

M.M = 15
 time = 1 hour

II CLASS test
 Date 18/1/18 CE-307, Estimating and Costing,
 III civil Engg.

16.30 - 11.30 A.M

- Solve all questions, Carry equal marks.
1. Prepare a rate Analysis for I-CLASS Brickwork with 20x10x10cm Brick with 1:6 C:M for 10M³ work. (5) use current local rates.
 2. What is Balancing Depth. what are the various Methods for Calculating Earthwork for road. (5)
 3. Explain term obsolescence, Distress value, Sentimental value, Salvage value, Monopoly value. (5)

Particulars	Qty/No.	Rate	Cost
<u>Materials</u>			
I CLASS Brick 500/M ³	5000 No.	4500/Thousand	22500
CEMENT 13.5 Bags	0.45 M ³	300/- Bag	4050
Sand	2.7 M ³	1500/M ³	4050
		Total ⇒	<u>30600</u> =
<u>LABOUR</u>			
Head MASON	1/2 No.	700/day	350
MASON	7 No.	600/day	4200
Mazdoor	15 No.	350/day	5250
Misc.	L: S	—	1000
		Total ⇒	<u>10800</u>

Total of Material & Labour ⇒ 41400/-
 Add water charges @ 1 1/2% ⇒ 621/-
 Add C.P @ 10% ⇒ 4140/-
 Grand total ⇒ 46161/- for 10M³
 or = 4616 Per M³

Sol ⇒ 2

While designing the Canal project, if the bed, level of Canal are so adopted, that the quantity of earth, excavated is just sufficient for making the two banks on either side of the Canal. The Depth of excavation is then called Balancing or economical Depth. The various Method to calculate the earthwork are as under

1. Mid-sectional Area Method
2. Mean sectional Area
3. Prismatical formula.

~~22/1/18~~

1. Mid Sectional Area, $A = Bd_m + Sd_m^2$

$$Qty. = A \times L$$

2. Mean Sectional Area one end Area $A_1 = Bd_1 + Sd_1^2$
other end $A_2 = Bd_2 + Sd_2^2$
Mean Area

$$A = \frac{A_1 + A_2}{2}$$

$$Qty = \frac{A_1 + A_2}{2} \times \text{Length}$$

3. Prismaidal formula: - $Q = \frac{L}{6} [A_1 + A_2 + 4A_m]$

Sel \Rightarrow 3 Obsolescence \Rightarrow the value of the property or structures become less by its becoming out of date in style, in structure in design etc. This is known as obsolescence.

Distress Value \Rightarrow when a property is sold at a lower price than that of an open market rate, due to financial difficulties of a vendor or panic due to war and riots known as distress value.

Sentimental Value \Rightarrow In some cases some sentiments or feelings of the owner is attached and he does not desire to sell even the buyer may pay much more than the actual value of the property. Such price is the sentimental value.

Salvage Value \Rightarrow It is the value of property building at the end of its utility period without dismantled.

Monopoly value \Rightarrow Some time certain property possess special advantage with respect to adjoining properties, due to its location, size, shape etc. owner may demand very high price. Such price is known as monopoly value

~~2/25/2018~~