

Mid-West University
Examinations Management Office

Semester End Examinations 2081

Bachelor level/ B.E. Civil/ 5th Semester

Time: 3 hours

Full Marks: 50

Pass Marks: 25

Subject: Estimating and Valuation (CE324)

- *Attempt all the questions*
- *Figures in the margin indicate full marks.*
- *Assume suitable values, with a stipulation, if necessary.*
- *Candidates are required to answer the questions in their own words as far as possible.*

1. a) Define purpose of estimating. Mention various methods of taking of quantities. [4]
b) What is meant by approximate estimate? What documents should be supplied along with this estimate? What are the different methods of preliminary estimate? Explain them clearly. [4]
2. a) How do you prepare the rate of an item? What are the different factors which affect the rate of an item? Explain with necessary example clearly. [4]
b) Calculate nos bricks, cement, sand and water for 1000 m² of a half brick thick partition wall with (1:4) cement mortar. Assume necessary data if any. [4]
c) Calculate the quantities of materials required for 150m² of external cement plaster (1:6) on the stone wall [4]
3. a) Define Depreciation. Explain the various method of depreciation. [4]
b) A Land Developer desires to purchases a piece of converted land measuring 7500000.00 Sqm in area. After developing this land for housing colony he wants to sell the plots at the rate of 350.00 per sqm. Which is prevailing in the vicinity and thus earn net profit 15 percent? Workout the maximum compensation which can be given to the owners whose land is to be acquired for the developing of the plots, assuming
 - i. 45% are into be provided for roads, parks, drainage, and other public amenities,
 - ii. Colony improvement charges Rs 16.00 per sqm.
 - iii. Developer need 12% profit
 - iv. Engineers and architects fee for surveying and planning the colony 5% on the sale of plots.
4. Work out the quantity of earth work in cutting and filling of a part of a hill road as per data [8]
given below:

Transverse slope of ground = 1 in 6

Formation width of road = 7.5m

Side slope in cutting = 1:1.5

Side slope in filling = 2:1

Distance	1500	2000	2500
RL of ground	1198.8	1200.20	1206.00
RL of formation	1199.20	1201.00	1205.00

5. Estimate the quantities of the following items of the works from the given RCC slab culvert [12]
drawing
- Earthwork excavation on foundation
 - PCC (1:3:6) in Foundation
 - Brick work in 1:4 cement mortar
 - PCC (1:2:4) For RCC Slab
 - Reinforcement works

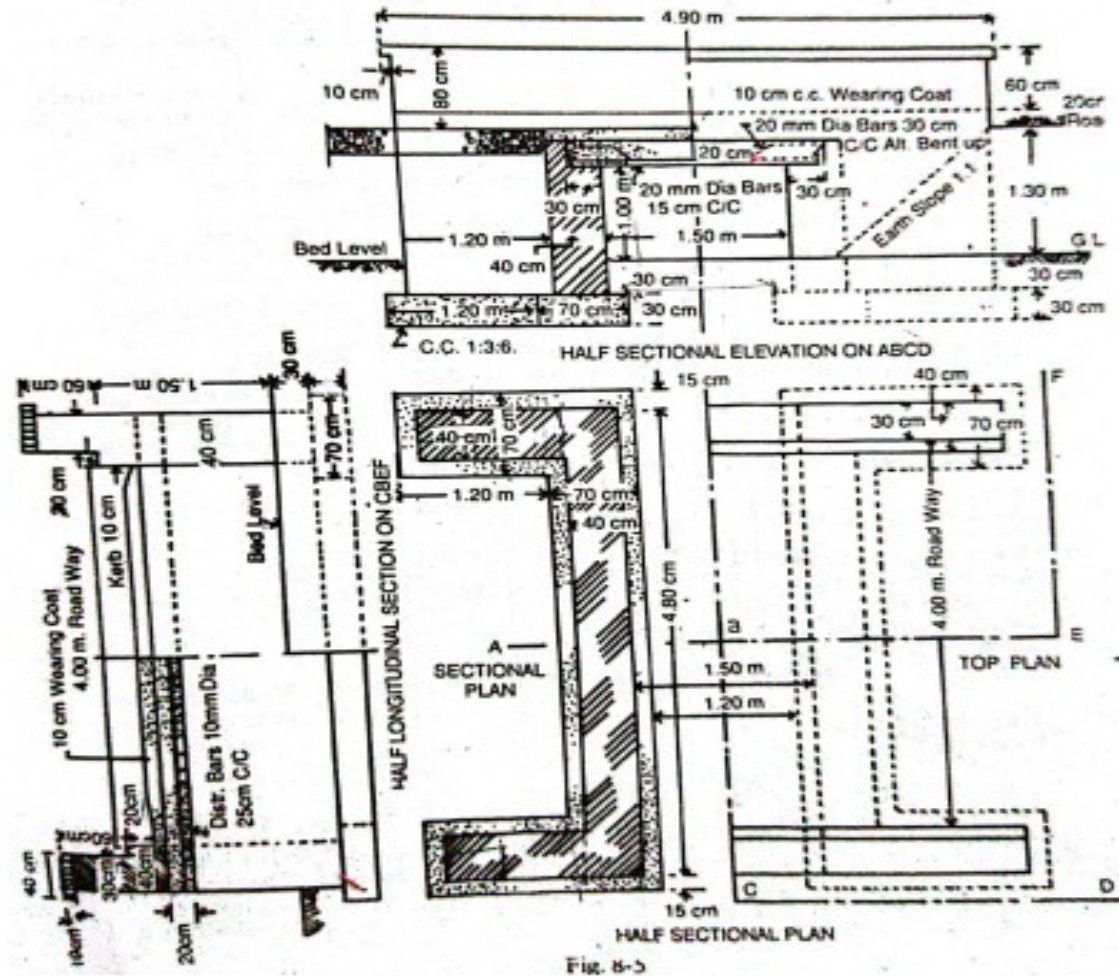


Fig. 8-5

The End