

CE 704
B.E. VII Semester
Examination, December 2014
Quantity Surveying And Costing
Time : Three Hours
Maximum Marks : 70

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Note: Attempt any five questions. Internal choice is given with each question. Assume data suitably if any is found missing or misprint.

1. a) Explain the following types of estimates. 7

- i) Plinth area rate estimate
- ii) Revised estimate
- iii) Cubical content rate estimate

b) Discuss the importance and various purposes of estimate. 7

OR

a) Prepare a preliminary estimate of a three storied office building having a carpet area of 1200 sqm with following data. It may be assumed that 30% of the built up area will be taken up by the corridors, verandahs, lavatories, staircase etc. and 10% of the built up area will be occupied by walls.

- i) Plinth area rate - Rs. 10000.00 per m
- ii) extra due to deep foundation at site = 1.1% of building cost
- iii) Extra for special Architectural treatment - 0.5% of Building cost
- iv) Extra for sanitary and water supply installation - 6% of Building cost
- v) Extra for Electrical installation = 12.5% of building cost
- vi) Contingencies = 2 1/2%
- vii) Supervision charges 8% 8

b) Explain the following: 6

- i) Plinth area
- ii) Carpet area
- iii) Built up area

3 a) Explain in detail about CSR. 6

b) Prepare the rate analysis for 12 mm cement plastering 1:6 unit 1 sqm. 8

OR

4. a) Explain how the various factors affect the rate of an item. 6

b) Prepare the rate analysis for half brickwork wall (10 cm thick) with 1:3 cement mortar-unit 1 sqm. 8

5. a) Explain the following:

- i) Schedule of bars
- ii) Calculation of length of bent up and hooked bars. 6

b) Explain the Long wall-Short Wall method and centre line method in detail. 8
OR

6. Estimate the quantity of earth work required in a road embankment having 10 m formation width, 2:1 side slope in a length of 7 chains, each chain being 30 m long. The central difference of formation and ground is 0.70 m, 1.20 m, 2.00m, 1.00 m, 1.50 m, 2.10 m, 1.80 m and 1.50 m at 0 to 7th chain respectively. Assume the ground is level in direction transverse to the centre line.

7. a) What is DPR? Discuss the content of DPR in detail. 8
b) Define the following 6
i) Overhead charges
ii) Contingencies
iii) Work charge establishments

OR

8. a) Discuss in detail how the cost of work can be minimized to a certain limit. 7
b) What percentages are recommended for different services in building? 7

9 Define the following

- i) Sinking fund
ii) Scrap value
iii) Gross income and net income
iv) Annuity
b) What are the various methods of valuation Explain any one in detail. 6
OR

10. a) Explain the following

- i) Purposes of Valuation
ii) Depreciation. 6
b) In a plot of land costing Rs. 8,00,000.00 a building has been newly constructed at total cost of Rs. 20,00,000.00 including sanitary and water supply works, electrical installations etc. The building consists of four flats for four tenants. The Owen expects 8% return on the cost of construction and 50 return on the cost of land. Calculate the standard rent for each flat of Idle building assuming -
i) The life of building as 60 years and sinking fund will be created on 4% interest basis.
ii) Annual repair cost at of the cost of construction.
iii) Other outgoings including taxes at 30% the net return on the building. 8

