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**Question Paper Code : 51264**

**B.E./B.Tech. DEGREE EXAMINATION, MAY/JUNE 2016**

**Seventh Semester**

**Civil Engineering**

**CE 2402/CE 1401/CE 72/10111 CE 702 – ESTIMATION AND QUANTITY SURVEYING**

**(Regulations 2008/2010)**

**(Common to PTCE 2402/10111 CE 702 – Estimation and Quantity Surveying for**

**B.E. (Part-Time) Fifth/Sixth Semester Civil Engineering – Regulations 2009/2010)**

**Time : Three Hours**

**Maximum : 100 Marks**

**Answer ALL questions.**

**PART – A (10 × 2 = 20 Marks)**

1. What are the different types of Approximate Estimate ?
2. What is mean by Centre line method ?
3. Define aqueduct.
4. Write the importance of soak pit.
5. List the reasons for rejection of all tenders.
6. List the qualities of an arbitrator.
7. Write any two purposes of valuation.
8. What is market value ?
9. What is the importance of report preparation ?
10. Why is valuation necessary ?

**PART – B (5 × 16 = 80 Marks)**

11. (a) Work out the quantities of materials required for the following works : **(8+8)**
- (i) First class Brick work in CM 1 : 5 : -1 m<sup>3</sup>
  - (ii) Plastering in CM 1:6, 12 mm thick – 10 m<sup>2</sup>.

**OR**

- (b) (i) Describe the different types of Estimate. **(8+8)**
- (ii) Explain the methods used to find the approximate cost of the building.

12. (a) Prepare a detailed estimate of a septic tank for 25 users. The tank shall be of first class brick work in 1:4 cement mortar, the foundations and floor shall be of 1:3:6 cement concrete. Inside of septic tank shall be finished with 20 mm cement plaster with 1:3 mortar mixed with standard water proofing compound. Upper and lower portion of soak pit shall be of second class brick work in 1:6 cement mortar and middle portion shall be of dry brick work. Roof covering slabs and baffle walls shall be of precast RCC. The length of the connecting pipe from latrine seat may be taken as 3 m. Assume suitable rates.

**OR**

- (b) A road is to be constructed in a side long ground partly in cutting and partly in banking. The formation width of road is 10 metre, cross slope of ground is 6:1, side slopes in banking 2:1 and in cutting 1.5:1, depth of cutting at the centre is 45 cms althrough. Calculate the quantity of earthwork in banking and in cutting for a length of 200 metre. Estimate the cost of making the formation of the road if the rate of earth work, is ₹ 1,50,000 per cubic metre.

13. (a) Describe the detailed specifications of various items of works for the following :
- (i) Reinforced cement concrete **(8)**
  - (ii) Colour washing **(2)**
  - (iii) Brickwork I class **(2)**
  - (iv) Plastering cement mortar or lime mortar. **(4)**

**OR**

- (b) (i) Describe briefly about arbitration and tender. **(8)**
- (ii) Explain the various types of contract system. **(8)**

14. (a) Explain the various methods of estimating cost depreciation.

**OR**

(b) Explain the procedure to work out the value of a property by rental method of valuation.

15. (a) (i) Explain the procedure for preparation of reports. **(8)**

(ii) How will you prepare a report on estimate of a culvert ? **(8)**

**OR**

(b) Write short notes on the following :

(i) Lump-Sum item **(4)**

(ii) Security deposit **(4)**

(iii) Labours requirement **(4)**

(iv) Call of Tenders **(4)**