

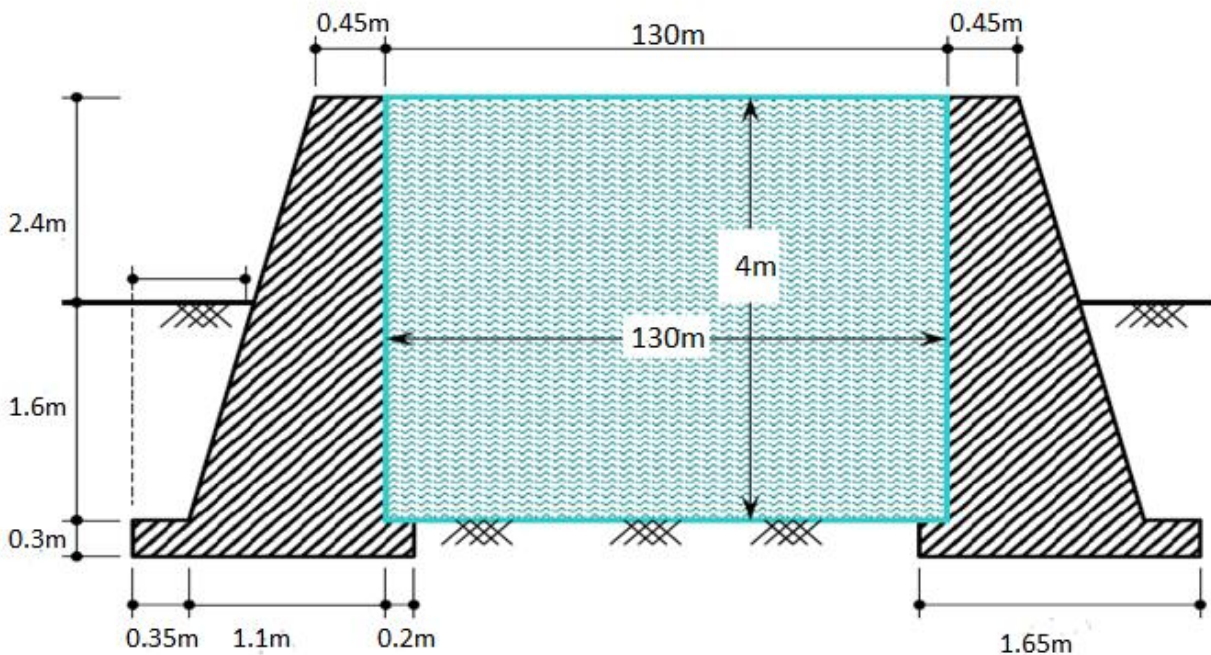


بسم الله الرحمن الرحيم

First Question

14/30 ()

Estimate quantity of construction materials [cement (ton), sand (m³) and gravel(m³)] used to build a round concrete tank (open top & bottom) used for rainwater , knowing that mixing ratios of the concrete for a basement and side walls are **1:3:6** and **1:2:4** respectively. Note that, the basement depth is **0.3m**.



Dimensions are not to scale

Using Calculator (Yes)



Total Grade: 30

Using Dictionary (No)

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Course No: CON4301
Course Title:
Specs.& Quantity Estimation
Date: 27 / 11 /2017
No. of Questions: (2)
Time: 60 Minutes
Using Calculator (Yes)

University of Palestine

Second Midterm Exam
First Semester
2017/2018
Total Grade: 30

Instructor Name: Dr.Mohammed Ahmed
Student No.: _____
Student Name: _____
College Name: Engineering
Dep. / Specialist: Civil Engineering
Using Dictionary (No)

Second Question**16/30 ()**

Estimate the quantities of Reinforcing Steel (in kg) for the following works:

Footings **(6 points)**

Column necks **(10 points)**

Knowing that,

- Depth of excavation for isolating footings is **1.3 m**
- Ground beams **25*50 cm**
- Consider a concrete cover of **5 cm** and **2.5 cm** for footings and column necks respectively.
- Stirrups are **φ8@ 20cm**

Item Description	Quantity	Dimensions (cm)	Reinforcement
Footings	5	190*170*45	14φ12 in long direction 16φ12 in short direction
Column necks	5	25*60	8φ14

Using Calculator (Yes)



Total Grade: 30

Using Dictionary (No)

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