

**B.Tech. SEM -VI (Civil ) 2014 Course (CBCS) : SUMMER - 2019**  
**SUBJECT-ESTIMATING COSTING AND VALUATION**

Day: Monday  
Date: 27/05/2019

**S-2019-2716**

Time: 02.30 PM TO 6:30 P.M  
Max. Marks: 60

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**N.B.:**

- 1) All questions are **COMPULSORY**.
  - 2) Figure to the right indicate **FULL** marks.
  - 3) Use of non programmable **CALCULATOR** is allowed
  - 4) Assume suitable data **WHEREVER** necessary.
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**Q.1 a)** What is detailed estimate? Give its necessity and enlist the list of document attached with it. **(05)**

**b)** Explain plinth area estimate and cubic content method of estimate. **(05)**

**OR**

**Q.1 a)** Explain service unit method and bay method. **(05)**

**b)** State the various modes of measurements of any 10 items of civil engineering works. **(05)**

**Q.2** A two room block with a common wall consists of **(10)**

- i) living room 4m X 5m (Internal dimension)
- ii) kitchen room 3.5 m (Internal dimension)
- iii) All walls are of 30cm thickness.
- iv) Two doors of size 1.2X2.1 m on front side
- v) Two windows for every room of size 3mX4m
- vi) Height of the rooms is 3.2m

Draw a centerline plan and work out the quantities of following items.

- a) Brick masonry in super structure
- b) Internal and external plaster in 1:6 cement mortar (Take plinth height 0.6m)
- c) Painting from internal and external side

**OR**

**Q.2** A RCC beam 23X60 cm size have 6m clear span and rests on a 30 cm wall. It consist of 4 bottom bars of 16 mm diameter ,two bent bars of 12 mm diameter and two straight bars of 10mm diameter in top. It also possesses stirrups of 8 mm diameter at 180 mm centre to centre through out the beam calculate quantities of concrete also draw the diagram and show all steel. Prepare bar bending schedule. **(10)**

**Q.3** Find out the rate for one meter of 1:1.5:3 cement concrete for slab excluding steel. Show all the details in tabular form. **(10)**

**P.T.O.**

**OR**

- Q.3** Work out the quantity of earthwork for 120m road length, formation width 9 meter, side slopes in embankment is 2:1 and in cutting is 1.5:1 (10)

Chainage	Reduced Level	Formation level
0	105.00	103.60
30	104.50	104.00
60	102.90	103.00
90	101.60	103.20
120	99.70	102.80

- Q.4** Calculate the capitalized value of the property from following data. (10)
- i) estimated life of building 75 years
  - ii) annual rent of plot –Rs. 500/- per year
  - iii) the gross rent from building is Rs600/- per month
  - iv) all outgoings 34% of gross rent
  - v) total replacement of property Rs. 100000/-
  - vi) scrap value 10%
  - vii) return on investment of building 6 %
  - viii) net yield 6 %

**OR**

- Q.4 a)** Discuss various factors affecting value of the property. (05)

**OR**

- b)** Explain building lease and occupational lease. (05)

- Q.5 a)** Write short notes on: (06)

- i) Security deposit
- ii) Pre bid conference
- iii) Liquidated damages

- b)** Explain the unbalanced tender with suitable with suitable example. (04)

**OR**

- Q5 a)** Prepare a tender notice to be advertised in news paper for construction of a school building. The estimated amount is Rs. 2 crores and work is to be completed in 18 months. Give also pre qualification criteria. (06)

- b)** Explain various forms of BOT tender. (04)

- Q.6 a)** What are the types of termination of contract? What are the types of penalties that are imposed on a contract and why are they imposed? (05)

- b)** Explain the role of arbitrator in civil engineering works. Explain how an arbitrator can be appointed and his power. (05)

**OR**

- Q.6 a)** Explain EMD & SD with all condition (05)

- b)** Explain in briefly: (05)

- i) Dispute resolution board
- ii) Voidable contract
- iii) Arbitration

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