**ASSIGNMENT/QUIZ**

**NAME**: ZOHAIB KHAN

**ID**: 14821

**DEPARMENT**: B-TECH (CIVIL)

**SUBJECT**: QUANTITY SURVEY & CONTRACT DOCUMENTS



2 bed room + veranda + kitchen + side both, (slab)

L\* W \*H/D

21.16\* 32.41\* 0.5=342.89 cft

Drawing hall + both , (slab)

L \* W \* H/D

14.5\* 15.875 \* 0.5 = 115.09 cft

Net qty

=342.89 + 115.09

=457.98 cft

457.98\* 1.54 = 705.28 cft

Ratio = 1 : 2 : 4 (sum = 7)

For cement = 1/7 \* 705.28

=100.75/1.25

=81 bags

For sand = 2/7 \* 705.28

= 201.50/100

= 2 sykra

For crush = 4/7\* 705.28

=403.01/100

=4 sykra

Ratio = 1 : 2 : 4 ( sum 1 + 2 + 4 = 7)

16.875 \* 1.54 = 25.98 cft

For cement = 1/7 \* 25.98 = 3.71 / 1.25

=3 bags

For sand = 2 /7\* 25.98 =7.42/100

=0.07 sykra

For crush = 4/7\* 25.98 = 14.84/100

= 0.14 sykra

Bed of stairs = L \* W \* H/D

= 11.25 \* 4 \* 0.5

= 22.5 cft

For cement = 1/7 \* 22.5

= 3.21/1.25

= 3 bags

For sand = 2/7 \* 22.5

= 6.42/100

= 0.06 sykra

For crush= 4/7 \* 22.5

= 12.85/100

= 0.12 sykra

Net qty = total qty – deduction qty

= 1752.75 – 221.805

Net qty = 1530.945 cft

For bricks = 1530.945 \* 30%

= 20667 bricks

For masonry = 1530.945 \* 30%

= 459.28 cft

Ratio = 1 : 4 ( sum of ratio = 1 + 4 = 5 )

For cement = 459.28 \* 1/5 = 91.856/1.25

= 74 bags required

For sand = 459.28 \* 4/5 = 367.42/100

= 3.6 sykra sand required

For stair = 1 step L \* W \* H/D = 4 \* 0.75 \* 0.75 = 2.25/2

1 step qty = 1.125 cft

15 \* 1.125 = 16.875 cft

Required bricks = 20667 no.s

Cement bags = 74 + 3 + 3 +81= 161 bags

Crush = 0.14 + 0.12 + 4 = 5 sykra

Sand = 3.6 + 0.07 + 0.06 + 2 = 6 sykra

**M.B 0F BUILDING**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| NO  | DESCRIPTION  | L | H./D | W | QTY | REMARKS |
| 1 | Back wall  | 32.41 | # | 0.75 | 267.38 |  |
| 2 | Sides wall | 35.5 | # | 0.75 | 585.75 | 37-0.75-0.75=35.5 |
| 3 | Drawing f/b wall | 13.75 | # | 0.75 | 226.875 | 13+0.75=13.75 |
| 4 | D.inner/s wall | 10 | # | 0.75 | 82.5 |  |
| 5 | Bed front wall | 30.91 | # | 0.75 | 255 | 32.41-0.75-0.75=30.91 |
| 6 | Bed/ mid wall | 12.66 | # | 0.75 | 104.445 |  |
| 7 | Main gate/fw | 17.91 | 9 | 0.75 | 120.89 | 32.41-1.5-13=17.91 |
| 8 | Kitchen wall | 7 | 11 | 0.375 | 28.875 |  |
| 9 | v/b both front  | 7 | 8 | 0.375 | 21 |  |
|  | back | 4.375 | 8 | 0.375 | 13.125 | 4+0.375=4.375 |
| 10 | Drawing both 1st | 7 | 11 | 0.375 | 28.875 |  |
|  | 2nd side | 4.375 | 11 | 0.375 | 18.04 | 4+0.375=4.375 |

**Total qty**=1752.755 cft

**Deduction of doors and windows**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | NO | L (ft) | H/D (ft) | W (ft) | QTY(cft) |
| D 1 | 4 | 3.5 | 7 | 0.75 | 73.5 |
| D 2 | 1 | 3 | 7 | 0.375 | 7.875 |
| D 3 | 3 | 2.5 | 7 | 0.375 | 19.68 |
| Front gate | 1 | 4 | 9 | 0.75 | 27 |
| Main gate | 1 | 10 | 9 | 0.75 | 67.5 |
| Window of d/b | 2 | 3.5 | 5 | 0.75 | 26.25 |

**Total qty =**221.805 cft