Uka Tarsadia University (Diwaliba Polytechnic)
Diploma in Environmental Engineering
Assignment (ECES)

Unit 1 Introduction

1. Which data are required for preparing an estimate?
2. Enlist different types of estimate. Discuss any one in detail.
3. Discuss annual repair estimate.
4. Define estimate & elaborate detailed estimate.
5. Explain maintenance estimate.
6. Define the "estimating & costing ''.Enlist types of estimate and methods for
7. Approximate estimate.

Unit 2 Mode of Measurements

1. What are the general rules of measurement based on IS: 1200?
2. What are the principles of units of Items?
3. Give accuracy criteria in the measurement of
    1) Brick work
    2) Earth work
    3) D.P.C
    4) R.C.C
    5) P.C.C
    6) White Washing

Unit 3 Detailed Estimates

1. Write a brief note on provisional sum.
2. Define the prime cost and explain it in brief.
3. Write short note on Day Work.
4. Write a short note on Contingencies.

Unit 4 Rate Analysis

1. What are the Factors affecting rate analysis?
2. Write a brief note on Schedule of Rates with item and their rates.
3. Calculate the materials for 100m2 area and 12mm thick plaster (1:4).
4. Calculate the materials for 100m2 area and 20mm thick plaster (1:3).

Unit 5 Detailed Estimate of Environmental Structures

1. The Formation level of canal is 100 m and the width is 7.50m.
2. the side slopes are 1:1 (H.V) both in cutting and filling. Find: A)

3. Quantity of cutting B) Quantity of filling
4. Solve example by mid-sectional area method.

Chainage	Ground level
0	10.55
30	10.50
60	10.40
90	10.35
120	10.20
150	10.00
180	9.80
210	9.65

5. Estimating only three items for the septic tank.

Estimate of a septic tank
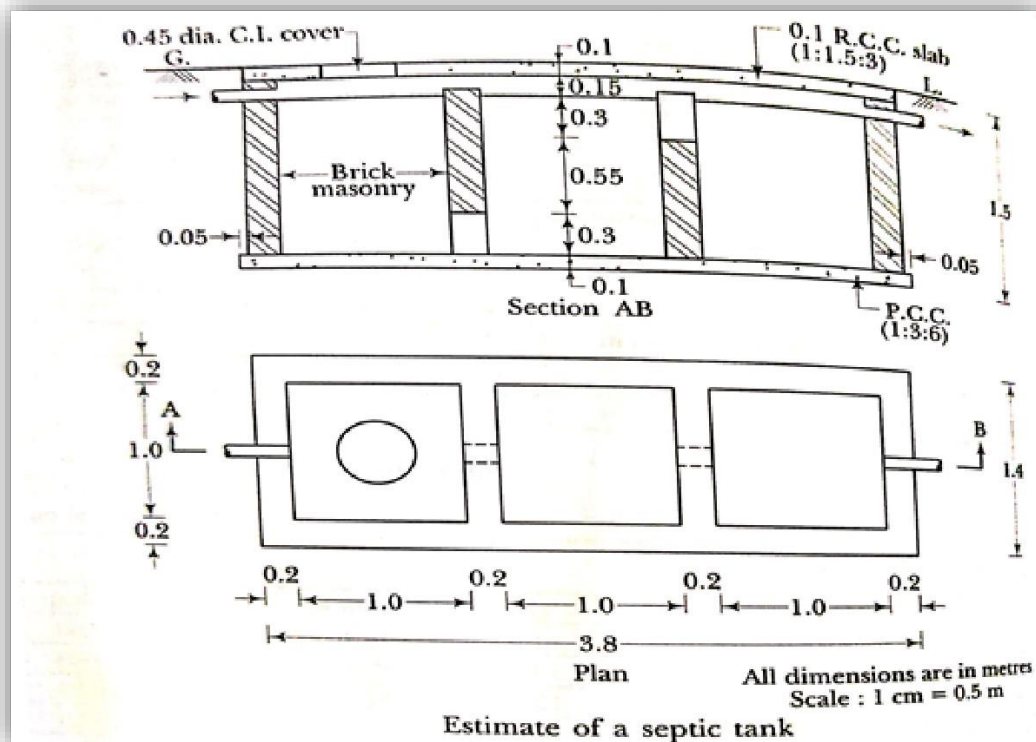
Unit 6 Valuation

1. Write characteristics of good valuer.
2. Define: cost, price, value, real estate and personal estate.
3. Give difference between Estimation and Valuation.
4. Give difference between free hold property and lease hold property.
5. Give difference between depreciation and obsolescence.

6. What will be the depreciated value at the end of 10th year of a property of the cost Rs.10,00,000 and its salvage value is Rs. 90,000 after 50 years. Consider straight line method and constant percentage method.
7. Give difference between gross income and net income.