

3RD SEM

Th4 Estimation & Cost Evaluation- I

2 Marks questions

- a. Define Depreciation and Obsolescence.
- b. Write down the volume and weight of one bag of cement.
- c. Write down the unit of following items.
(i) Earthwork in filling (ii) lime concrete terracing
- d. Define floor area of a building.
- e. What do you mean by lead and lift?
- f. Calculate the standard weight of 20mm diameter bar of 1 meter length.
- g. What do you mean by sinking fund?
- h. What do you mean by AR estimate?
- i. Draw the details of measurement form used in estimate.
- j. Classify the labours as per OPWD and also mention their rates.

5Marks Questions

- a. Write the duties of Junior Engineer.
- b. Calculate the dry materials required for 500m² of cement plaster (1:6) of 12mm thickness.
- c. Describe briefly about different types of values of a structure.
- d. Calculate the cost of construction of 8 m³ of brickwork (1:4) using standard bricks of size 19c.m×9c.m×9c.m .Use latest OPWD rates
- e. Differentiate between Plinth area estimate and cube rate estimate.
- f. Calculate the quantity of woodwork in frames of 2 doors and 3 windows having following specifications
Size of door = 1.2m ×2m , size of window = 1×1.5m
Size of chowkath = 10 c.m×8 c.m.
- g. What do you mean by analysis of rate? Write the purpose of analysis of rates.

10 Marks Questions

- 3 Prepare the quantity estimate for the following items from the given drawing in Fig-1.
(a) Earthwork in excavation in foundation
(b) 1st class brickwork in foundation and plinth(1:3) .
- 4 Prepare the quantity estimate for the following items from the given drawing in Fig-1.
(a) First class brickwork in superstructure (1:3)
(b) 2.5 c.m dpc work (1:2:4)
- 5 (a) Calculate the dry materials required for the quantity of items calculated for Q 4(b) .
(b) Analyse the rate of materials and labours as per OPWD for Q .4 (a).
- 6 Write the role of following persons.
(a) Divisional accountant
(b) Executive engineer
- 7 Describe briefly about different types of estimates.