

**B.Tech. SEM -VI (Civil) 2014 Course (CBCS) : WINTER -  
2017**

**SUBJECT: ESTIMATING COSTING AND VALUATION \***

Day: Wednesday  
Date: 22/11/2017

**W-2017-2184**

Time: 10.00 AM TO 02.00 PM  
Max. Marks: 60

**N.B:**

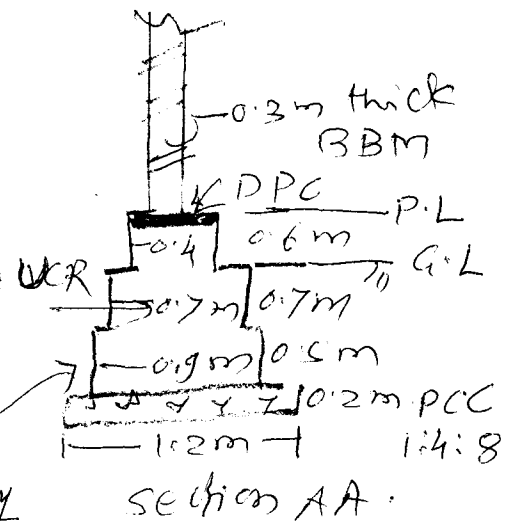
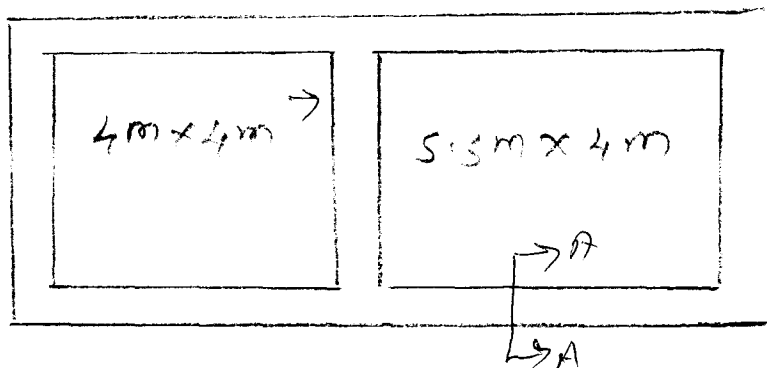
- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Use of non-programmable **CALCULATOR** is allowed.
- 4) Assume suitable data if necessary.

- Q.1**
- a) Enlist different types of estimates and explain plinth area estimate. **(04)**
  - b) A hospital building of 150 beds is constructed in Mumbai with 25 lacks. Find approximate estimate of 35 beds in the same locality by using service unit methods. **(03)**
  - c) What is D.S.R.? Write down the description of brick masonry and excavation as per DSR. **(03)**

**OR**

- a) What is detailed estimate? What are the documents attached with it? **(04)**
- b) What is preliminary estimate? How the preliminary estimate is carried out for road, irrigation canal? **(03)**
- c) What is contingencies and work charged establishment? **(03)**

- Q.2** Determine the quantities of following items for given plan and section **(10)**
- i) Excavation
  - ii) UCR masonry in foundation and plinth
  - iii) 1:4:8 PCC in foundation and plinth
  - iv) DPC 15 cm thick
- Use long wall short wall methods All walls are of 300 mm thick above plinth level.



All walls 0.3m Thick.

UCR  
masonry

Section AA.

**P.T.O.**

**OR**

- a) Find out quantitation of concrete and steel for RCC slab on 4m X 5m room (05)  
(Internal dimensions) External walls 230 mm thick. Also prepare bar bending schedule Reinforcement details.  
Main steel – 8 mm diam 120 mm C/C.  
Distribution steel – 6 mm diam 150 mm C/C.

- b) Find out quantities of concrete and steel for RCC column also prepare bar bending schedule (05)  
Size of column 230 mm X 600 mm.  
Length of column 3.5 m.  
Main steel 16 mm diameter 8 NOS.  
Links 8 mm diameter 150 mm C/C.

- Q.3** a) Find out rate per cum for B.B masonry in 1:6 cement mortar. (05)

**OR**

- b) Find out quantity of materials required for 12 mm thick cement plastering in 1:4 cement mortar. (05)

**OR**

- Find out the quantities of earthwork from the given data. Formation width of road is 10m (10)  
R.L. of formation 115m upward gradient 1in150 upto 600m. Remaining downward gradient 1 in 300  
Side slopes 2:1 in banking and 1:5:1 in cutting.

Distance (m)	0	100	200	300	400	500	600
R.L (m)	114.50	114.65	115.10	115.00	116.15	116.65	117.85

Distance (m)	700	800	900	1000	1100	1200
R.L (m)	118.00	117.70	117.60	117.45	117.70	119.00

- Q.4** a) What are the various methods of valuation? Explain value, cost, Gross income and net Income of property. (05)  
b) State True or False and comment on following:  
i) The amount of sinking fund to be accumulated is nothing but the total depreciation of the property. (05)  
ii) Value of building may be higher than its estimated cost.

**OR**

- a) Define: i) market value ii) Book value iii) Distressed value (05)  
b) Discuss i) Sinking fund ii) Years purchase (05)

- Q.5** a) Draft tender notice of road work with all details. (05)  
b) State and explain any one method of execution of minor works in PWD. (05)

**OR**

- a) Write notes on: i) Pre-bid conference ii) Method of inviting tenders (05)  
b) Differentiate between Manual tendering and E-tendering (05)

- Q.6** a) Explain: i) Defect Liability Period ii) Retention Money (05)  
b) Enlist various types of contract and explain any one. (05)

**OR**

- a) Explain: Termination of contract. (05)  
b) Define arbitration and hence explain various matters which can be referred to an arbitrator. (05)

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