BHARATI VIDYAPEETH INSTITUTE OF TECHNOLOGY
Question Bank (K-Scheme)

Name of subject: Estimating, Costing and Valuation
Unit Test: I
Subject code: 314313 **Course: CE**

Semester: IV

Unit 3 (Detailed estimate) 30 marks

2 Marks

1. Calculate steel reinforcement in kg for 60 cu.m R.C.C. work of slab where 0.9% steel reinforcement is provided.
2. What is bar bending schedule? State any two advantages of preparing bar bending Schedule.
3. Enlist the methods of earthwork computation.

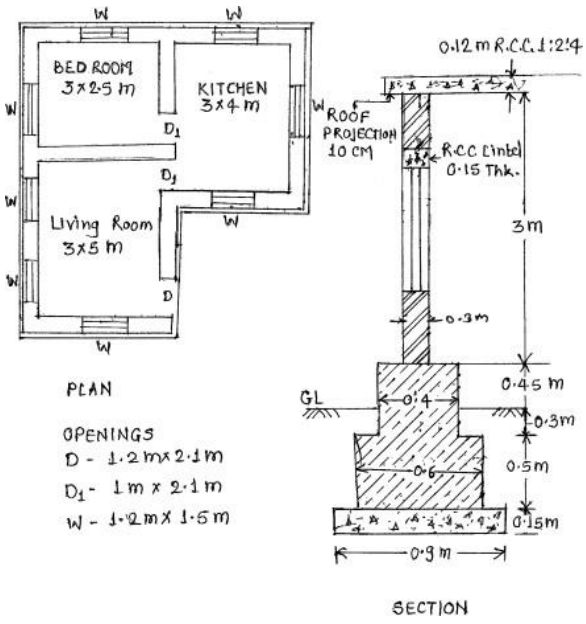
4 Marks

1. An R.C.C roof slab of overall size 5000 X 2500 mm and thickness 150 mm is provided with 12 mm diameter main bar bent up alternately and placed at 150 mm c/c the distribution steel of 8 mm diameters is provided of 200 mm c/c. the all-round cover is 20 mm. find out the total quantity of steel and prepare bar bending schedule.
2. Calculate the quantity of earthwork for a road by mid sectional area method with following data

Chainage in m	50	60	70	80	90
G. L. in m	101.50	101.00	99.00	98.00	96.50

R. L. of formation level at 50 m chainage is 103.00 m having falling gradient 1 in 40 top width 10 m and side slope is 2:1.

3. Work out quantities of following any three items from Fig.
   a) Earthwork in excavation
   b) U.C.R. masonry in C.M. 1 : 6 in foundation and plinth.
   c) Brickwork in C.M. 1 : 5 in superstructure, Thk. – 30 cm
   d) R.C.C. work in roof slab (M20 concrete)



Unit 4 – Rate Analysis (12 Marks)

2 Marks

1. Define Rate analysis and state its purpose.
2. Define rate analysis and state the factors affecting rate analysis.
3. Explain in brief lead and lift.

4 marks

1. Workout the material required for 50 m3 brickwork masonry in cement mortar 1:6.
2. Calculate the quantity of cement, sand , aggregates for 80 m^3 cement concrete having proportion 1:1.5:3.
3. Prepare the rate analysis for plain cement concrete of grade M15 (1:2:4).
4. Prepare the rate analysis for 12 mm thick plaster in C. M. (1:4) in superstructure.

Unit 5 (Valuation) 12 marks

2 Marks

1. Enlist purpose of valuation.
2. Define cost, price and value.
3. Define book value and market value.
4. Define depreciation.
5. Enlist the methods of depreciation.

4 marks

1. A land measuring 200 sq. m is purchased at rate of 3500/- per sq. m. and building of 100 sq. m area is constructed on it. The cost of construction is 7000/- per sq. m. if the return on the cost of land is 8% and building is tobe 10 %. Calculate monthly rate of property. Assume all outgoing 30% gross rent.
2. Find the value of the property consisting of land and building from the following data, rent inclusive of all taxes 400/- P. M., outgoings 20% of gross rent, net yield expected from the property 6%, and future life of building 60 years.
3. A person has invested 13,60,000/- in land and building, expecting 7% return. Assuming annual sinking fund to be 5000/-, cost of annual repairs to be 7500/- and management charges 45000/- p. a., other outgoings are 205 of gross rent. Decide monthly rent.