

Buildings (C&M) Division			P.W.D. SCHEDULE-'A'	Thoothukudi			
Name of work: Construction of class rooms at Sri Ramakrishna Chidambareswarar Higher secondary school at Udankudi in Thoothukudi District							
Sl. No	Approximate Quantity		Description of work & T.N.B.P. & N.B.C. No.	Rate in Figures and words		Unit for calculation	Amount
1	200.00	Cum	Earth work excavation for foundation in hard stiff clay, stiff black cotton, hard earth, shale, murum, gravel stony earth and earth mixed with small size boulders and hard gravelly soil and to full depth as may be directed except in rock requiring blasting but including shoring, strutting and baling out water sherever necessary and refilling the sides of foundation with excavated earth in layers of not more than 15cm thick, well rammed and consolidated and depositing the surplus earth within the compound in places as shown by the departmental officers with an initial lead of 10m and an initial lift of 2m clearing, levelling the site etc. complete complying with standard specification. TNBP No.23 & 24	Rs.	172.30	1M ³ (One cubic metre)	34460
	(Two hundred cubic metre only)			(Rupees One hundred and seventy two and paise thirty only)			
2	11.60	Cum	Cement Concrete 1:5:10 (One Cement, Five crushed stone sand (M.sand) and Ten hard broken stone jelly) using 40 mm gauge hard broken granite stone jelly for Foundation including dewatering wherever necessary and laid in layers of not more than 15 cm thick well rammed, consolidated and curing etc. complete complying with standard specification. TNBP No.30 V, VI (S5) VII & 13	Rs.	4816.30	1M ³ (One cubic metre)	55869
	(Eleven point six zero cubic metres only)			(Rupees Four thousand eight hundred and sixteen and paise thirty only)			
3	38.75	Cum	Refilling the basement with excavated earth other than sand with an initial lead of 100metres and depositing the earth as shown by the departmental officers in layers of not more than 15cm thick rammed, watered and well consolidated etc., complying with standard specification.	Rs.	33.60	1M ³ (One cubic metre)	1302
	(Thirty eight point seven five cubic meter only)			(Rupees Thirty three and paise sixty only)			
4	45.50	Cum	Supplying and filling in basement with excavated and conveyed earth with a lead of 3 KMMR including loading into lorry conveying and unloading at site and laid in layers of not more than 15cm thick well rammed watered and well consolidated etc., complete, complying with standard specification.	Rs.	163.60	1M ³ (One cubic metre)	7444
	(Forty five point five zero cubic metres only)			(Rupees One hundred and sixty three and paise sixty only)			
5	19.50	Cum	Supplying and filling in foundation, basement, etc with stone dust in layers of not more than 15 cm thick well watered, rammed and consolidated etc. complete complying with standard specification and as directed by the departmental officers..	Rs.	561.75	1M ³ (One cubic metre)	10954
	(Nineteen point five zero cubic meter only)			(Rupees Five hundred and sixty one and paise seventy five only)			

Sl. No	Approximate Quantity		Description of work & T.N.B.P. & N.B.C. No.	Rate in Figures and words		Unit for calculation	Amount
6	18.00	Sqm.	Damp proof course with Cement Mortar 1:4 (One Cement and Four M.sand) 12mm thick mixed with best approved quality water proofing compound conforming to Indian Standard specification as specified by the departmental officers at 2% by weight of cement used and finishing, curing etc. complete complying with standard specification.	Rs.	232.05	1M ² (One Square metre)	4177
	(Eighteen square metres only)			(Rupees Two hundred and thirty two and paise five only)			
7	106.50	Sqm.	Supplying and erecting steel centering including necessary supports for plane surfaces for reinforced cement concrete works such as column footings, plinth beam, grade beam, stair case steps, Pedestal bed block covers etc. which require only nominal strutting using mild steel sheets of size 90 cm x 60 cm and 10 BG stiffened with mild steel angles of size 25 mm x 25 mm x 3 mm for boarding, laid over silver oak joints of size 10 cm x 6.50 cm spaced at about 75 cm centre to centre or at suitable intervals etc. complete complying with standard specification. (payment for centering shall be given after the concrete is laid) TNBP No.30(S) 86 86 A V, VI (S3) VII	Rs.	748.55	1M ² (One square metre)	79721
	(One hundred and six point five zero square metre only)			(Rupees Seven hundred and forty eight and paise fifty five only)			
8			Supplying and erecting centering for sides and soffits including necessary supports and strutting upto 3.29 M height for plane surfaces as detailed below in all floors with all cross bracings using Mild Steel sheets of size 90 x 60 cm and 10 BG stiffened with welded Mild Steel angle of size 25mm x 25mm x 3 mm for boarding laid over silver oak joists of size 10cm x 6.50 cm spaced at about 90 cm centre to centre and supported by casurina props of 10cm to 13 cm dia spaced at not more than 75 cm centre to centre etc. complete complying with the standard specification. (Payment for centering shall be given after the concrete is laid). TNBP No.30(S) 86 86 A V, VI (S3) VII				
a	231.00	Sqm.	For plane surfaces such as RCC floor slab, roof slab, beams, lintels, bed blocks landing slab, waist slab,protico slabs and beams etc.	Rs.	841.80	1M ² (One square metre)	194456
	(Two hundred and thirty one square metre only)			(Rupees Eight hundred and forty one and paise eighty only)			
b.	175.00	Sqm.	Centering for columns, sunshade,sill slab etc.	Rs.	1010.15	1M ² (One square metre)	176776
	(One hundred and seventy five square metre only)			(Rupees One thousand and ten and paise fifteen only)			

Sl. No	Approximate Quantity		Description of work & T.N.B.P. & N.B.C. No.	Rate in Figures and words		Unit for calculation	Amount
9			Providing and laying in position, standardised concrete Mix M30 grade in accordance with IS 456-2000 using 20mm and down graded hard broken granite stone jelly for all RCC items of work with minimum cement content of 400 Kg/m3 and maximum water cement ratio of 0.45 including admixyure (Plasticiser / super plasticiser) in recommended proportions as per : 9103 to accelerate retard setting of concrete, improve workability without impairing strength and durability with about (5Cum) 7730kg. og 0mm machine crushed stone jelly and with about (3.3cu.m.) 5156kg. of 10-12 mm machine crushed stone jelly with about 4.79Cu.m.)7670kg. of sand, but excluding cost of reinforcement grill and fabricating charges centering and shuttering and also including laying , vabricating with mechical vibrators, finishing curing etc., and providing fixtures like fan clamps in the RCC floor/ roof slab where ever necessary without claiming extra ,etc., complete.complying with standarde specification and as directed by departmental officers.The coarse and fine aggregates to be used should complying with the requirements of IS Standards. (No separate payment will be made by the department for excess usage of materials) .TNBP.No.30				
a	41.50	Cum.	For Foundation and basement	Rs.	8161.85	1M ³ (One cubic metre)	338717
	(Forty one point five zero cubic metre only)			(Rupees Eight thousand one hundred and sixty one and paise eighty five only)			
b	36.75	Cum.	In Ground floor	Rs.	8265.15	1M ³ (One cubic metre)	303744
	(Thirty six point seven five cubic metre only)			(Rupees Eight thousand two hundred and sixty five and paise fifteen only)			
10	73.70	Qtl	Supplying, fabricating and placing in position M.S. or R.T.S. reinforcement grill for RCC works as per the design given including cost of steel and black binding wire etc., complete complying with standard specification. (The contractor will have to make his own arrangements for the supply of M.S. plain rods / RTS rods and black binding wire) TNBP No.86,86-A & 86-B.	Rs.	7839.80	1 Qtl (One Quintal only)	577793
	(Seventy three point seven zero quintal only)			(Rupees Seven thousand eight hundred and thirty nine and paise eighty only)			
11			Brick work in cement mortar 1:6(One cement and six crushed stone sand) using country bricks of size 8 ¾"x 4 ¼" x 2 ¾" for the following items including curing etc., complete complying with standard specification. TNBP No.31 & similar to 31C V, VI (S5) VII				

Sl. No	Approximate Quantity		Description of work & T.N.B.P. & N.B.C. No.	Rate in Figures and words		Unit for calculation	Amount
a	20.00	Cum.	For foundation and basement	Rs.	5405.45	1M ³ (One cubic metre)	108109
	(Twenty cubic metre only)				(Rupees Five thousand four hundred and five and paise forty five only)		
b	39.80	Cum.	In Ground floor	Rs.	5473.45	1M ³ (One cubic metre)	217843
	(Thirty nine point eight zero cubic metre only)				(Rupees Five thousand four hundred and seventy three and paise forty five only)		
12			Brick partition walls of 10.80cm thickness using best quality country bricks of size 8-3/4" x 4-1/4" x 2-3/4" in Cement Mortar 1:3 (One Cement and Three crushed stone sand) using hoop iron reinforcement if found necessary including curing etc. complete and as directed by the departmental officers. (Hoop iron reinforcement will be measured and paid for separately)				
a	5.00	Sqm.	In Ground floor	Rs.	715.85	1M ² (One Square metre)	3579
	(Five square metre only)				(Rupees Seven hundred and fifteen and paise eighty five only)		
13	12.90	Cum	Cement Concrete 1:5:10 (One Cement, Five crushed stone sand (M.sand) and Ten hard broken stone jelly) using 40 mm gauge hard broken granite stone jelly for Flooring including dewatering wherever necessary and laid in layers of not more than 15 cm thick well rammed, consolidated and curing etc. complete complying with standard specification. TNBP No.30 V, VI (S5) VII & 13	Rs.	4816.30	1M ³ (One cubic metre)	62130
	(Twelve point nine zero cubic meter only)				(Rupees Four thousand eight hundred and sixteen and paise thirty only)		
14	132.50	Sqm.	Paving the floor with best approved quality fine polished Rajasthan Kotta Stone slab of size 600 x 600 x 20mm with combination of Marble slabs of 20mm thick machine cut edges at the proportion of 9:1 laid over cement mortar 1:3 (One cement three crushed stone sand) fixing the slab in true right angles with minimum possible width of joints and pointing the joints with cement mortar 1:3 and polishing with floor to a high degree of finish and curing etc., complete complying with standard specification.	Rs.	1212.60	1M ² (One Square metre)	160670
	(One hundred and thirty two point five zero square metre only)				(Rupees One thousand two hundred and twelve and paise sixty only)		

Sl. No	Approximate Quantity		Description of work & T.N.B.P. & N.B.C. No.	Rate in Figures and words		Unit for calculation	Amount
15	7.60	Sqm.	Paving the floor with cement based hydraulically pressed anti-skid flooring tiles in all floors with pattern design of approved quality and colour set in cement mortar 1:3 (one cement and three crushed stone sand) 20mm thick and pointing with white cement mixed with colouring pigments to full depth of tiles at a rate of 0.40kg/m2 perfectly and neat finishing the joints and curing. The rate shall be inclusive of cost of tiles, taxes, incidental charges, transportation charges and labour charges for fixing the tiles, neat finishing the joints, curing, as directed by the departmental officers etc., complete complying with standard specification. The tiles should be got approved by the departmental officers before use on work.	Rs.	1227.95	1M ² (One Square metre)	9332
	(Seven point six zero square metres only)			(Rupees One thousand two hundred and twenty seven and paise ninety five only)			
16	11.75	Cum	Weathering course in brick jelly lime concrete using broken brick jelly of size 20mm uniform gauge in pure slaked lime (no sand to be used) to the proportion of brick jelly to lime being 32:12.5 by volume and laid over the RCC roof slab in a single layer of required slope and finished by beating the concrete with wooden beaters of approved pattern, keeping the surface constantly wet by sprinkling lime jaggery water, etc., complete as per standard specification and as directed by the departmental officers.	Rs.	3596.50	1M ³ (One cubic metre)	42259
	(Eleven point seven five cubic metre only)			(Rupees Three thousand five hundred and ninety six and paise fifty only)			
17	149.30	Sqm.	Finishing the top of roof with one course of approved first quality Machine Pressed Tiles of size 230mm x 230mm x 20mm thick laid in Cement Mortar 1:3 (one cement and three crushed stone sand) 12mm thick mixed with water proofing compound conforming to Indian standard as approved by the departmental officers at 2% by weight of cement used and the joints pointed neatly to full depth of tiles with the same mortar mixed with the water proofing compound and red oxide etc. complete complying with standard specification. TNBP No.44 H V, VI (S5A) VII, 3	Rs.	1084.25	1M ² (One Square metre)	161879
	(One hundred and forty nine point three zero square metre only)			(Rupees One thousand and eighty four and paise twenty five only)			
18			Supplying and fixing in position best approved of BIS quality PVC rain water down fall pipes having a pressure of 4 kg. / sq.cm including cost of necessary PVC shoe, PVC bend, cast iron gratings of required diameter and special clamps, brass screws, nails, etc., and fixing of cast iron gratings at junction of parapet and the RCC roof slab including finishing neatly etc., complete. The rate shall be inclusive of cast of removable cast iron grating. The PVC pipe shall be fixed in wall with special type of "U" clamp at the centre of the pipe line in addition to those for more than 3.0 metre pipe length, etc., complete complying with standard specification.				
a	12.00	Rm.	110mm dia PVC down fall pipe	Rs.	526.90	1RM (One running metre)	6323
	(Twelve running metre)			(Rupees Five hundred and twenty six and paise ninety only)			

Sl. No	Approximate Quantity		Description of work & T.N.B.P. & N.B.C. No.	Rate in Figures and words		Unit for calculation	Amount
19	6.50	Sqm.	Supplying and fixing fine polished cuddapah slab of size of 20mm-30mm thickness for shelves, cup-board arrangements including laying to correct alignment with necessary cement mortar and black oxide etc, complete complying with standard specification and as direct.	Rs.	438.55	1M ² (One square metre)	2851
	(Six point five zero square meter only)			(Rupees Four hundred and thirty eight and paise fifty five only)			
20	212.00	Sqm.	Special ceiling plastering and finishing the exposed surface of RCC items of work such as slabs, beams, sunshades, facia, canopy slab, staircase waist slab, landing slab etc. with Cement Mortar 1:3 (One Cement and Three P.sand) 10 mm thick including hacking the surfaces and providing Cement Mortar nosing, beading for sunshades, staircases, steps, landing slabs and finishing, curing, etc., in all floors complying with standard specification as directed by the departmental officers. TNBP No. 56 & 57	Rs.	253.20	1M ² (One Square metre)	53678
	(Two hundred and twelve square metre only)			(Rupees Two hundred and fifty three and paise twenty only)			
21	601.00	Sqm.	Plastering with Cement Mortar 1:5 (One cement and Five P. sand) , 12mm thick in all floors including finishing neatly curing etc. complete complying with standard specification.	Rs.	221.90	1M ² (One square metre)	133362
	(Six hundred and one square meters only)			(Rupees Two hundred and twenty one and paise ninety only)			
22			Manufacturing supplying and fixing of steel door with the following specification MS angels of size 40x40x6mm are used for the outer frames and M.S. angles of size 35x35x6mm for the shutter frames stiffeners with 32 x 6mm M.S flat is provided at required intervals in the shutter frame. 18-gauge C.R. sheet laid as panel in the shutter and welded intact. M.S. flat 18x5mm is welded over the 32 x 6mm M.S. flat sandwitching the C.R. sheet in between additional stiffeners with 18x5mm M.S. flat is provided diagonally at the rear side of the shutter, 3nos. of hinges in case of single leaf and 6nos. of hinges in double leaves shutter to be provided 6nos. of holdfasts 120 mm in length made of angle section spliced at the ends are welded to the outer frames of the door. Tower bolts 2nos. one at the top and the other at the bottom are provided 1no. Aldrop is provided incase of double leaf door at lock rail section in the door in single leaf door, one more aldrop is provided in the inner lock rail section of the door One rotaing locking arrangements for the inner side of the door and additional provision for locking arrangements for lock is provided on the rear side of the door at an appropriate place. Incase of double leaf door M.S.Flat 32 x 3mm at 1.1Kg/m is provided on the one shutter t conceal the gap between the two shutters.at an appropriate place in the door. A tie bar is provided at the bottom of the frame to prevent twisting of frame during transportation and fixing. All members are given a coat of red oxide primer as directed by the departmental officers. The rate includes cost of all materials, labour charges, transportation to site of work, loading, un loading and all other incidental charges etc., complete.				
a	7.56	Sqm.	Double leaf	Rs.	4089.40	1M ² (One square metre)	30916
	(Seven point five six square metre only)			(Rupees Four thousand and eighty nine and paise forty only)			

Sl. No	Approximate Quantity		Description of work & T.N.B.P. & N.B.C. No.	Rate in Figures and words		Unit for calculation	Amount
23			Fabricating, Supplying and fixing in position of steel sheeted windows with the following specifications. Outer frames of windows made of 'Z' section F7D of size 33 x 25 x 3mm at 1.419 kg/m and mullion 'J' section (F4B) of size 46x25x3mm at 2.28kg/m and shutter section of made of F7D of 33x25x3mm at 1.419 kg/m as specified in IS 7452/1990. Each openable shutter should not exceed a width of 600mm to enable separate operations and easy maintenance. The panel of the shutters to be covered with 18 gauge cold rolled sheet of superior quality and welded intact with shutter frames. Horizontal stiffeners using 18x5mm MS Flat at 0.70kg/m at 3 Nos. for each shutter and additional diagonal stiffeners of the same MS flats at all the four corners of each shutters to the suitable length welded to the shutters, for holding the CR Sheets in position firmly. 2 numbers of sturdy hinges and one number of handle-cum-latch of special type made with 18x5mm MS flats are rivetted to the shutters at an appropriate height in window. suitable opening is left for its easy operation. a stopper square rod for handle is provided in the mullion section at suitable place to catch the window handle. each window shutter having an adjustable stay made out of 18 x 5mm at 0.70 kg/ m MS flat of length 220mm with three adjustable position. A matching peg is provided in the outer frame of the window at				
a	14.04	Sqm.	Four leaves	Rs.	4101.60	1M ² (One square metre)	57586
	(Fourteen point zero four square metre only)				(Rupees Four thousand one hundred and one and paise sixty only)		
b	5.85	Sqm.	Three leaves	Rs.	4014.50	1M ² (One square metre)	23485
	(Five point eight five square metre only)				(Rupees Four thousand and fourteen and paise fifty only)		
24	448.00	Sqm.	White washing three coats with freshly burnt white shell lime in all floors including cost of lime, blue powder, fevicol type gum, brushes, scaffolding charges, etc., complete complying with standard specification and as directed by the departmental officers.	Rs.	39.30	1M ² (One square metre)	17606
	(Four hundred and forty eight square metre only)				(Rupees Thirty nine and paise thirty only)		

Sl. No	Approximate Quantity		Description of work & T.N.B.P. & N.B.C. No.	Rate in Figures and words		Unit for calculation	Amount
25	208.00	Sqm.	Painting two coats of newly plastered wall surface with ready mixed plastic Exterior emulsion paint of first class quality and of approved colour over a priming coat including thorough scrapping, clean removal of dirt, and including necessary plaster of paris putty, wherever required etc., complete complying with standard specification.(The make, quality and colour of paint should be got approved by the Executive Engineer before use on works.)	Rs.	213.30	1M ² (One square metre)	44366
	(Two hundred and eight square metre only)				(Rupees Two hundred and thirteen and paise thirty only)		
26	60.39	Sqm.	Painting New iron works such as steel doors, windows, ventilators, window bars, balustrades etc. with two coats of best approved first quality and colour of synthetic enamel paint over the existing red-oxide priming coat in all floors excluding cost of priming coat etc. complete complying with standard specification. (The make, quality and colour of paint should be got approved by the Executive Engineer before use on works.)	Rs.	126.20	1M ² (One square metre)	7621
	(Sixty point three nine square metres only)				(Rupees One hundred and twenty six and paise twenty only)		
27	10.55	Sqm.	Providing black board in two layers with first layer in C.M. 1:5(One cement and five crushed stone sand) 20mm thick and second layer in combination mortar 1:1:6 (One cement one lime and six crushed stone sand) 20mm thick and 50mm width including cost of one coat black oxide paint of approved quality etc., complete complying with standardised specification and as directed by departmental officers.	Rs.	901.70	1M ² (One Square metre)	9513
	(Ten point five five square metre only)				(Rupees Nine hundred and one and paise seventy only)		
			Basic value for work				2938521
			GST @ 12%				352623
			Value put to tender including GST.				3291144
			(Rupees Thirty two Lakhs ninety one thousand one hundred and forty four only)				
			(Twenty seven items only)				

Executive Engineer,PWD
Buildings (C&M) Division,
Thoothukudi .