## Office of the Chief Engineer LSGD

## construction of a Bio gas plant (50 kg/day) MODEL ESTIMATE

**Detailed Estimate** 

(Cost Index Applied for this estimate is 35.59%)

	Description No	L	В	D	CF	Quantity	Remark
	1 1 (A) INI	ET TANK (	circular size	e 60 cm dio	)		
1	2.8.1 Earth work in excavation by me trenches or drains (not exceeding ramming of bottoms, lift up to 1 excavated soil as directed, with	ng 1.5 m in w .5 m, includir	yidth or 10 s	sqm on plar ut the exca	n), including	dressing o	f sides and
	(52. L	1.	IN LET TAN	NK .			
	circular pit for foundation 0.785 (3.14/4*D*D*h )	1.250	1.25*.4			0.491	
	LSGD E	ngine	ering	Tota	al Quantity	0.491 cum	1
		_	To	tal Deducte	d Quantity	0.000 cum	1
		2		Net Tota	al Quantity	0.491 cum	1
		- 5	Say0.491 cui	m @ Rs 277	7.58 / cum	Rs 1	36.29
	Providing and laying in position of		ete of speci	fied grade e	excludina th	e cost of ce	
	shuttering - All work up to plinth nominal size)		1 cement : 4	4 coarse sa	_		•
	, ,			4 coarse sa	_		•
	nominal size)  circular pit for foundation 0.785	1.	IN LET TAN	4 coarse sa	_	ed stone ag	gregate 40
	nominal size)  circular pit for foundation 0.785	1.	1.250	4 coarse sa	nd: 8 grad	ed stone ag	gregate 40
	nominal size)  circular pit for foundation 0.785	1.	1.250	VIX. VIX. VIX. VIX. VIX. VIX. VIX. VIX.	nd: 8 grad	0.123 0.123 cum	gregate 40
	nominal size)  circular pit for foundation 0.785	1.250	1.250	4 coarse sa	nd: 8 grad  al Quantity d Quantity al Quantity	0.123 0.123 cum 0.000 cum 0.123 cum	gregate 40
3	nominal size)  circular pit for foundation 0.785	1.250 Sa Rough stoness to lines lev	1.250  To ay0.123 cum e dry packir rels, cost ar	A coarse sand	al Quantity d Quantity al Quantity 0.44 / cum	0.123 0.123 cum 0.000 cum 0.123 cum Rs 7	gregate 40

							1	
					Tota	al Quantity	0.312 cum	1
				To	tal Deducte	d Quantity	0.000 cum	1
			_		Net Tota	al Quantity	0.312 cum	1
			Sa	ıy0.312 cum	@ Rs 3388	3.97 / cum	Rs 10	57.36
4	7.1.1 Random rubble masor concrete 1:6:12 (1 cemelevel with:Cement mortal)	ent : 6 coar	se sand : 12	graded sto	•	•	• .	
	B a s e m e n t (3.14/4*D*D*h	0.785	1.150	1.150	0.450		0.468	
		541	SARA.		Tota	al Quantity	0.468 cum	1
	4.2	52 14		Tc	tal Deducte	d Quantity	0.000 cum	1
	45			5.680	Net Tota	al Quantity	0.468 cum	1
			Sa	y0.468 cum	@ Rs 6734	1.90 / cum	Rs 31	51.93
5	6.2.1 Brick work with common in:Cement mortar 1:4		•		lass design	ation 7.5 in	foundation	and plinth
	3.14*R*R*h - 3.14*r*r*h	3.14	0.375	0.375	0.300		0.133	
				Deduction				
	3.14*r*r*h	3.14	0.300	0.300	0.300		-0.084	
					Tota	al Quantity	0.133 cum	1
				To	tal Deducte	d Quantity	-0.084 cur	n
					Net Tota	al Quantity	0.049 cum	1
			Sa	ıy0.049 cum	@ Rs 6046	6.47 / cum	Rs 2	96.28
6	13.1.1 12 mm cement plaster of	of mix:1:4 (	1 cement : 4	fine sand)	I	ı	ı	
	Inner floor portion (3.14*r*r )	3.14	0.300	0.300			0.283	
	Inner wall (2*3.14*r*h	2*3.14	0.300	0.300			0.566	
	Outer wall (2*3.14*R*h)	2*3.14	0.400	0.300			0.754	
	Top face 3.14/4 ( D*D - d*d )	0.785	0.280	0.300			0.066	
				To	Tota	al Quantity	1.669 sqm	
				10	nai Deducte	u Quariiiy	0.000 Sq11	I

					Net Tota	al Quantity	1.669 sqn	n
			S	Say1.669 sq	m @ Rs 293	3.61 / sqm	Rs 4	90.04
7	13.33.1 Pointing on stone work	with cemen	t mortar 1:3	(1 cement	: 3 fine sand	d):Flush/ Ru	led pointing	
	(2*3.14*r*h = 2*3.14*0.575*0.40	2*3.14	0.575	0.400			1.445	
		~7	300		Tota	al Quantity	1.445 sqn	n
				To	otal Deducte	d Quantity	0.000 sqn	n
		10			Net Tota	al Quantity	1.445 sqn	n
	(	AII	S	Say1.445 sq	m @ Rs 314	1.08 / sqm	Rs 4	53.85
SI No	Description	No	L	В	D	CF	Quantity	Remark
	3.5	2 :	2 Lid with L	ocking fac	ility			
		Lump-S	um Total	135700		7	Rs 5	00.00
	SI No Desc	ription	No	già L	В	D	CF	Quantity
			2 / P \ DICS	STER (inne	r dia 2.90 m	nm)		
Remark 1	2.8.1 Earth work in excavare trenches or drains (no ramming of bottoms, lexcavated soil as directions)	tion by med ot exceeding ift up to 1.5	hanical me g 1.5 m in w s m, includir	ans (Hydra vidth or 10 s	sqm on plar out the exca	tor) /manuan), including	g dressing o	of sides ar
	Earth work in excava- trenches or drains (no ramming of bottoms, excavated soil as dire	tion by med ot exceeding lift up to 1.5 octed, within	hanical me g 1.5 m in w s m, includir	ans (Hydra vidth or 10 s	sqm on plar out the exca	tor) /manuan), including	g dressing o	of sides ar
	Earth work in excava- trenches or drains (no ramming of bottoms, excavated soil as dire	tion by med of exceeding ift up to 1.5 ected, within 0.875	hanical me g 1.5 m in w i m, includir a lead of 5	ans (Hydra vidth or 10 s ng getting o 50 m.All kin	sqm on plar out the exca ds of soil	tor) /manuan), including	dressing o	of sides ar
	Earth work in excaval trenches or drains (no ramming of bottoms, excavated soil as directly as a single of the excavated soil as directly as a single of the excavated soil as directly as a single of the excavated soil as directly as a single of the excavated soil as directly as a single of the excavated soil as directly as a single of the excavated soil as directly as a single of the excavated soil as directly as a single of the excavated soil as directly as a single of the excavated soil as directly as a single of the excavated soil as directly as a single of the excavated soil as directly as a single of the excavated soil as directly as a single of the excavated soil as directly as a single of the excavated soil as directly as a single of the excavated soil as directly as a single of the excavated soil as directly as a single of the excavated soil as directly as a single of the excavated soil as directly as a single of the excavated soil as directly as a single of the excavated soil as directly as a single of the excavated soil as directly as a single of the excavated soil as	tion by med of exceeding ift up to 1.5 ected, within 0.875 3.14	hanical me g 1.5 m in w i m, includir a lead of 5	ans (Hydra vidth or 10 s ng getting o 50 m.All kin 3.900	sqm on plar but the exca ds of soil 2.050	tor) /manuan), including	g dressing of and disposa 27.283	of sides a
	Earth work in excava- trenches or drains (not ramming of bottoms, excavated soil as dire  Above dome = 3.14/4*d*d*h  bellow dome = 3.14*h*h(3*R-h)  projection all round = 3.14*h(R*R - r*r) =3.14*0.20(2.30*2.30*2.30*2.30*2.30*2.30*2.30*2.30*	tion by med of exceeding ift up to 1.5 ected, within 0.875 3.14	hanical me g 1.5 m in w i m, includir a lead of 5 3.900 0.650	ans (Hydra vidth or 10 s ng getting o 50 m.All kin 3.900 0.650	sqm on plar but the exca ds of soil 2.050 5.350	tor) /manuan), including	g dressing of and disposal 27.283 7.098	f sides and of surpli
	Earth work in excava- trenches or drains (not ramming of bottoms, excavated soil as dire  Above dome = 3.14/4*d*d*h  bellow dome = 3.14*h*h(3*R-h)  projection all round = 3.14*h(R*R - r*r) =3.14*0.20(2.30*2.30*2.30*2.30*2.30*2.30*2.30*2.30*	tion by med of exceeding ift up to 1.5 ected, within 0.875 3.14	hanical me g 1.5 m in w i m, includir a lead of 5 3.900 0.650	ans (Hydra vidth or 10 s ng getting o 50 m.All kin 3.900 0.650	sqm on plar but the exca ds of soil 2.050 5.350	tor) /manua n), including vated soil a	27.283 7.098 0.811	of sides and of surpli
	Earth work in excava- trenches or drains (not ramming of bottoms, excavated soil as dire  Above dome = 3.14/4*d*d*h  bellow dome = 3.14*h*h(3*R-h)  projection all round = 3.14*h(R*R - r*r) =3.14*0.20(2.30*2.30*2.30*2.30*2.30*2.30*2.30*2.30*	tion by med of exceeding ift up to 1.5 ected, within 0.875 3.14	hanical me g 1.5 m in w i m, includir a lead of 5 3.900 0.650	ans (Hydra vidth or 10 s ng getting o 50 m.All kin 3.900 0.650	sqm on plar but the exca ds of soil 2.050 5.350 1.290 Total Deducte	tor) /manua n), including vated soil a	27.283 7.098 0.811	of sides and of surpling the su
	Earth work in excava- trenches or drains (not ramming of bottoms, excavated soil as dire  Above dome = 3.14/4*d*d*h  bellow dome = 3.14*h*h(3*R-h)  projection all round = 3.14*h(R*R - r*r) =3.14*0.20(2.30*2.30*2.30*2.30*2.30*2.30*2.30*2.30*	tion by med of exceeding ift up to 1.5 ected, within 0.875 3.14	hanical me g 1.5 m in w is m, includir a lead of 5 3.900 0.650	ans (Hydra vidth or 10 s ng getting o 50 m.All kin 3.900 0.650	sqm on plar but the exca ds of soil 2.050 5.350 1.290 Total Deducte	tor) /manua n), including vated soil a vated soil a al Quantity d Quantity	27.283  7.098  0.811  35.192 cu 0.000 cun 35.192 cu	of sides and of surpl
	Earth work in excava- trenches or drains (not ramming of bottoms, excavated soil as dire  Above dome = 3.14/4*d*d*h  bellow dome = 3.14*h*h(3*R-h)  projection all round = 3.14*h(R*R - r*r) =3.14*0.20(2.30*2.30*2.30*2.30*2.30*2.30*2.30*2.30*	onal lift 1.5	hanical me g 1.5 m in w is m, includir a lead of 5 3.900 0.650	ans (Hydra ridth or 10 sing getting of 50 m.All kin 3.900 0.650	sqm on plar out the exca ds of soil 2.050 5.350  1.290  Tota otal Deducte Net Tota m @ Rs 277	tor) /manua n), including vated soil a al Quantity d Quantity al Quantity 7.58 / cum	27.283  7.098  0.811  35.192 cu 0.000 cun 35.192 cu Rs 9	of sides and of surplements of surpl

	bellow dome = 3.14*h*h(3*R-h)	3.14	0.650	0.650	5.350		7.098	
					Tota	al Quantity	14.418 cu	m
				To	tal Deducte	d Quantity	0.000 cum	1
					Net Tota	al Quantity	14.418 cu	m
			5	Say14.418 c	um @ Rs 99	).43 / cum	Rs 14	133.58
3	4.1.6 Providing and laying in shuttering - All work up nominal size)					-		_
	dome outer v = 3.14*h*h(3R	3.14	0.650	0.650	5.350		7.098	
	projection	1	3.140	0.200	1.290		0.811	
		-74	The same	Deduction			1	
	dome inner V = 3.14*h*h(3*R - h)=3.14*0.55*0.55(3*1.9-0.65) -	3.14	0.550	0.550	5.150	g	-4.891	
	opening	1	0.750	0.100	0.100		-0.007	
			· -		Tota	al Quantity	7.909 cum	1
				To	otal Deducte	d Quantity	-4.898 cur	n
					Net Tota	al Quantity	3.011 cum	1
			Sa	ay3.011 cum	@ Rs 6740	).86 / cum	Rs 20	296.73
4	5.1.2 Providing and laying ir centering, shuttering, fir sand :3 graded stone ag	nishing and	reinforceme	ent - All work			_	
	dome outer v = 3.14*h*h(3R	3.14	0.550	0.550	5.150		4.892	
	tank lintel opening portion	1	1.000	0.100	0.200		0.020	
	projection	1	3.140	0.200	1.290		0.811	
				Deduction				
	dome inner V= 3.14*h*h(3*R - h )=3.14*0.55*0.55(3*1. 9-0.65) -	3.14	0.450	0.450	4.950		-3.147	

	opening	1	0.750	0.100	0.100		-0.007	
					Tota	al Quantity	5.723 cum	ı
				To	otal Deducte	d Quantity	-3.154 cur	m
					Net Tota	al Quantity	2.569 cum	1
			Sa	ay2.569 cum	@ Rs 8492	2.63 / cum	Rs 21	817.57
5	5.22.6 Steel reinforcement fo binding all complete up		10.704			•		
	As per item No.4 = 2.580 cu.m	2.580				70.0	180.600	
	As per item No.9 = 21.871 cu.m	21.871				5.0	109.355	
					Tota	al Quantity	289.955 k	ilogram
		799	States of	To	otal Deducte	d Quantity	0.000 kilo	gram
	1.5/	SDE	naine	erine	Net Tota	al Quantity	289.955 k	ilogram
	San Assort		Sav289 95	5 kilogram (	@ Rs 91 89	/ kilogram	Rs 26	643.96
			Ouy200.00	o mogram v	7 110 0 1100	/ Kilogram	110 20	0 10100
6	5.9.5 Centering and shuttering girders bressumers and	_	g strutting, e	-				
6	Centering and shuttering	_	g strutting, e	-				
6	Centering and shuttering girders bressumers and Surface Area of projection sides	d cantileve	g strutting, e	etc. and rem	noval of form		, beams, pli	inth beam
6	Centering and shuttering girders bressumers and Surface Area of projection sides	d cantileve	g strutting, e	etc. and rem	noval of form	n for:Lintels	1.445	inth beam
6	Centering and shuttering girders bressumers and Surface Area of projection sides	d cantileve	g strutting, e	etc. and rem	noval of form  Total	n for:Lintels	1.445 1.445 sqm	inth beam
6	Centering and shuttering girders bressumers and Surface Area of projection sides	d cantileve	g strutting, e	etc. and rem	Total Deducte	n for:Lintels  al Quantity d Quantity al Quantity	1.445 1.445 sqm 0.000 sqm	inth beam
7	Centering and shuttering girders bressumers and Surface Area of projection sides	es in supers	strutting, e	0.200  To Say1.445 squares ove plinth learns with con	Total Deducte  Net Total  Met Total	al Quantity d Quantity al Quantity 7.44 / sqm ofloor five local	1.445 1.445 sqm 0.000 sqm 1.445 sqm Rs 8	n n 77.75
	Centering and shuttering girders bressumers and Surface Area of projection sides (2*3.14*r*h)  6.9  Brick work in plain arch and shuttering complet	es in supers	strutting, e	0.200  To Say1.445 squares ove plinth learns with con	Total Deducte  Net Total  Met Total	al Quantity d Quantity al Quantity 7.44 / sqm ofloor five local	1.445 1.445 sqm 0.000 sqm 1.445 sqm Rs 8	n 77.75

	Hemi spear inner v o l u m e = 2/3*3.14*1.80*1.80*1.	0.67*3.14	1.450	1.450	1.450		-6.413	
	Opening	1	0.750	0.100	1.000		-0.075	
					Tota	al Quantity	7.835 cum	1
			550	To	otal Deducte	d Quantity	-6.488 cur	n
			- 113H		Net Tota	al Quantity	1.347 cum	1
		-8	Say	1.347 cum	@ Rs 13592	2.24 / cum	Rs 18	308.75
8	13.6.1 20 mm cement plaster of	of mix:1:4 ( ;	1 cement : 4	coarse san	nd)	/		
	ferro cement lining over brick work/ Area of hemi speare cuved surface Area = 2*3014*r*r	2*3.14	1.550	1.550	10/1-		15.088	
	LOV		igine	Deduction	AAIII	9	1	İ
	Opening portion	1	0.750	1.000			-0.750	
		- 1			Tota	al Quantity	15.088 sq	m
				To	otal Deducte	d Quantity	-0.750 sqr	m
					Net Tota	al Quantity	14.338 sq	m
			Sa	ıy14.338 sqr	m @ Rs 417	7.76 / sqm	Rs 59	989.84
9	13.1.1 12 mm cement plaster of	of mix:1:4 ( )	1 cement : 4	fine sand)				
	ferro cement lining over brick work/ Area of hemi speare cuved surface Area = 2*3014*r*r	2*3.14	1.550	1.550			15.088	
				Deduction				
	Opening portion	1	0.750	1.000			-0.750	
					Tota	al Quantity	15.088 sq	m
				То	otal Deducte	d Quantity	-0.750 sqr	n
					Net Tota	al Quantity	14.338 sq	m
	The state of the s				m @ Rs 293			

	spiracle surface Area floor base (3.14*1.80*1.80+0.45* 0.45)	1	3.140	3.443			10.812	
	Inside of dome (2*3.14*r*r )	2*3.14	1.450	1.450			13.204	
				Deduction	1			
	Opening	1	0.750	1.000			-0.750	
		-6			Tota	al Quantity	24.016 sq	m
	/	1 13		To	otal Deducte	d Quantity	-0.750 sq	m
		Ryl			Net Tota	al Quantity	23.266 sq	m
	R.	57 13	Sa	y23.266 sq	m @ Rs 375	5.04 / sqm	Rs 87	725.68
11	50.18.9.10.1 Providing and fixing PV refilling & testing of join							-
	In let pipe	GD E	3.250	erino	ı Win	q	3.250	
					Tota	al Quantity	3.250 met	re
		) L	2	To	otal Deducte	d Quantity	0.000 met	re
			/ T		Net Tota	al Quantity	3.250 met	re
			Say	3.250 metre	@ Rs 844.	12 / metre	Rs 2	743.39
SI No	Description	No	L	В	D	CF	Quantity	Remark
	4 4 ( c ) OU	T LET POC	KET & TAN	IK (inner di	mension 2.	60x1.4 mts	)	
1	2.6.1 Earth work in excava (exceeding 30 cm in de earth, lead up to 50 m soil	epth, 1.5 m	in width as	well as 10	sqm on pla	n) including	disposal of	f excavate
	Out let Tank	1	3.000	1.800	0.550		2.970	
	Out let pocket	1	0.800	0.800	1.150		0.736	
					Tota	al Quantity	3.706 cun	า
				To	otal Deducte	d Quantity	0.000 cun	า
					Net Tota	al Quantity	3.706 cun	า
			S	ay3.706 cu	m @ Rs 200	0.07 / cum	Rs 7	41.46
2	5.1.3 Providing and laying ir centering, shuttering, fi sand: 4 graded stone a	nishing and	d reinforcem	ent - All wo			_	

	Cover slab	1	3.000	1.800	0.075		0.405	
			1		Tota	al Quantity	0.405 cum	1
				То	tal Deducte	d Quantity	0.000 cum	1
					Net Tota	al Quantity	0.405 cum	1
			Sa	y0.405 cum	@ Rs 8028	3.36 / cum	Rs 32	251.49
3	5.2.2 Reinforced cement condand string courses, fille excluding cost of center 3 graded stone aggregations.	ts, column ing, shutte	s, pillars, pi	ers, abutme g and reinfo	nts, posts a	nd struts et	c. up tot floo	or five level
	Out let pocket - floor	1	1.300	0.800	0.100		0.104	
	Out let Tank - floor	1	2.600	1.400	0.100		0.364	
	***			Deduction				
	pocket	1	1.200	1.000	0.100		-0.120	
	1.0/	an E	naine	orino	Tota	al Quantity	0.468 cum	1
			rigiric	То	tal Deducte	d Quantity	-0.120 cur	n
		ЭГ	T		Net Tota	al Quantity	0.348 cum	1
			Say	0.348 cum	@ Rs 10239	.65 / cum	Rs 35	63.40
4	5.9.1 Centering and shuttering columns, etc for mass of Covering slab Length wise side	-	strutting, et	c. and remo	oval of form	for:Foundat	ions, footing	s, bases of
	Covering slab width wise side	2	1.800	0.100			0.360	
					Tota	al Quantity	0.960 sqm	1
				То	tal Deducte	d Quantity	0.000 sqm	1
					Net Tota	al Quantity	0.960 sqm	1
			S	ay0.960 sqr	m @ Rs 313	3.45 / sqm	Rs 3	00.91
5	60.7.4	DONE F	Rough stone	dry nackin	ng for apror	ı with good	quality blas	stad rubbla
 	DR PACKING FOR AF including packing to co etc. complete as per di	mpactness	s to lines lev	els, cost an	nd conveyar	nce of all m		
	including packing to co	mpactness	s to lines lev	els, cost an	nd conveyar	nce of all m		
	including packing to co etc. complete as per di	mpactness rection of	s to lines lev Department	rels, cost an	nd conveyar t site	nce of all m	aterials labo	

					Tota	al Quantity	5.130 cum	ı
				To	otal Deducte	d Quantity	-1.140 cur	n
					Net Tota	al Quantity	3.990 cum	1
			Sa	ıy3.990 cun	n @ Rs 3388	3.97 / cum	Rs 13	521.99
6	6.2.1 Brick work with comm in:Cement mortar 1:4		200 1000		class design	ation 7.5 ir	foundation	and pli
	Out let pocket	1	2.800	0.200	0.950		0.532	
	Out let taNK	10	8.800	0.200	0.650		1.144	
	1	AT	D. S. S.		Tota	al Quantity	1.676 cum	1
	. )) .	AT		T	otal Deducte	d Quantity	0.000 cum	1
	1.6	145	No.	52.5M	Net Tota	al Quantity	1.676 cum	1
			Sa	y1.676 cun	n @ Rs 6046	6.47 / cum	Rs 10	133.88
7	13.7.1 12 mm cement plaster t	finished wi	th a floating o	coat of neat	cement of m	nix:1:3 ( 1 ce	ement : 3 fine	e sand)
	Floor inner	1	2.600	1.400			3.640	
	Inside of out let pocket wall	1	2.400	0.950			2.280	
	Inside of out let tank wall	1	8.000	0.650			5.200	
					Tota	al Quantity	11.120 sq	m
				To	otal Deducte	d Quantity	0.000 sqm	1
					Net Tota	al Quantity	11.120 sq	m
			Sa	y11.120 sq	m @ Rs 375	5.04 / sqm	Rs 41	70.44
8	13.1.1 12 mm cement plaster of	of mix:1:4 (	(1 cement:4	I fine sand)				
	Inside of outlet wall - Tank top 1	8	0.650				5.200	
					Tota	al Quantity	5.200 sqm	1
				To	otal Deducte	d Quantity	0.000 sqm	1
					Net Tota	al Quantity	5.200 sqm	1
			S	ay5.200 sq	m @ Rs 293	3.61 / sqm	Rs 15	526.77
9	50.2.25.1 Filling with contractor's not exceeding 20 cm ir 50 m and lift up to 1.5	depth, co	nsolidating e	ach depos	ited layer by			-

	Top of dome	0.875	3.300	3.300	2.050		19.534	
	Dome bottom	3.14	0.650	0.650	5.350		7.098	
				Deduction				
	Dome bellow	3.14	0.650	0.650	5.350		-7.097	
	Tope brick portion	0.67	3.140	1.900	1.900		-7.594	
			1		Tota	al Quantity	26.632 cu	m
			136	То	tal Deducte	d Quantity	-14.691 cu	ım
		-6			Net Tota	al Quantity	11.941 cu	m
	6	1 3	Sa	y11.941 cur	m @ Rs 491	.53 / cum	Rs 58	369.36
SI No	Description	No	TER ( inner	В	D	CF	Quantity	Remark
	trenches or drains (not ramming of bottoms, lit excavated soil as direct	ft up to 1.5	5 m, includir a lead of 5	g getting o	ut the excards of soil		and disposa	
		1	1.400	2.400	1.200		4.032	
		- 1	$\langle \bot \bot$		Tota	al Quantity	4.032 cum	1
	-			То	tal Deducte	d Quantity	0.000 cum	<u> </u>
					Net Tota	al Quantity	4.032 cum	1
							Do 44	
			S	ay4.032 cur	m @ Rs 277	7.58 / cum	KS I	119.20
2	4.1.8 Providing and laying in shuttering - All work up nominal size)	-	ement concr	ete of speci	fied grade e	excluding th	e cost of ce	ntering and
2	Providing and laying in shuttering - All work up	-	ement concr	ete of speci	fied grade e	excluding th	e cost of ce	ntering and
2	Providing and laying in shuttering - All work up nominal size)  leveling ( cement	to plinth l	ement concr evel:1:4:8 (	ete of speci	fied grade e 4 coarse sa 0.100	excluding th	e cost of ce ed stone ag	ntering and
2	Providing and laying in shuttering - All work up nominal size)  leveling ( cement	to plinth l	ement concr evel:1:4:8 (	ete of speci 1 cement : 4 2.400	fied grade e 4 coarse sa 0.100	excluding th nd : 8 grad	e cost of ce ed stone ag 0.336	ntering and gregate 40
2	Providing and laying in shuttering - All work up nominal size)  leveling ( cement	to plinth l	ement concr evel:1:4:8 (	ete of speci 1 cement : 4 2.400	fied grade e 4 coarse sa 0.100 Tota	excluding th nd : 8 grad	e cost of ce ed stone ag 0.336	ntering and gregate 40
2	Providing and laying in shuttering - All work up nominal size)  leveling ( cement	to plinth l	ement concr evel:1:4:8 (* 1.400	ete of speci 1 cement : 4 2.400	fied grade e 4 coarse sa 0.100 Tota tal Deducte Net Tota	excluding the nd: 8 grades al Quantity al Quantity al Quantity	e cost of ce ed stone ag 0.336 0.336 cum 0.000 cum	ntering and gregate 40
3	Providing and laying in shuttering - All work up nominal size)  leveling ( cement	to plinth I	ement concrevel:1:4:8 (**  1.400  Saspecified grant reinforceme	ete of speci 1 cement : 4 2.400 To y0.336 cum	fied grade e 4 coarse sa  0.100  Tota tal Deducte  Net Tota  @ Rs 6370  priced ceme	excluding the nd: 8 grades al Quantity de Quantity al Quantity 0.44 / cum	e cost of ce ed stone ag  0.336  0.336 cum  0.000 cum  0.336 cum  Rs 21	ntering and gregate 40

					Tota	al Quantity	0.336 cum	1
	4			To	otal Deducte	d Quantity	0.000 cum	1
					Net Tota	al Quantity	0.336 cum	1
			Sa	y0.336 cum	n @ Rs 8492	2.63 / cum	Rs 28	353.52
4	5.1.3 Providing and laying centering, shuttering sand: 4 graded ston	finishing and	reinforcem	ent - All wo	1			
	Cover slab	1	1.400	2.400	0.075		0.252	
	partition wall	3	0.600	0.050	0.500		0.045	
		15-41	77/40		Tota	al Quantity	0.297 cum	1
		all	(al	To	otal Deducte	d Quantity	0.000 cum	1
					Net Tota	al Quantity	0.297 cum	1
			Sa	y0.297 cum	n @ Rs 8028	3.36 / cum	Rs 23	884.42
5	5.22.6 Steel reinforcement binding all complete As per item Nos.3 & = 0.336 + 0.297	upto plinth le						
	= 0.336 + 0.297				Tot	 al Quantity	44.310 kile	
								aram
				To		<u>-</u>		
				To	otal Deducte	d Quantity	0.000 kilo	gram
			Say44.31		otal Deducte Net Tota	d Quantity	0.000 kilo	gram
6	6.2.1 Brick work with comin:Cement mortar 1:		ay modular	0 kilogram (	Net Tota @ Rs 91.89	d Quantity al Quantity / kilogram	0.000 kilo 44.310 kilo Rs 40	gram ogram 071.65
6	Brick work with com		ay modular	0 kilogram (	Net Tota @ Rs 91.89	d Quantity al Quantity / kilogram	0.000 kilo 44.310 kilo Rs 40	gram ogram 071.65
6	Brick work with comin:Cement mortar 1:	4 (1 cement	ay modular : 4 coarse :	0 kilogram ( bricks of c sand)	Net Tota  Rs 91.89  class design	d Quantity al Quantity / kilogram	0.000 kilo 44.310 kilo Rs 40	gram ogram 071.65 and plint
6	Brick work with comin:Cement mortar 1:	4 (1 cement	ay modular : 4 coarse :	0 kilogram ( bricks of c sand) 0.200	Net Tota  Rs 91.89  class design	d Quantity al Quantity / kilogram ation 7.5 in	0.000 kilo 44.310 kilo Rs 40 foundation	gram ogram 071.65 and plint
6	Brick work with comin:Cement mortar 1:	4 (1 cement	ay modular : 4 coarse :	0 kilogram ( bricks of c sand) 0.200	Net Tota  Rs 91.89  class design  1.000  Tota  otal Deducte	d Quantity al Quantity / kilogram ation 7.5 in	0.000 kilo 44.310 kilo Rs 40 foundation 1.520	gram  D71.65  and plintle
6	Brick work with comin:Cement mortar 1:	4 (1 cement	ay modular : 4 coarse : 7.600	0 kilogram (bricks of cosand) 0.200	Net Tota  Rs 91.89  class design  1.000  Tota  otal Deducte	d Quantity al Quantity / kilogram ation 7.5 in al Quantity d Quantity al Quantity	0.000 kilon 44.310 kilon Rs 40 1.520 1.520 cum 0.000 cum 1.520 cum	gram ogram 071.65 and plint
7	Brick work with comin:Cement mortar 1:	1 1	ay modular : 4 coarse : 7.600	bricks of desand) 0.200 To	Net Tota  @ Rs 91.89  class design  1.000  Tota  otal Deducte  Net Tota  n @ Rs 6046	d Quantity al Quantity / kilogram ation 7.5 in al Quantity d Quantity al Quantity al Quantity	0.000 kilog 44.310 kilog Rs 40 1.520 1.520 cum 0.000 cum 1.520 cum Rs 91	gram  D71.65  and plint
	Brick work with comin:Cement mortar 1: Allround  13.7.1	1 1	ay modular : 4 coarse : 7.600	bricks of desand) 0.200 To	Net Tota  @ Rs 91.89  class design  1.000  Tota  otal Deducte  Net Tota  n @ Rs 6046	d Quantity al Quantity / kilogram ation 7.5 in al Quantity d Quantity al Quantity al Quantity	0.000 kilog 44.310 kilog Rs 40 1.520 1.520 cum 0.000 cum 1.520 cum Rs 91	gram  D71.65  and plintle
	Brick work with comin:Cement mortar 1: Allround  13.7.1 12 mm cement plaste	4 (1 cement  1 er finished with	ay modular : 4 coarse : 7.600  Sa	bricks of cosand)  0.200  Touristics of neat	Net Tota  @ Rs 91.89  class design  1.000  Tota  otal Deducte  Net Tota  n @ Rs 6046	d Quantity al Quantity / kilogram ation 7.5 in al Quantity d Quantity al Quantity al Quantity	0.000 kilog 44.310 kilog 44.310 kilog Rs 40 1.520 1.520 cum 0.000 cum 1.520 cum Rs 91	gram  D71.65  and plintle

				То	tal Daduata	d Ougantitu	0.000	
				10	otal Deducte	<u> </u>	0.000 sqm	
				°048 000 oa	n @ Rs 375	al Quantity	8.000 sqm	00.32
8	13.1.1 12 mm cement plaster of	of mix:1:4 (	X		II & KS 373	.04 / Sqiii	NS 30	00.32
	Out let walls	1	7.600	1.000			7.600	
	Top of cover slab	1	1.400	2.400			3.360	
		-6			Tota	al Quantity	10.960 sq	m
	6	113		To	tal Deducte	d Quantity	0.000 sqm	1
		RHI	NEW!		Net Tota	al Quantity	10.960 sq	m
	1/2	52 14	Sa	ıy10.960 sqı	m @ Rs 293	.61 / sqm	Rs 32	17.97
SI No	Description	No	L	В	D	CF	Quantity	Remark
	(exceeding 30 cm in de earth, lead up to 50 m soil  Septic Tank  Soak pit (circular shape )				1.100 1.150	,	•	
				To		al Quantity	2.928 cum	
				To	tal Deducte	d Quantity	0.000 cum	
			S		otal Deducte	d Quantity	0.000 cum 2.928 cum	1
2	4.1.8 Providing and laying in shuttering - All work up nominal size)	•	ment concr	ay2.928 cur	Net Tota n @ Rs 200 fied grade e	d Quantity al Quantity .07 / cum	0.000 cum 2.928 cum Rs 5	85.80
2	Providing and laying in shuttering - All work up	•	ment concr	ay2.928 cur	Net Tota n @ Rs 200 fied grade e	d Quantity al Quantity .07 / cum	0.000 cum 2.928 cum Rs 5	85.80
2	Providing and laying in shuttering - All work up nominal size)  Septic Tank bed	to plinth le	ment concr evel:1:4:8 (	ete of speci	Net Tota  Met Tota  Met Tota  Met Rs 200   d Quantity al Quantity .07 / cum	0.000 cum 2.928 cum Rs 5 e cost of celed stone ag	85.80 ntering an	
2	Providing and laying in shuttering - All work up nominal size)  Septic Tank bed leveling	to plinth lo	ment concr evel:1:4:8 ( 2.200	ete of speci 1 cement : 4	Net Total  Net Total  Rs 200  fied grade et 4 coarse sa  0.100  0.100	d Quantity al Quantity .07 / cum	0.000 cum 2.928 cum Rs 5 e cost of celed stone ag	atering an gregate 4
2	Providing and laying in shuttering - All work up nominal size)  Septic Tank bed leveling	to plinth lo	ment concr evel:1:4:8 ( 2.200	ete of speci 1 cement : 4 1.000 0.750	Net Total  Net Total  Rs 200  fied grade et 4 coarse sa  0.100  0.100	d Quantity al Quantity .07 / cum excluding th nd : 8 grad	0.000 cum 2.928 cum Rs 5 e cost of celed stone ag 0.220 0.045	atering an gregate 4
2	Providing and laying in shuttering - All work up nominal size)  Septic Tank bed leveling	to plinth lo	ment concr evel:1:4:8 ( 2.200	ete of speci 1 cement : 4 1.000 0.750	Net Tota  Net Tota  Rs 200  fied grade et 4 coarse sa  0.100  0.100  Tota  otal Deducte	d Quantity al Quantity .07 / cum excluding th nd : 8 grad	0.000 cum 2.928 cum Rs 5 e cost of celed stone ag  0.220  0.045  0.265 cum	atering and gregate 40

3	5.1.2 Providing and laying in centering, shuttering, fir sand :3 graded stone ag	ishing and	reinforceme	ent - All worl			•		
	Septic tank top covering slab	1	2.200	1.000	0.100		0.220		
		0.220 cum							
	Total Deducted Quantity							0.000 cum	
	Net Total Quantity							0.220 cum	
	Say0.220 cum @ Rs 8492.63 / cum							868.38	
4	5.1.3  Providing and laying in position specified grade of reinforced cement concrete, excluding the cost centering, shuttering, finishing and reinforcement - All work up to plinth level:1:2:4 (1 cement : 2 coars and : 4 graded stone aggregate 20 mm nominal size)								
	wearing coat on the top of the floor	1 E	1.800	0.600	0.050		0.054		
	LD/	0.054 cum							
	Total Deducted Quantity							0.000 cum	
	Net Total Quantity							0.054 cum	
	Say0.054 cum @ Rs 8028.36 / cum						Rs 433.53		
5	5.9.21 Centering and shuttering including strutting, etc. and removal of form for:Lintels, beams, plinth bear girders, bressumers and cantilevers with water proofply 12 mm thick.								
	foundation sides	1	6.400	0.100			0.640		
	Total Quantity						0.640 sqm		
	Total Deducted Quantity						0.000 sqm		
	Net Total Quantity							0.640 sqm	
	Say0.640 sqm @ Rs 705.98 / sqm							51.83	
6	5.15 Providing, hoisting and fixing up to floor five level precast reinforced cement concrete in lintels, bea and bressumers including setting in cement mortar 1:3 (1 cement : 3 coarse sand), cost of requirement centering and shuttering but excluding the cost of reinforcement with, 1:1.5:3 (1 cement : 1.5 coarse sat (Zone - III) : 3 graded stone aggregate 20 mm nominal size)								
	<u> </u>						0.042		
	partition wall1	1	0.500	0.050	0.500		0.013		

	covering slab for soak								
	pit	0.785	0.750	0.750	0.100		0.045		
					Tota	al Quantity	0.278 cum		
		Total Deducted Quantity  Net Total Quantity  Say0.278 cum @ Rs 12490.30 / cum						0.000 cum	
								0.278 cum	
								Rs 3472.30	
7	5.22.6 Steel reinforcement fo binding all complete up		- A. C.						
	As per item No. 3 & 4 = 0.22 +.0.054 = 0.274 cu.m	4	0.274			80.0	21.920		
	Total Quantity							21.920 kilogram	
	Total Deducted Quantity							0.000 kilogram	
	Net Total Quantity							21.920 kilogram	
	Say21.920 kilogram @ Rs 91.89 / kilogram							Rs 2014.23	
	Brick work with common plinth in:Cement mortar Septic tank		•		0.900	s designatio	n 7.5 in foui	ndation an	
	Soak pit = 3.14*h ( R*R - r*r ) = 3.14*0.90(0.80*0.80- 0.60*0.60	1	2.826	0.280			0.792		
	Total Quantity							1.800 cum	
	Total Deducted Quantity							0.000 cum	
	Net Total Quantity							1.800 cum	
	Say1.800 cum @ Rs 6775.21 / cum							Rs 12195.38	
9	13.9.1 Cement plaster 1:3 ( 1 cement : 3 coarse sand) finished with a floating coat of neat cement.12 microment plaster								
	Septic tank floor	1	1.800	0.600			1.080		
	Side wall inner	1	4.800	0.900			4.320		
	Total Quantity							5.400 sqm	
	Total Deducted Quantity						0.000 sqm		
	Net Total Quantity							5.400 sqm	

			5	Say5.400 sqr	m @ Rs 385.25 / sqm	Rs 2	080.35		
10	13.1.1 12 mm cement plaster of mix:1:4 ( 1 cement : 4 fine sand)								
	Side wall outer	1	4.800	0.900		4.320			
					Total Quantity	4.320 sqm			
				То	tal Deducted Quantity	0.000 sqr	0.000 sqm		
			186		Net Total Quantity	4.320 sqm			
		-6	5	Say4.320 sqr	m @ Rs 293.61 / sqm	Rs 1	268.40		
	direction of Engineer-i 110 mm pipe 4 kgf/cm	A Palent Date	300	ork, includin	g cutting chases and i		the wall et		
	out let pipe	1	8.000	122/		8.000			
	Total Quantity						8.000 metre		
	Total Deducted Quantity					0.000 metre			
	Net Total Quantity						8.000 metre		
	Say8.000 metre @ Rs 629.02 / metre								
				Amour	nt reserved for GST p		Rs 27580.0		
							257413.3		
					Lumpsum for round of	#	0.0		
					·	TOTAL R			
					·	ded Total R	s 257413.3		

(Cost Index Applied for this estimate is 35.59%)

## Bio gas Plant (Capacity 50 kg/day)



