

**Working Estimate for Construction of Training Centre
at Goat Farm Jaring, Kalahandi**

1. Excavation of foundation in all kinds of soil including dressing & leveling the bed and depositing the soil away from working area within all lead & lift etc. complete finished as per the direction of Engineer-in-charge

$12 \times 4' \times 4' \times 4' = 768.00$
 $2 \times 31'6'' \times 2' \times 2'6'' = 315$
 $2 \times 19'3'' \times 2' \times 2'6'' = 192.50$
 $1275.50 \text{ cft or } 36.10 \text{ cum}$
 $@ 4400/ 100 \text{ cum } \dots\dots$

Rs. 1588.00

2. Filling in foundation & plinth with sand well watered and rammed with cost carriage, Royalty, Taxes etc. of sand, all labour, T & P etc. complete finished as per the direction of the Engineer-in-charge

$12 \times 4' \times 4' \times 1' = 192.00$
 $2 \times 31'6'' \times 2' \times 6'' = 63.00$
 $2 \times 19'3'' \times 2' \times 6'' = 38.50$
 $293.50 \text{ cft or } 8.31 \text{ cum}$
 $@ 230/ \text{ cum} \dots\dots\dots$

Rs. 1911.00

3. Cement concrete (1:3:6) using 4cm. size H.G. metal in foundation with cost carriage, Royalty, Taxes etc. of all materials, all labour T & P etc. complete finished as per the direction of the Engineer-in charge with adequate curing for required days

$12 \times 4' \times 4' \times 6'' = 96.00$
 $2 \times 31'6'' \times 2' \times 6'' = 63.00$
 $2 \times 19'3'' \times 2' \times 6'' = 38.50$
 $197.50 \text{ cft or } 5.59 \text{ cum}$
 $@ 2710/\text{cum} \dots\dots\dots$

Rs. 15149.00

4. R.C.C (1 : 2 : 4) using 12mm size H. G. C. B. chips including centering, shuttering False work etc. and dismantling the same after completion of work on required days with cost, carriage, royalty, Taxes etc. of all materials, all labour, T & P etc., complete finished with adequate curring for required days and as per the direction of the Engineer-in-charge.
 - a) Col Base

$12 \times 3'6'' \times 3'6'' \times 1' = 147.00$
 $12 \times 3'6'' \times 3'6'' + 1'3'' \times 1'3'' \times 10'' = 68.79$
 $2 \qquad \qquad \qquad 215.79 \text{ cft or } 6.11 \text{ cum}$
 $@ 3700/\text{cum} \dots\dots\dots$

Rs. 22607.00

 - b) Coloumn

$12 \times 1'3'' \times 1'3'' \times 3'4'' = 62.44$
 $12 \times 10'' \times 10'' \times 9'10'' = 81.26$
 $143.70 \text{ cft or } 4.07 \text{ cum}$
 $@ 5870/\text{cum} \dots\dots\dots$

Rs. 23891.00

 - c) Grade Beam

$1 \times 36'6'' \times 10'' \times 10'' = 25.14$

$$1 \times 33'8'' \times 10'' \times 10'' = 23.19$$

$$1 \times 23' \times 10'' \times 10'' = 15.84$$

$$1 \times 13'8'' \times 10'' \times 10'' = 9.41$$

$$1 \times 8'3'' \times 10'' \times 10'' = 5.68$$

$$1 \times 4'4'' \times 10'' \times 10'' = 2.98$$

$$2 \times 15' \times 10'' \times 10'' = \underline{20.67}$$

102.91 cft or 2.91 cum

@ 3900/cum....

Rs. 11349.00

d) Lintel

$$1 \times 36'6'' \times 10'' \times 6'' = 15.15$$

$$1 \times 33'8'' \times 10'' \times 6'' = 13.97$$

$$1 \times 23' \times 10'' \times 6'' = 9.55$$

$$1 \times 13'8'' \times 10'' \times 6'' = 5.67$$

$$1 \times 8'3'' \times 10'' \times 6'' = 3.42$$

$$1 \times 4'4'' \times 10'' \times 6'' = 1.80$$

$$2 \times 15' \times 10'' \times 6'' = \underline{12.45}$$

62.01 cft or 1.75 cum

@ 5720/cum....

Rs. 10010.00

e) Chaja

$$1 \times 4'6'' \times 1'6'' = 6.75$$

$$1 \times 6' \times 1'6'' = 9.00$$

$$1 \times 6' \times 1'6'' = 9.00$$

$$1 \times 11'6'' \times 1'6'' = 17.25$$

$$1 \times 4'2'' \times 1'6'' = 6.24$$

$$1 \times 25' \times 1'6'' = \underline{37.50}$$

85.74 sft or 7.96 sqm

@ 470/sqm.....

Rs. 3741.00

f) Roof Beam

$$1 \times 18' \times 1' \times 10'' = 14.94 \text{ cft or } 0.42 \text{ cum}$$

@ 5870/cum.....

Rs. 2465.00

g) Roof Slab

$$1 \times 35' 5'' \times 24'7'' \times 4'' = 287.10$$

$$1 \times 15'4'' \times 2' 7'' \times 4'' = \underline{13.00}$$

300.10 cft or 8.49 cum

@ 5760.00

Rs. 48902.00

- 5 Labour charges for cutting, bending, binding of M.S. rod with supply of M.S. rod of approved brand i.e. SAIL/TATA with cost, Carriage, Taxes etc. of M.S. Rod and binding wire and lying the same at the approved place on approved design etc. complete finished as per the direction of the Engineer-in-Charge = 24.52 Qntl.

@ 6470/Qntl.

Rs. 158644.00

- 6 Providing 25 mm. thick grading C.C. on roof slab in C.C. (1:2:2) using 6 mm. chips including cost, carriage, labour T & P taxes etc. complete

$$1 \times 35' 5'' \times 24'7'' = 870.02$$

$$1 \times 15'4'' \times 2'7'' = \underline{39.40}$$

909.42 sft or 84.49 sqm

@ 122.57/sqm.....

Rs. 10356.00

- 7 Filling in foundation & plinth with sand well watered and rammed with cost carriage, Royalty, Taxes etc. of sand, all labour, T & P etc. complete finished as per the direction of the Engineer-in-charge

$$1 \times 25' \times 16' \times 2' = 800.00$$

$$1 \times 25' \times 4'4'' \times 2' = 216.50$$

$$1 \times 8'3'' \times 6'3'' \times 2' = 103.13$$

$$1 \times 12' \times 9' \times 2' = \underline{216.00}$$

$$1335.63 \text{ cft or } 37.80 \text{ cum}$$

@ 230/cum

Rs. 8694.00

- 8 Cement concrete (1:3:6) using 4cm. size H.G. metal in foundation with cost carriage, Royalty, Taxes etc. of all materials, all labour T & P etc. complete finished as per the direction of the Engineer-in charge with adequate curing for required days

$$1 \times 25' \times 16' \times 3'' = 100.00$$

$$1 \times 25' \times 4'4'' \times 3'' = 27.06$$

$$1 \times 8'3'' \times 6'3'' \times 3'' = 12.89$$

$$1 \times 12' \times 9' \times 3'' = \underline{27.00}$$

$$166.95 \text{ cft or } 4.72 \text{ cum}$$

@ 2710/cum

Rs. 12791.00

- 9 R. R. Stone Masonry in C.M. (1 : 6) in F & P with cost, carriage, Royalty, Taxes etc. of all materials, all labor, T &P etc. complete finished as per the direction of the Engineer-in-charge with adequate curring for required days.

$$2 \times 31'6'' \times 2' \times 1'6'' = 189.00$$

$$2 \times 19'3'' \times 2' \times 1'6'' = 115.50$$

$$2 \times 31'6'' \times 1'3'' \times 2' = 157.50$$

$$2 \times 19'3'' \times 1'3'' \times 2' = \underline{96.25}$$

Step - $1 \times 6' \times 3' \times 6'' = 9.00$

$$1 \times 6' \times 2' \times 6'' = 6.00$$

$$1 \times 6' \times 10'' \times 6'' = \underline{2.49}$$

575.74 cft or 16.29 cum

@ 1328.01/cum.....

Rs. 21633.00

- 10 Brick masonry in C.M.(1:6) in Suptt. Using good quality .brick having c/s 100 to 149 Kg/Cm² with cost, carriage, royalty ,taxes etc. of all materials, all labour, T & P etc. complete finished as per the direction of the Engineer-in-charges with adequate Curring for required days & immersion of bricks in water before 24 hours of use

$$2 \times 33'2'' \times 10'' \times 9'10'' = 541.10$$

$$1 \times 23'4'' \times 10'' \times 9'10'' = 190.35$$

$$1 \times 8'3'' \times 10'' \times 9'10'' = 67.31$$

$$2 \times 4'4'' \times 10'' \times 9'10'' = 70.66$$

$$1 \times 12' \times 10'' \times 9'10'' = 97.91$$

$$2 \times 16' \times 10'' \times 9'10'' = \underline{261.08}$$

1228.41 cft

Deduct – D & W

$$1 \times 3'6'' \times 4'6'' \times 10'' = 13.07$$

$$3 \times 4'6'' \times 10'' \times 5' = 56.03$$

$$2 \times 3'0'' \times 10'' \times 4'6'' = 22.41$$

$$1 \times 4'4'' \times 10'' \times 7' = 25.16$$

$$\begin{aligned}
4 \times 4'6'' \times 10'' \times 4' &= 59.76 \\
2 \times 1'6'' \times 10'' \times 1'6'' &= 3.74 \\
3 \times 3'6'' \times 10'' \times 7' &= 61.00 \\
1 \times 3' \times 10'' \times 7' &= \underline{17.43} \\
&(-) 258.60 \\
\text{Net} - 1228.41 - 258.60 &= 969.81 \text{ cft or } 27.45 \text{ cum} \\
&\text{@ } 1880/\text{cum} \dots\dots\dots
\end{aligned}$$

Rs. 51606.00

11 16 mm thick cement plaster in C.M.(1:6) over brick work with cost, carriage, royalty, taxes etc. of all materials, all labour, T & P scaffolding charges etc. complete finished as per the direction of the Engineer-in-charge with adequate Curring for required days

$$\begin{aligned}
2 \times 25' \times 11' &= 550 \text{ sft} \\
2 \times 16' \times 11' &= 352.00 \\
2 \times 12' \times 11' &= 264.00 \\
2 \times 9' \times 11' &= 198.00 \\
2 \times 25' \times 11' &= 550.00 \\
2 \times 4'3'' \times 11' &= 93.50 \\
2 \times 8' \times 11' &= 176.00 \\
2 \times 6' \times 11' &= \underline{132.00} \\
&2315.50 \text{ sft or } 215.11 \text{ sqm} \\
&\text{@ } 62/\text{sqm} \dots\dots\dots
\end{aligned}$$

Rs. 13337.00

12 12 mm thick cement plaster in C.M.(1:6) over brick work with cost, carriage, royalty, taxes etc. of all materials, all labour, T & P scaffolding charges etc. complete finished as per the direction of the Engineer-in-charge with adequate Curring for required days

$$\begin{aligned}
2 \times 36'6'' \times 14' &= 1022 \text{ sft} \\
2 \times 23' \times 14' &= \underline{644.00} \\
&1666.00 \text{ sft}
\end{aligned}$$

Ded –

$$\begin{aligned}
\text{G. D.} &= 1 \times 4'3'' \times 7' = - 29.75 \\
\text{D} &= 3 \times 3'6'' \times 7' = - 73.50 \\
&1 \times 3' \times 7' = - 21.00 \\
\text{W} &- 4 \times 3' \times 4'6'' = - 54.00 \\
&3 \times 5'2'' \times 4'6'' = - 69.66 \\
&1 \times 3'6'' \times 4'4'' = \underline{- 15.15} \\
&- 263.06
\end{aligned}$$

$$\begin{aligned}
\text{Net} &= 1666 - 263.06 = 1402.94 \text{ or } 130.33 \text{ sqm} \\
&\text{@ } 53 / \text{sqm} \dots\dots\dots
\end{aligned}$$

Rs. 6907.00

13 Providing M.S. D & W made up of M.S. Angle & Flat including cost, carriage, labour T & P taxes etc. complete including the cost of Febrication

$$\begin{aligned}
\text{D} &= 3 \times 3'6'' \times 7' = 73.50 \\
&1' \times 3' \times 7' = 21.00 \\
\text{W} &= 4 \times 3' \times 4'6'' = 54.00
\end{aligned}$$

$$3 \times 5'2'' \times 4'6'' = 69.66$$

$$1 \times 3'6'' \times 4'4'' = \underline{15.15}$$

$$233.31 \text{ sft @ } 3 = 699.93 \text{ Kg}$$

@ 75/Kg.....

Rs. 52495.00

- 14 Providing fitting, fixing M.S. Grill & Gate F.V. opening including cost, carriage, labour T & P taxes etc. complete including the cost of Fabrication.

Verandah - $4 \times 4'5'' \times 3'10'' = 67.56$

$1 \times 4'3'' \times 7' = 29.75$

$4 \times 3'4'6'' = 54.00$

$3 \times 5'2'' \times 4'6'' = 69.66$

$1 \times 3'6'' \times 4'4'' = \underline{15.15}$

$236.12 \text{ sft @ } 2.50 = 590.30 \text{ Kg}$

@ 70/Kg.....

Rs. 41321.00

- 15 Supply, fitting, fixing of PVC door at Lavatory

$1 \times 2'10'' \times 6'10'' = 19.32 \text{ sft}$

@ 90/sft

Rs. 1739.00

- 16 1" thick A.S. flooring in C.C. (1:2:4) with cement punning using 12 mm. size, HGCB chips and OPC Cement of approved grade & brand with cost, carriage, taxes etc. of all materials, all labour, T & P etc. complete finished as per the direction of the Engineer-in-charge with adequate curring for required days

Area as per Item No. 4 = 667.81 sft or 62.04 sqm

@ 127/sqm.....

Rs. 7879.00

- 17 Brick masonry in C.M.(1:6) in Suptt. Using good quality .brick having c/s 100 to 149 Kg/Cm² with cost, carriage, royalty ,taxes etc. of all materials, all labour, T & P etc. complete finished as per the direction of the Engineer-in-charges with adequate Curring for required days & immersion of bricks in water before 24 hours of use

Signboard = $1 \times 8' \times 5'' \times 2'6'' = 8.20 \text{ cft}$ or 0.23 cum

@ 1880/cum.....

Rs. 432.00

- 18 16 mm thick cement plaster in C.M.(1:6) over brick work with cost, carriage, royalty, taxes etc. of all materials, all labour, T & P scaffolding charges etc. complete finished as per the direction of the Engineer-in-charge with adequate Curring for required days

$2 \times 8' \times 3' = 48.00 \text{ sft}$ or 4.46 sqm

@ 62/sqm.....

Rs. 276.00

Plinth protection

- 19 Brick masonry in C.M.(1:6) in F&P using good quality brick having c/s 100 to 149 Kg/Cm² with cost, carriage, royalty, taxes etc. of all materials, all labour, T & P etc. complete finished as per the direction of the Engineer-in-charges with adequate Curring for required days & immersion of bricks in water before 24 hours of use

$2 \times 40' \times 10'' \times 1' = 66.40 \text{ cft}$

$2 \times 25' \times 10'' \times 1' = \underline{41.50}$

107.90 cft or 3.05 cum

	@ 1840/cum.....	<u>Rs. 5612.00</u>
20	Filling in foundation & plinth with sand well watered and rammed with cost carriage, Royalty, Taxes etc. of sand, all labour, T & P etc. complete finished as per the direction of the Engineer-in-charge $2 \times 40' \times 1' \times 1' = 80.00$ $2 \times 25' \times 1' \times 1' = 50.00$ 130.00 cft or 3.68 cum @ 230/cum.....	<u>Rs. 846.00</u>
21	Cement concrete (1:3:6) using 4cm. size H.G. metal in foundation with cost carriage, Royalty, Taxes etc. of all materials, all labour T & P etc. complete finished as per the direction of the Engineer-in charge with adequate curing for required days $2 \times 40' \times 1' \times 3'' = 20.00$ $2 \times 25' \times 1' \times 3'' = 12.50$ 32.50 cft or 0.92 cum @ 2710/cum.....	<u>Rs. 2493.00</u>
22	1" thick A.S. flooring in C.C. (1:2:4) with cement punning using 12 mm. size, HGCB chips and OPC Cement of approved grade & brand with cost, carriage, taxes etc. of all materials, all labour, T & P etc. complete finished as per the direction of the Engineer-in-charge with adequate curring for required days $2 \times 40' \times 2' = 160.00$ $2 \times 25' \times 2' = 100.00$ 260.00 sft or 24.15 sqm @ 127/sqm.....	<u>Rs. 3067.00</u>
23	Providing glazed tile on 25 mm. thick bed of CM (1:1) including cost, carriage, labour T & P taxes etc. complete $1 \times 8'3'' \times 6'3'' = 51.56 \text{ sft or } 4.79 \text{ sqm}$ @ 835/sqm.....	<u>Rs. 4000.00</u>
24	Providing glazed tile in walling over 12 mm. C.P. (1:3) including cost, carriage, labour T & P taxes etc. complete $2 \times 8'3'' \times 5' = 82.50 \text{ sft}$ $2 \times 6'3'' \times 5' = 62.50$ 145.00 (-) $1 \times 2' \times 5' = (-) 10.00$ 135.00 sft or 12.54 sqm @ 700/sqm.....	<u>Rs. 8778.00</u>
25	Water proof cement paint two coat over a coat of cement wash using approved shade and brand of cement paint with cost carriage, taxes etc. of all materials, all labour T&P etc. complete finish as per the direction of the Engineer-in- charge Qty. as item No. 11+12+18 = 349.90 sqm @ 22/sqm.....	<u>Rs. 7698.00</u>
26	Painting two coat over a coat of primer on wood and MS work using approved brand and shade of paint and primer including cost, carriage, labour T & P taxes etc. complete $2.25 \times 233.31 = 524.95$	

$$0.50 \times 236.12 = 118.06$$

643.01 or 59.73 sqm
@ 70/sqm.....

		Rs. 4181.00
		Rs. 566398.00
27	Electrification	Rs. 40000.00
28	Sanitary	Rs. 25000.00
29	Borewell	Rs. 60000.00
		Rs. 691398.00
	Supervision 2%	Rs. 13828.00
	Labour cess 1%	Rs. 6914.00
	Total	Rs. 7,12,140.00
	Limited to	Rs. 6,92,677.00

REPORT

This is working estimate amounting to Rs. 6,92,677/- (Rupees Six Lakhs Ninety two Thousand Six hundred Seventy Seven) only for Construction of Training Centre at Goat Farm Jaringji, District - Kalahandi.

This is R.C.C. frame structure building with heavy grade beam provided at plinth level one lavatory and complete electrification & water supply, provision made in the estimate with Deep Bore well. One Over head tank installed at the roof level which can supply water to Goat sheds. The building to be utilised for training of farmers accordingly provision has been made.

The estimate has been prepared as per approved tender rate with the latest labor rate.

Asst Engineer (Civil)

GOVERNMENT OF ORISSA



(Directorate of A.H. & V.S., Orissa)

**NAME OF THE WORK : Working Estimate for Construction of
Training Centre at Goat Farm Jaringi,
Kalahandi.**

ESTIMATED COST : Rs. 6, 92, 677/-