ps. Sixty Four only	113.28
		TOTAL				460,442

PAC Rs.4,60,442/- (Rs. Four Lakh Sixty thousand Four	hundred & Forty Two only)
I/We agreed to execute the work.	1% above the estimate rate.
2% below the estimate rate.	3. At the estimate rate.

sd/-UNIVERSITY ENGINEER

CONTRACTOR