

**PONDICHERRY UNIVERSITY  
ENGINEERING WING**

<b>Name of the work: Construction of Chiller room at Physics Department.</b>					
<b>Abstract Estimate</b>					
<b>S.No</b>	<b>Description</b>	<b>Qty</b>	<b>Rate</b>	<b>Unit</b>	<b>Amount</b>
<b>1</b>	<b>Code No: 2.8.1</b>				
	Earth work in excavation by mechanical means (Hydraulic excavator)/manual means in foundation trenches or drains (not exceeding 1.5m in width or 10 sqm on plan) including dressing of sides and ramming of bottoms , lift upto 1.5m, including getting out the excavated soil and disposal of surplus excavated soil as directed , within a lead of 50m -All kinds of	8.50		Cum	
<b>2</b>	<b>Code No: 2.27</b>				
	Supplying and filling in plinth with sand under floors including, watering, ramming consolidating and dressing complete.	2.00		Cum	
<b>3</b>	<b>Code No: 2.25</b>				
	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead upto 50m and lift upto 1.5m.	6.00		Cum	
<b>4</b>	<b>Code No: 4.1.10</b>				
	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering.- All work upto plinth level - 1:5:10 (1 cement:5coarse sand : 10 graded stone aggregate 40mm nominal size)	5.00		Cum	
<b>5</b>	<b>Code No: 4.11</b>				
	Providing and laying damp - proof course 50mm thick with cement concrete 1:2:4 (1 cement : 2 coarse sand :4 graded stone aggregate 20mm nominal size).	2.00		Sqm	
<b>6</b>	<b>Code No: 4.13</b>				
	Applying a coat of residual petroleum bitumen of penetration 80/100 of approved quality using 1.7kg per square metre on damp proof course after cleaning the surface with brushes and finally with a piece of cloth lightly soaked in kerosene oil.	2.00		Sqm	

<b>7</b>	<b>Code No: 5.3</b>				
	Reinforced cement concrete work in beams , suspended floors, roofs having slope upto 15 degree landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral stair cases upto floor five level excluding the cost of centering, shuttering, finishing and reinforcement with 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20mm nominal size).	3.00		Cum	
<b>8</b>	<b>Code No: 5.9.5</b>				
	Centring and shuttering including strutting, propping etc. and removal of form for: lintels, beams, plinth beams, girders, bressumers and cantilevers.- Using steel sheet with M.S.frames	14.00		Sqm	
<b>9</b>	<b>Code No: 5.9.3</b>				
	Centring and shuttering including strutting, propping etc. and removal of form for : suspended floors, roofs, landings , balconies and access platform - Using steel sheet with M.S.frames	15.00		Sqm	
<b>10</b>	<b>Code No: 5.22.7</b>				
	Reinforcement for R.C.C work including straightening , cutting , bending , placing in position and binding all complete - Thermo - Mechanically treated bars(ISI BRAND OF APPROVED MAKE) including placing the M30 grade Athees make cover block @ 60cm centre to centre	330.00		Kg	
<b>11</b>	<b>Code No: 6.2.2</b>				
	Brick work with modular bricks of class designation 35 in foundation and plinth in cement mortar 1:6 (1 cement: 6 coarse sand)	5.50		Cum	
<b>12</b>	<b>Code No: 6.3.2</b>				
	Brick work with machine moulded perforated bricks of class designation 35 conforming to IS:2222-1991 in superstructure above plinth level upto floor five level in cement mortar 1:6 (1 cement : 6 coarse sand) with modular bricks.	6.50		Cum	
<b>13</b>	<b>Code No: 15.7.4</b>				
	Demolishing brick work, manually / by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead - In cement mortar.	1.00		Cum	
<b>14</b>	<b>Code No: 9.1.2P</b>				

	Providing wood work in frames of doors, windows, clerestory windows and other frames, wrought framed and fixed in position - Padak wood	0.19		Cum	
<b>15</b>	<b>Code No: 9.5.1.1P</b>				
	Providing and fixing panelled or panelled and glazed shutters for doors, windows and clerestory windows including ISI marked black enamelled M.S butt hinges with necessary screws excluding panelling which will be paid for separately. - Padak wood teak wood - 35mm thick shutters.	3.50		Sqm	
<b>16</b>	<b>Code No: 9.7.5.2</b>				
	Providing and fixing panelling or panelling and glazing in panelled or panelled and glazed shutters for doors, windows and clerestory windows (area of opening for panel inserts excluding portion inside grooves or rebates to be measured). Panelling for panelled or panelled and glazed shutters 25mm to 40mm thick: Particle board 12mm thick - Veneered flat pressed three layer or graded wood particle board with commercial veneering on both sides conforming to IS:3097, grade 1	3.50		Sqm	
<b>17</b>	<b>Code No: 9.9.1.2P</b>				
	Providing and fixing glazed shutters for doors, windows and clerestory windows using 4mm thick float glass panes including black enamelled ISI marked MS butt hinges with necessary screws. - Padak teak wood -30mm thick	7.00		Sqm	
<b>18</b>	<b>Code No: 9.48.2</b>				
	Providing and fixing M.S.grills of required pattern in frames of windows etc. with M.S. flats, square or round bars etc .all complte - fixed to openings / wooden frames with rawl plugs screws etc	200.00		Kg	
<b>19</b>	<b>Code No: 9.53</b>				
	Providing 40x5 mm flat iron hold fast 40cm long including fixing to frame with 10mm diameter bolts, nuts and wooden plugs and embedding in cement concrete block 30x10x15cm 1:3:6 mix (1 cement : 3 coarse sand : 6 graded stone aggregate 20mm nominal size)	14.00		Each	
<b>20</b>	<b>Code No: 9.96.1</b>				

	Providing and fixing aluminium sliding door bolts ISI marked anodised (anodic coating not less than grade AC 10 as per IS:1868) transparent or dyed to required colour or shade with nuts and screws etc.complete:- 300x16mm	1.00		Each	
<b>21</b>	<b>Code No: 9.97.1</b>				
	Providing and fixing aluminium tower bolts ISI marked anodised (anodic coating not less than grade AC 10 as per IS:1868) transparent or dyed to required colour or shade with necessary screws etc.complete : - 300x10mm	2.00		Each	
<b>22</b>	<b>Code No: 9.97.4</b>				
	Providing and fixing aluminium tower bolts ISI marked anodised (anodic coating not less than grade AC 10 as per IS:1868) transparent or dyed to required colour or shade with necessary screws etc.complete : - 150x10mm	12.00		Each	
<b>23</b>	<b>Code No: 9.100.1</b>				
	Providing and fixing aluminium handles ISI marked anodised (anodic coating not less than grade as per 10 as per IS:1868) transparent or dyed to required colour or shade with necessary screws etc.complete :- 125mm	2.00		Each	
<b>24</b>	<b>Code No: 9.100.2</b>				
	Providing and fixing aluminium handles ISI marked anodised (anodic coating not less than grade as per 10 as per IS:1868) transparent or dyed to required colour or shade with necessary screws etc.complete :-100mm	12.00		Each	
<b>25</b>	<b>Code No: 9.101.1</b>				
	Providing and fixing aluminium hanging floor door stopper ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour and shade with necessary screws etc. complete - Twin rubber stopper	1.00		Each	
<b>26</b>	<b>Code No: 9.102</b>				
	Providing and fixing aluminium casement stays ISI marked anodised (anodic coating not less than grade AC 10 as per IS : 1868) transparent or dyed to required colour and shade with necessary screws etc.complete	6.00		Each	
<b>27</b>	<b>Code No: 11.3.1</b>				

	Cement concrete flooring 1:2:4 (1 cement :2 coarse sand : 4 graded stone aggregate) finished with a floating coat of neat cement including cement slurry, but excluding the cost of nosing of steps etc. complete. 40mm thick with 20mm nominal size stone aggregate.	12.00		Sqm	
<b>28</b>	<b>Code No: 12.20</b>				
	Providing and laying pressed clay tiles (as per approved pattern 20mm nominal thickness and of approved size) on roofs jointed with cement mortar 1:4 (1 cement : 4 coarse sand) mixed with 2% intergral water proofing compound laid over a bed of 20mm thick cement mortar 1:4 (1 cement : 4 coarse sand) and finished neat complete.	15.00		Sqm	
<b>29</b>	<b>Code No: 13.16.1</b>				
	6mm cement plaster of mix 1:3 (1 cement : 3 fine sand).	12.00			
<b>30</b>	<b>Code No: 13.2.1</b>				
	15 mm cement plaster on rough side of single or half brick wall of mix - cement mortar 1:4 (1 cement : 4 fine sand)	41.00		Sqm	
<b>31</b>	<b>Code No: 13.3.1</b>				
	20mm cement plaster of mix 1:4 (1cement : 4 fine sand)	53.00		Sqm	
<b>32</b>	<b>Code No: 13.37.1</b>				
	White washing with lime to give on even shade - New work (three or more coats).	12.00		Sqm	
<b>33</b>	<b>Code No: 13.47.1</b>				
	Finishing walls with Premium Acrylic Smooth exterior paint with Silicone additives of required shade - New work (Two or more coats applied @ 1.43 ltr / 10 sqm over and including base coat of water proofing cement paint applied @ 2.20 kg/10 sqm).	53.00		Sqm	
<b>34</b>	<b>Code No: 13.42.1</b>				
	Distempering with 1st quality acrylic washable distemper (ready made) of approved manufacturer and of required shade and colour complete, as per manufacturer specification - Two or more coats on new work.	41.00		Sqm	
<b>35</b>	<b>Code No: 13.50.1</b>				
	Applying priming coat - with ready mixed pink or grey primer of approved brand and manufacture on wood work	15.00		Sqm	

	(hard and soft wood).				
<b>36</b>	<b>Code No: 13.61.1</b>				
	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade - Two or more coats on new work.	15.00		Sqm	
<b>37</b>	<b>Code No: 12.41.2</b>				
	Providing and fixing on wall face unplasticised rigid PVC rain water pipes conforming to IS : 13592 type A including jointing with seal ring conforming to IS : 5382 leaving 10mm gap for thermal expansion, (i) single socketed pipes. 110mm diameter.	8.00		Rmt	
<b>38</b>	<b>Code No: 12.42.4.2</b>				
	Providing and fixing on wall face unplasticised - PVC moulded fittings / accessories for unplasticised rigid PVC rain water pipes conforming to IS : 13592 type A including jointing with seal ring conforming to IS : 5382 leaving 10mm gap for thermal expansion. Single Tee with out door 110X110X110mm.	2.00		Sqm	
<b>39</b>	<b>Code No: 12.42.6.2</b>				
	Providing and fixing on wall face unplasticised- PVC moulded fittings / accessories for unplasticised rigid PVC rain water pipes conforming to IS : 13592 type A including jointing with seal ring conforming to IS : 5382 leaving 10mm gap for thermal expansion. Shoe (plain)110mm shoe.	2.00		Sqm	
				<b>Total</b>	

I hereby abide the rules and regulations stipulated in the CPWD form no. 6 & 8.

**Contractor**

**Superintending Engineer**