

UNIVERSITY OF KERALA						
ENGINEERING UNIT KARIYAVATTOM						
Tender Schedule for the Maintenance and renovation works for Question Paper room in the Controller of Examinations building at SH campus Palayam						
SL NO	Qty	Specifications	Unit	Rate	Rate in Words	Amount
1	0.375	15.2.2 Demolishing cement concrete manually / by mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in-Charge. Nominal concrete 1:4:8 leaner mix (including equivalent design mix)	cum	848.48	Rs Eight Hundred Fourty Eight Ps: Forty Eight Only	318.18
2	2	15.12.1 Dismantling doors, windows and clerestory windows (steel or wood) shutter including chowkhats, architrave, holdfasts etc. complete and stacking within 50 metres lead:of area 3Sq meters and below	Each	217.72	Rs:Two HundredSeventeen Ps: Seventy Two Only	435.44
3	0.194	15.7.4 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 morta	cum	1162.34	Rs One Thousand One Hundred Sixty Two Ps:Thirty Four Only	225.49
4	13.35	15.23.1 Dismantling tile work in floors and roofs laid in cement mortar including stacking material within 50 metres lead. For thickness of tiles 10 mm to 25 mm	sqm	43.52	Rs Fourty Three Ps:Fifty Two Only	580.99
5	55.50	15.57 Dismantling aluminium / Gypsum partitions, doors, windows, fixed glazing and false ceiling including disposal of unserviceable surplus material and stacking of serviceable material with in 50 metres lead as directed by Engineer – in-Charge	sqm	33.52	Rs: Thirty Three Ps: Fifty Two Only .	1860.36
6	1	15.52 Dismantling of flushing cistern of all types (C.I. / PVC/ Vitrous China) including stacking of useful materials near the site and disposal of unserviceable materials within 50 metres lead	Each	539.58	Rs : Five Hundred Thirty Nine Ps: Fifty Eight Only	539.58
7	1	Od Dismantling water closet Indian/European type and disposal of the debris 150 m out side the area as per departmental direction	Each	412.69	Rs:Four hundred and and twelve Ps. Sixty nine Only .	412.69

8	1	Od Dismantling wash basin including removal of all fixtures and stacking materials as per departmental direction within 150 m lead for re-use	Each	358.86	Rs . Three hundred and fifty eight Ps. Eighty six Only	358.86
9	0.375	4.1.5 Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level: 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 20 mm nominal size)	cum	6795.81	Rs : Six Thousand Seven Hundred Ninty Five Ps:Eighty One t Only	2548.43
10	6.00	22.5 Providing and laying water proofing treatment in sunken portion of WCs, bathroom etc., by applying cement slurry mixed with water proofing cement compound consisting of applying : a) First layer of slurry of cement @ 0.488 kg/sqm mixed with water proofing cement compound @ 0.253 kg/sqm. This layer will be allowed to air cure for 4 hours. b) Second layer of slurry of cement @ 0.242 kg /sqm mixed with water proofing cement compound @ 0.126 kg/ sqm. This layer will be allowed to air cure for 4 hours followed with water curing for 48 hours. The rate includes preparation of surface, treatment and sealing of all joints, corners, junctions of pipes and masonry with polymer mixed slurry.	sqm	411.45	Rs : Four Hundred Eleven Ps: Fourty Five Only	2468.70
11	2	Od Removing and Re arranging the office furniture and files	Day	589.56	Rs Five Hundred Eighty Nine Ps: Fifty Six Only	1179.12
12	3	Od supplying and fixing 15mm CP brass angle valve	Each	1066.17	Rs One Thousand Sixty six Ps: Seventeen Only	3198.51
13	1.891	Od Providing and fixing plywood 6 mm thick with necessary screws/nails, including priming coat on surface	sqm	1468.71	Rs One Thousand Four Hundred Sixty Eight Ps: Seventy One Only	2777.33
14	2.000	Od Labour engaged for easing doors and windows	Day	717.72	Rs Seven Hundred Seventeen Ps: Seventy Two Only	1435.44
15	1.00	Od Supplying and fixing Floor Trap 110mm	Each	190.33	Rs One Hundred Ninty Rs: Thirty Three Only	190.33

16	55.5	<p>1.45.2 Providing and fixing false ceiling at all height including providing and fixing of frame work made of special sections, power pressed from M.S. sheets and galvanized with zinc coating of 120 gms/ sqm (both side inclusive) as per IS : 277 and consisting of angle cleats of size 25 mm wide x 1.6 mm thick with flanges of 27 mm and 37 mm, at 1200 mm centre to centre, one flange fixed to the ceiling with dash fastener 12.5 mm dia x 50 mm long with 6 mm dia bolts, other flange of cleat fixed to the angle hangers of 25x10x0.50 mm of required length with nuts & bolts of required size and other end of angle hanger fixed with intermediate G.I. channels 45x15x0.9 mm running at the spacing of 1200 mm centre to centre, to which the ceiling section 0.5 mm thick bottom wedge of 80 mm with tapered flanges of 26 mm each having lips of 10.5 mm, at 450 mm centre to centre, shall be fixed in a direction perpendicular to G.I. intermediate channel with connecting clips made out of 2.64 mm dia x 230 mm long G.I. wire at every junction, including fixing perimeter channels 0.5 mm thick 27 mm high having flanges of 20 mm and 30 mm long, the perimeter of ceiling fixed to wall/partition with the help of rawl plugs at 450 mm centre, with 25 mm long dry wall screws @ 230 mm interval, including fixing of gypsum board to ceiling section and perimeter channel with the help of dry wall screws of size 3.5x25 mm at 230 mm c/c, including jointing and finishing to a flush finish of tapered and square edges of the board with recommended jointing compound, jointing tapes, finishing with jointing compound in 3 layers covering upto 150 mm on both sides of joint and two coats of primer suitable for board, all as per manufacturer's specification and also including the cost of making openings for light fittings, grills, diffusers, cutouts made with frame of perimeter channels suitably fixed, all complete as per drawings, specification and direction of the Engineer in Charge but excluding the cost of painting with:</p>	sqm	1271.78	Rs One Thousand Two Hundred Seventy One Ps: Seventy Eight Only	70583.79
17	6.391	<p>1.16.1 Steel work in built up tubular (round, square or rectangular hollow tubes etc.) trusses etc., including cutting, hoisting, fixing position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc. complete. Hot finished welded tpe tubes</p>	Kg	124.48	Rs One HundredTwenty Four Ps:: Four Eight Only	795.55

18	3.75	22.3 Providing and laying water proofing treatment to vertical and horizontal surfaces of depressed portions of W.C. kitchen and the like consisting of : i) I course of applying cement slurry @ 4.4 Kg/ sqm mixed with water proofing compound conforming to IS: 2645 in recommended proportions including rounding off junction of vertical and horizontal surface. ii) II course of 20 mm cement plaster 1:3 (1 cement : 3 coarse sand) mixed with water proofing compound in recommended proportion including rounding off junction of vertical and horizontal surface. iii) III course of applying blown or residual bitumen applied hot at 1.7 kg per sqm of area. iv) IV course of 400 micron thick PVC sheet. (Overlaps at joints of PVC sheet should be 100 mm wide and pasted to each other with bitumen @ 1.7 Kg/ sqm.	sqm	697.79	Rs Six Hundred Ninty Seven Ps: Seventy Nine Only	2616.71
19	1.024	50.4.11 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.	Cum	7522.02	Rs:Seven Thousand Five Hundred Twenty Two Ps: Two Only	7702.55

20	13.65	<p>22.71 Providing and laying integral cement based water proofing treatment including preparation of surface as required for treatment of roofs, balconies, terraces etc. consisting of following operations: a) Applying a slurry coat of neat cement using 2.75 kg/ sqm of cement admixed with water proofing compound conforming to IS: 2645 and approved by Engineer-in-Charge over the RCC slab including adjoining walls upto 300 mm height including cleaning the surface before treatment. b) Laying brick bats with mortar using broken bricks/brick bats 25 mm to 115 mm size with 50% of cement mortar 1:5 (1 cement : 5 coarse sand) admixed with water proofing compound conforming to IS: 2645 and approved by Engineer-in-Charge over 20 mm thick layer of cement mortar of mix 1:5 (1 cement : 5 coarse sand) admixed with water proofing compound conforming to IS: 2645 and approved by Engineer - in- Charge to required slope and treating similarly the adjoining walls upto 300 mm height including rounding of junctions of walls and slabs c) After two days of proper curing applying a second coat of cement slurry using 2.75 kg/ sqm of cement admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-Charge. d) Finishing the surface with 20 mm thick jointless cement mortar of mix 1:4 (1 cement : 4 coarse sand) admixed with water proofing compound conforming to IS: 2645 and approved by Engineer - in- Charge including laying glass fibre cloth of approved quality in top layer of plaster and finally finishing the surface with trowel with neat cement slurry and making pattern of 300x300 mm square 3 mm deep. e) The whole terrace so finished shall be flooded with water for a minimum period of two weeks for curing and for final be flooded with water for a minimum period of two weeks for curing and for final test. All above operations to be done in order and as directed and specified by Engineer in Charge:</p>	sqm	1427.09	Rs:One Thousand Four Hundred Twenty Seven Ps: Nine Only .	19479.78
21	18.4	<p>11.36 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.</p>	sqm	1027.30	Rs : One Thousand Twenty Seven Ps: Thirty Only	18902.32

22	3.75	11.37 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	sqm	949.44	Rs : Nine Hundred forty nine Ps: Forty Four Only	3560.4
23	82.131	47.2 Providing and laying Vitrified tiles in different sizes (thickness to be specified by the manufacturer), with water absorption less than 0.08% and conforming to IS : 15622, of approved brand & manufacturer, in all colours and shade, in skirting, riser of steps, laid with cement based high polymer modified quick set tile adhesive (water based) conforming to IS : 15477, in average 6 mm thickness, including grouting of joints (Payment for grouting of joints to be made separately).	sqm	1711.16	Rs: One Thousand seven Hundred Eleven Ps: Sixteen Only	140539.28
24	30.751	21.1.1.2 Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS : 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing /paneling, C.P. brass/ stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge.(Glazing, paneling and dash fasteners to be paid for separately):for fixed portion powder coated aluminium (minimum thickness of powder coating 50 micron	Kg	530.34	Rs Five HundredThirty Ps:thirty Four Only	16308.49
25	25.201	21.1.2.2 For shutters of doors, windows & ventilators including providing and fixing hinges / pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber/ neoprene gasket required (Fittings shall be paid for separately) powder powder coated aluminium (minimum thickness of powder coating 50 micron)	Kg	613.72	Rs : six Hundred Thirteen Ps: Seventy Two Only	15466.36

26	1.651	21.2.2 Providing and fixing 12 mm thick prelaminated particle board flat pressed three layer or graded wood particle board conforming to IS : 12823 Grade I Type II, in panelling fixed in aluminum doors, windows shutters and partition frames with C.P. brass / stainless steel screws etc. complete as per architectural drawings and directions of Engineer - in- Charge. pre laminated particle board with decoative lamination on both sides	sqm	1195.30	Rs : One Thousand One Hundred Ninty Five Ps: Thirty Only	1973.44
27	1.5	21.3.2 Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of Engineer - in -Charge. (Cost of aluminium snap beading shall be paid in basic item): with float panes of 5.50 mm thickness	sqm	1384.75	Rs: One Thousand Three Hundred Eighty Four Ps: Seventy Five Only	2077.13
28	2.961	21.3.1Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of Engineer - in -Charge. (Cost of aluminium snap beading shall be paid in basic item): with float glass panes of 4.0 mm thickness	sqm	1022.75	Rs One Thousand Twenty Two Ps Seventy Five Only :	3028.36
29	2.00	21.16.2 Providing and fixing aluminium round shape handle of outer dia 100 mm with SS screws etc. complete as per direction of Engineer-in-Charge. Powder coated minimum thickness 50 micron aluminium	Each	94.21	Rs: ninty Four Ps: Twenty One Only	188.42
30	1	21.13 Providing and fixing 100 mm brass locks (best make of approved quality) for aluminium doors including necessary cutting and making good etc. complete	Each	495.17	Rs Four Hundred ninty Five Ps: Seventeen Only	495.17
31	1	9.82 Providing and fixing bright finished brass hanging type floor door stopper with necessary screws, etc. complete	Each	118.41	Rs : One Hundred Eighteen Ps: Fourty One Only	118.41

32	1	17.2.1 Providing and fixing white vitreous china pedestal type water closet (European type W.C. pan) with seat and lid, 10 litre low level white P.V.C. flushing cistern, including flush pipe, with manually controlled device (handle lever), conforming to IS : 7231, with all fittings and fixtures complete, including cutting and making good the walls and floors wherever required: W.C pan with ISI marked white solid plastic seat and lid	Each	4715.41	Rs Four Thousand Seven Hundred fifteen Ps: Forty One Only	4715.41
33	1	17.7.1 Providing and fixing wash basin with C.I. brackets, 15 mm C.P. brass pillar taps, 32 mm C.P. brass waste of standard pattern, including painting of fittings and brackets, cutting and making good the walls wherever require: White Vitreous china wash basin size 630x450 mm with a pair of 15mm C P brass pillar taps	Each	3170.39	Rs: Three Thousand One hundred Seventy Ps: Thirty Nine only	3170.39
34	5	9.117.2 Providing and fixing factory made uPVC door frame made of uPVC extruded sections having an overall dimension as below (tolerance ± 1 mm), with wall thickness 2.0mm (± 0.2 mm), corners of the door frame to be jointed with galvanized brackets and stainless steel screws, joints mitred and plastic welded. The hinge side vertical of the frames reinforced by galvanized M.S. tube of size 19 x 19 mm and 1 mm (± 0.1 mm) wall thickness and 3 nos. stainless steel hinges fixed to the frame complete as per manufacturer's specification and direction of Engineer-in-charge Extruded section profile size 42x50mm	Metre	283.03	Rs Two Hundred Eighty three Ps: Three Only	1415.15

35	1.47	9.118.2 Providing and fixing to existing door frames mm thick factory made Polyvinyl Chloride (PVC) door shutter made of styles and rails of a uPVC hollow section of size 60x30 mm and wall thickness 2 mm (± 0.2 mm), with inbuilt decorative moulding edging on one side. The styles and rails mitred and joint at the corners by means of M.S. galvanised/plastic brackets of size 75x220 mm having wall thickness 1.0 mm and stainless steel screws. The styles of the shutter reinforced by inserting galvanised M.S. tube of size 25x20 mm and 1 mm (± 0.1 mm) wall thickness. The lock rail made up of 'H' section, a uPVC hollow section of size 100x30 mm and 2 mm (± 0.2 mm) wall thickness fixed to the shutter styles by means of plastic/galvanised M.S. 'U' cleats. The shutter frame filled with a uPVC multi-chambered single panel of size not less than 620 mm, having over all thickness of 20 mm and 1 mm (± 0.1 mm) wall thickness. The panels filled vertically and tie bar at two places by inserting horizontally 6 mm galvanised M.S. rod and fastened with nuts and washers, complete as per manufacturer's specification and direction of Engineer-in-charge.	sqm	2686.88	Rs : Two Thousand Six Hundred Eighty Six Ps: Eighty Eight Only	3949.71
36	1	50.17.1.4 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-charge.	Each	757.76	Rs : Seven Hundred fifty Seven Ps: Seventy Six Only	757.76
37	1	18.51.1 Providing and fixing C.P. brass long body bib cock of approved quality conforming to IS standards and weighing not less than 690 gms. 15 mm nominal bore	Each	679.37	Rs Six Hundred seventy Nine Ps: Thirty Seven Only	679.37
38	15	50.18.7.3.2 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 25 mm dia 10Kg/ cm ² - Internal work- Exposed on wall	Metre	199.88	Rs One Hundred Ninty Nine Ps: : Eighty Eight Only	2998.2

39	5	50.18.9.22.3 Providing and fixing PVC moulded fittings/ accessories for Rigid PVC pipes, including jointing with PVC solvent cement-110 mm dia Door Elbow	Each	126.90	Rs One Hundred Twenty six Ps: ninety Only	634.5
40	2	50.18.9.22.4 Providing and fixing PVC moulded fittings/ accessories for Rigid PVC pipes, including jointing with PVC solvent cement-110 mm dia Bend	Each	155.95	Rs :One Hundred fifty Five Ps: Ninty Five Only	311.90
41	2	50.18.9.22.7 Providing and fixing PVC moulded fittings/ accessories for Rigid PVC pipes, including jointing with PVC solvent cement - 110x110x75 mm dia Door Tee	Each	175.28	Rs One Hundred Seventy Five Ps: Twenty Eight Only	350.56
42	10	14.1.1 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)	sqm	365.24	Rs Three Hundred Sixty Five Ps: Twenty Four Only	3652.40
43	183.003	14.53.1 Wall painting with plastic emulsion paint of approved brand and manufacture to give an even shade: One or more coats on old work	sqm	76.21	Rs Seventy six Ps:Twenty One Only	13946.66
44	6.906	14.54.1 Painting with synthetic enamel paint of approved brand and manufacture of required colour to an give even shade: One or more coats on old work	sqm	70.76	Rs Seventy Ps:Seventy Six Only	488.67
		TOTAL				359436

PAC 3,59,436/- (Rs. Three Lakh Fifty nine Thousand Four Hundred and Thirty six Only)

I/we agreed to the execute the work

.....% above the estimate rate

.....% below the estimate rate

at the estimate rate

sd/-

CONTRACTOR

UNIVERSITY ENGINEER