MANMOHAN TECHNICAL UNIVERSITY
MODEL QUESTION
2082

Level: Bachelor   **Year/Part: III/II**
Faculty: School of Engineering   **F.M.: 50**
Program: Civil Engineering   **P.M.: 20**
Subject: Estimating Costing and Valuation (EG704CE)   **Time: 3 Hours**

Group A (Attempt ALL Questions:)   [$10 \times 1 = 10$]

Instructions:
- Choose one answer out of four options.
- Use black ball pen for shading only one circle for correct option of a question in Answer Sheet which you have provided.
- No mark will be awarded for cutting, erasing, over writing and multiple circles shading

1) The most reliable estimate is:
   a. Detailed estimate   b. Plinth area estimate   c. revise estimate   d. cube rate estimate

2) Volume of cement in one bag is:
   a. 0.067 m^3 b. 0.050 m^3 c. 0.033 m^3 d. 0.025 m^3

3) The unit of chaukath (door frame) measurement is:
   a. running meter   b. M^2
   c. M^3 d. all of the above

4) The value of the property (without being dismantle) at the end of the useful life period is known as
   a. scrap value   b. salvage value
   c. book value   d. junk value

5) Detailed specification specified the following for a particular item of work in a project:
   a. quality and quantity   b. proportion of material
   c. method of preparation and execution   d. all of the above

6) The nominal lead and lift allowed for the earthwork in the excavation are:
   a. 50 m and 2m   b. 30m and 2m
   c. 30m and 1.5m   d. 20m and 1m

7) Abstract of cost is prepared:
   a. To summarize total cost   b. To calculate depreciation
   c. To write specifications   d. To prepare drawing

8) Obsolescence means:
   a. Wear and tear   b. Outdated due to new technology
   c. Loss by accident   d. Increase in value

9) No deduction is made for masonry opening if the area of opening is:
   a. Less than 0.25 m²   b. Less than 0.50 m²
   c. Less than 1.00 m²   d. Less than 2.00 m²

10) Pick up the incorrect statement from the following
  (a) The built up covered area at the floor level of any storey of a building is called plinth area
  (b) The usable covered area of the rooms of any storey of a building is called carpet area
  (c) The carpet area of a building along with area of its kitchen, pantry, store, lavatory, bath room is called floor area
  (d) None of these

Group B (Attempt any eight questions)   [8*2=16]

1. What are various methods of taking quantities of works?
2. Prepare tables of quantity sheet and abstract cost for a residential building.
3. Write two differences between general specification and detailed specification.
4. Explain in detail the method of measurement of plastering works.
5. Distinguish clearly between:
   i) Salvage value and scrap value
   ii) Cost based method of valuation and development method of valuation
6. What are the purposes of estimating?
7. 'An estimate is never the actual cost of the work', justify your answer.
8. What are the units of measurement of following item of work?
   i) Brickwork in foundation ii) Marble in kitchen iii) Flat brick soling iv) RCC works
9. What are the factors on which the unit rates of particular item of work depends?

Group C   (Attempt all questions)   [3*8=24]

10. Calculate the quantities of earthwork for a portion of road from the following data: [8]
    Formation width of road = 12 m
    Side slope of cutting and filling = 1.5:1 and 2:1 respectively

Chainage (m)	0	50	100	150	200	250
R.L of ground	101.75	103.3	104.65 102.25	103	104	102

    Formation level at 0 m chainage = 101 m
    Rising gradient of 1 in 100 from 0 to 150 m chainage and falling gradient of 1 in 100
    from 200 to 250 m chainage.

11. Estimate the quantities of the following items of work from the accompanying
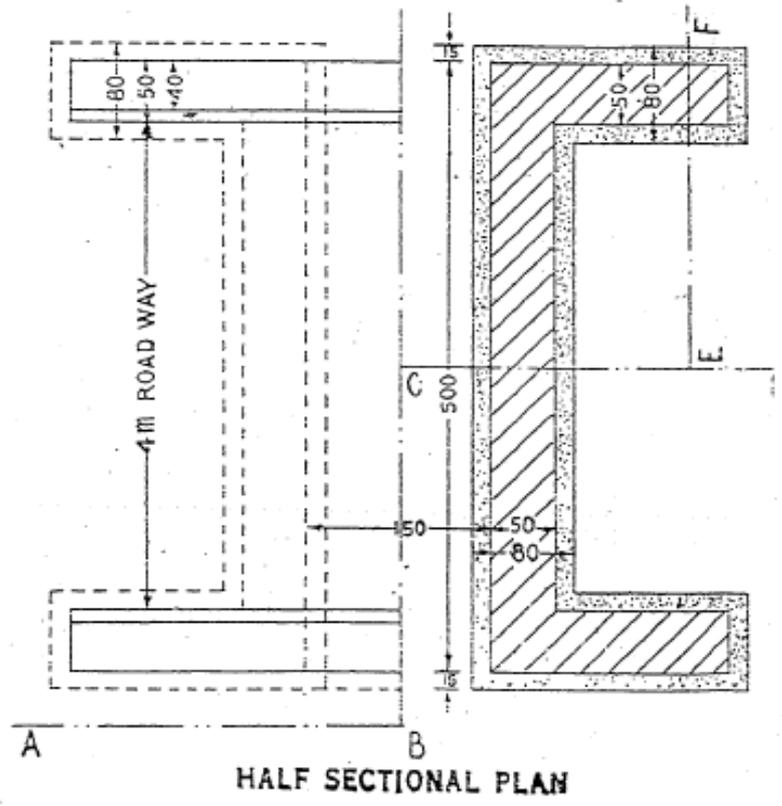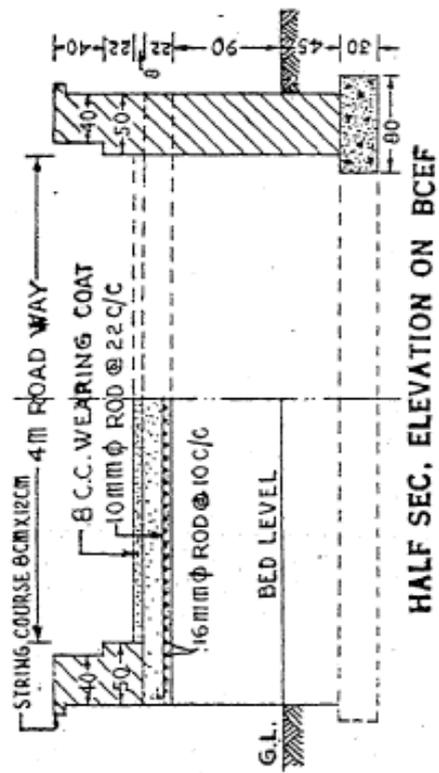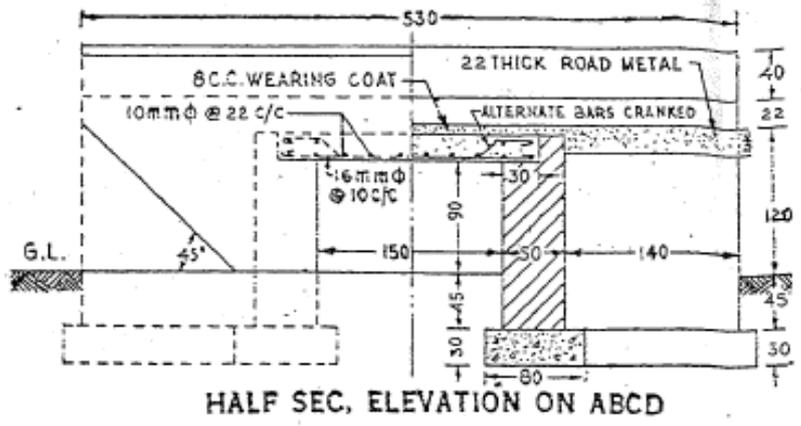   RCC slab culvert drawing.
      a. Earthwork in excavation in foundation
      b. PCC (1:3:6) in foundation
      c. Brick work in (l:4) cement mortar
      d. PCC (l:2:4) for RCC slab   [8]

12. Prepare an analysis of rate of brick masonry in (1:5) cement mortar in super structure.   [8]
    Assume size of brick 240 x 130 x 65mm and thickness of mortar joint is 12mm. Assume
    suitable rates of material and labour.

HALF SEC. ELEVATION ON ABCD

HALF SEC. ELEVATION ON BCEF

HALF SECTIONAL PLAN

All dimensions in centimetre

***** All the Best ***