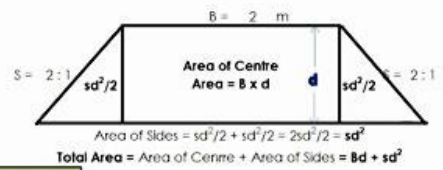


ESTIMATING AND COSTING OF CIVIL ENGINEERING PROJECTS (LECTURED BY: Engr. WASEEM RAJA)

2 Top width of an embankment is 2m. Side Slope on both sides of this bank is 2:1. Levels of top surface of this bank is to be 250 m. Natural Surface Level at 30 m interval are given below. Workout the quantity of earth work for this embankment according to Mean Depth Method.

RD	0	30	60	90	120	150
NSL	248.145	248.5	249.25	248.75	248.15	247.75
Breadth of the Top of Bank	= B	= 2	m			
Side Slope on Each Side	= S	= 2:1	= 2			
Length of Each Section (Interval)	= L	= 30	m			
Top Level	= TL	= 250.00	m			
Depth or Height of Bank	= d	= TL - N.S.L				



Station or Chainage	NSL	Top Level TL	Depth (D) D = TL-NSL	Mean Depth (d) dm=(D1+D2)/2	Centre (AC) AC= B x d	Area of Sides (AS) AS= S x d^2	Total Area A= AC+AS	Length of Each Section (L)	Each Section Q = A x L
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