

UNIVERSITY OF KERALA							
ENGINEERING UNIT, KARIAVATTOM							
TENDER SCHEDULE FOR IMPLEMENTATION OF THE SPECIFIC PROJECT-ADVANCED CENTRE FOR TISSUE ENGINEERING IN THE DEPARTMENT OF BIOCHEMISTRY AT KARIAVATTOM CAMPUS.							
SI No	Qty	Unit	Description of Item	unit	Rate	Rate in words	Amount
1	7.8	M ³	Solid block masonry using pre cast solid blocks (Factory made) of size 40x20x15cm or nearest available size confirming to IS 2185 part I of 1979 for foundation and plinth with thickness 15 cm in : CM 1:6 (1 cement : 6 coarse sand) etc complete	M ³	5307.88	Rupees Five thousand three hundred and seven Paise eighty eight only	41,401.46
2	20	M ²	12 mm cement plaster of mix 1:4 (1 cement : 4 coarse sand)	M ²	252.71	Rupees Two hundred and fifty two and Paise seventy one only	5,054.20
3	35	kg	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 Anodised aluminium (anodised transparent or dyed to required shade according to IS: 1868, Minimum anodic coating of gradeAC 15)	kg	511.14	Rupees five hundred and eleven Paise fourteen only	17,889.90

4	15	M 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 decorative lamination on both sides	M ²	1598.33	Rupees One thousand five hundred and ninety eight and Paise thirty three only	23,974.95
5	3	M 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 glass panes of 5.50mm thickness	M ²	1546.19	Rupees One thousand five hundred and forty six and Paise nineteen only	4,638.57
6	2	E	Providing and fixing aluminium extruded section body tubular type universal hydraulic door closer (having brand logo with ISI, IS : 3564, embossed on the body, door weight upto 36 kg to 80 kg and door width from 701 mm to 1000 mm), with double speed adjustment with necessary accessories and screws etc. complete.	E	1530.69	Rupees One thousand five hundred and thirty and Paise sixty nine only	3,061.38
7	2	E	21.13 Providing and fixing 100mm brass locks (best make of approved quality) for aluminium doors including necessary cutting and making good etc. complete.	E	614.03	Rupees Six hundred and fourteen and Paise three only	1,228.06

8	17	M 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 37mm, at 1200 mm centre to centre, one flange fixed to the ceiling with dash fastener 12.5 mm dia x 50mm long with 6mm 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 25mm 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 3.5 x 25 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 12.5 mm thick tapered edge gypsum plain board conforming to IS: 2095- Part I	M ²	1330.40	Rupees One thousand three hundred and thirty and Paise forty only	22,616.80
9	53	M ²	Painting with acid proof paint of approved brand and manufacture of required colour to give an even shade : One or more coats on old work	M ²	73.55	Rupees Seventy three and Paise fifty five only	3,898.15
10	19.5	M ²	Providing and laying Vitrified tiles in different sizes (thickness to be specified by manufacturer), with water absorption less than 0.08 % and conforming to I.S. 15622, of approved make, in all colours & shade, in skirting, riser of steps, over 12 mm thick bed of cement mortar 1:3 (1 cement: 3 coarse sand), including grouting the joint with white cement & matching pigments etc. complete. Size of Tile 600x600 mm	M ²	2075.97	Rupees Two thousand and sventy five and Paise Ninety seven only	40,481.42

11	1	E	Providing and fixing white vitreous china laboratory sink with C.I. brackets, C.P. brass chain with rubber plug, 40 mm C.P brass waste and 40mm C.P. brass trap with necessary C.P. brass unions complete, including painting of fittings and brackets, cutting and making good the wall wherever required : Size 450x300x150 mm	E	3437.80	Rupees Three thousand four hundred and thirty seven and Paise eighty only	3,437.80
12	1	E	Providing and fixing C.P. brass bib cock of approved quality conforming to IS:8931 : 15 mm nominal bore	E	673.95	Rupees Six hundred and seventy three and Paise ninety five only	673.95
13	20	M	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 12 Kg/ cm ² - External work-exposed on wall	M	219.76	Rupees Two hundred and nineteen and Paise seventy six only	4,395.20
14	0.5	M ³	Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level :1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	M ³	8398.18	Rupees Eight thousand three hundred and ninety eight and Paise eighteen only	4,199.09
15	3.9	M ²	Centering and shuttering including strutting, propping etc. and removal of form for :Lintels, beams, plinth beams, girders, bressumers and cantilevers	M ²	487.16	Rupees Four hundred and eighty seven and Paise sixteen only	1,899.92
16	75	kg	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete above plinth level. Thermo-Mechanically Treated bars	kg	99.88	Rupees Ninety nine and Paise eighty eight only	7,491.00

17	2.4	M ²	Providing and fixing 18 mm thick gang saw cut, mirror polished, premoulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills , facias and similar locations of required size, approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement : 4 coarse sand), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels.Granite of any colour and shade Area of slab over 0.50 sqm	M ²	5730.98	Rupees Five thousand seven hundred and thirty and Paise ninety eight only	13,754.35
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18	4	m	Providing edge moulding to 18 mm thick marble stone counters, Vanities etc., including machine polishing to edge to give high gloss finish etc. complete as per design approved by Engineer-in-Charge.Granite work	m	338.15	Rupees Three hundred and thirty eight and Paise fifteen only	1,352.60
19			Labour engaged for refixing the cabins				
	1	E	Carpenter	E	741.05	Rupees Seven hundred and forty one and Paise five only	741.05
	1	E	Coolie	E	560.47	Rupees Five hundred and sixty and Paise fourty seven only	560.47

20	6	M ²	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	M ²	1932.50	Rupees One thousand nine hundred and thirty two and Paise fifty only	11,595.00
TOTAL							Rs 214,345.33

PAC Rs.2,14,345/- (Rupees Two Lakh fourteen thousand three hundred and forty five only)

I/We agreed to execute the work.

1.% below the estimate rate.

2. % above the estimate rate.

3. At the estimate rate.

Sd/-

CONTRACTOR

UNIVERSITY ENGINEER