

Total No. of Questions : 12]

SEAT No. :

P725

[Total No. of Pages : 5

[4659] - 14

**B.E. (Civil Engineering) (Semester - II)**  
**QUANTITY SURVEYING, CONTRACTS & TENDERS**  
**(2008 Pattern)**

*Time : 4 Hours]*

*[Max. Marks : 100*

*Instructions to the candidates:*

- 1) *Solve Q. 1 or Q. 2, Q. 3 or Q. 4, Q. 5 or Q. 6, from Section - I and Q. 7 or Q. 8, Q. 9 or Q. 10, Q. 11 or Q. 12 from Section - II.*
- 2) *Answers to the two sections should be written in separate books.*
- 3) *Neat diagrams must be drawn wherever necessary.*
- 4) *Figures to the right indicate full marks.*
- 5) *Your answers will be valued as a whole.*
- 6) *Use of logarithmic tables slide rule, Mollier charts, electronic pocket calculator and steam tables is allowed.*
- 7) *Assume suitable data, if necessary.*

**SECTION - I**

- Q1)** a) Enlist the different types of estimate used in civil engineering and hence explain the supplementary estimate in brief. **[6]**
- b) Explain the importance of brief description of an item required in the measurement sheet. **[4]**
- c) Explain how the knowledge of quantity surveying is essential to civil engineer during execution of a project. **[6]**

**OR**

- Q2)** a) List out various methods of preparing approximate estimate and the necessity of preparation of approximate estimate. **[6]**
- b) Explain the provisional sum and the provisional sum items in construction project. **[4]**

**P.T.O.**

c) State the range of provisions to be made for following items during preparation of detailed estimate : [6]

- i) Contingencies
- ii) Workcharge establishment
- iii) Water supply and drainage
- iv) Electrification

Q3) a) Fig. 1 shows the plans of an office building. Prepare a measurement sheet and determine the quantities of following items, writing brief description of each item in the measurement sheet.

- i) Excavation in earthwork for foundation. [2]
- ii) R.C.C. in slab. [2]
- iii) UCR masonry in plinth and foundation. [3]
- iv) Brick masonry (1 : 6) in superstructure. [3]

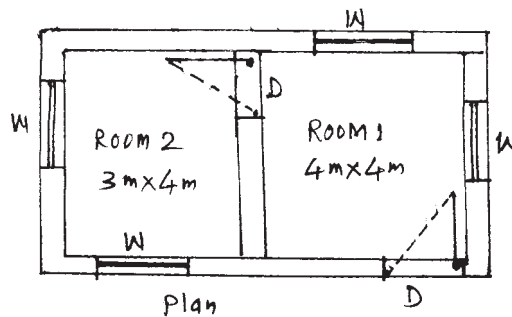


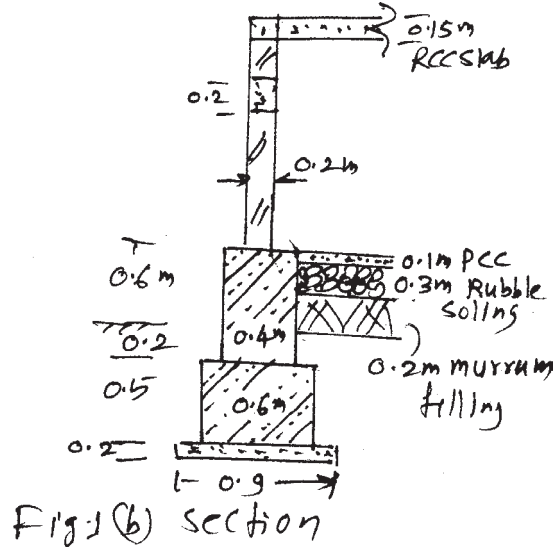
Fig No. 1 (a) Plan

$$D = 1.2 \text{ m} \times 2.1 \text{ m}$$

$$W = 1.5 \text{ m} \times 1.2 \text{ m}$$

All walls 0.2 m thick.

- b) Explain the method of taking out quantities for RCC in footing, column, beam with necessary formula if any. [6]

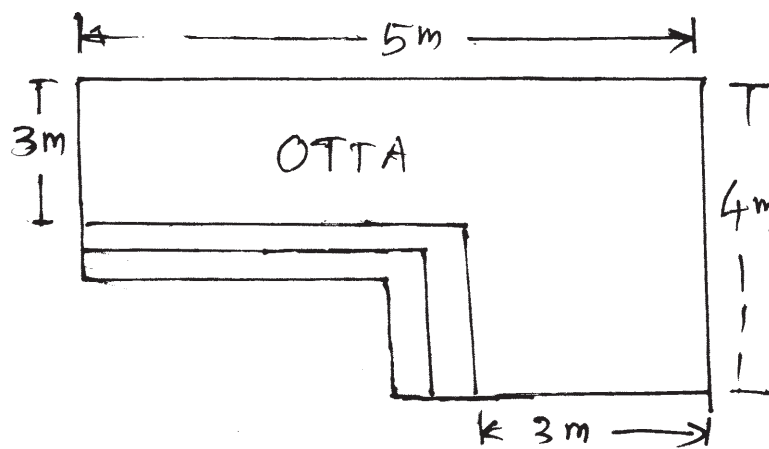


- c) Explain the prime cost items. [2]

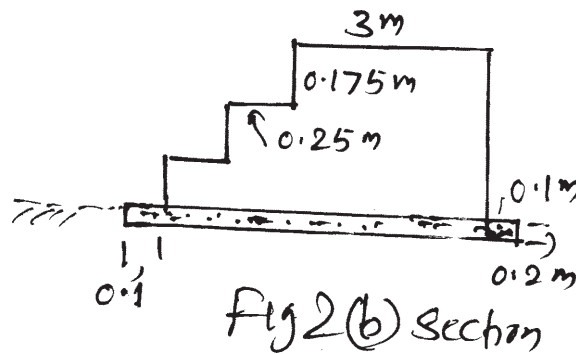
OR

- Q4) a) Fig. 2 shows the plan for an otta provided in front of a building. Determine the quantities of following items.

- i) Earthwork in excavation. [3]
- ii) Brick masonry in C.M. (1 : 6) [3]
- iii) Tile flooring [3]
- iv) Plastering to the surfaces [3]



- b) Write short note on : [6]
- i) Method of measurement and rule for deduction for item of plastering.
  - ii) Method of measurement of timber work for doors and windows.



- Q5) a) Explain the purposes of preparing rate analysis for various items. [4]
- b) Explain the factors which affect the rate of an item. [4]
- c) Determine the rate per unit of measurement for brick masonry in C.M. (1 : 6) in superstructure. [8]

**OR**

- Q6) a) Determine the basic materials required for construction of 135 Cu.m. of brick masonry (1 : 6). [6]
- b) Explain the overhead charges. [4]
- c) Draft a detailed specification for execution of U.C.R. masonry in plinth and foundation with reference to : [6]
- i) Materials, quality of material, proportions.
  - ii) Method of execution and workmanship.
  - iii) Method of measurement and payment.

### SECTION - II

- Q7) a) What is meant by 'value' of a commodity? State four parameters or characteristics a commodity should have to possess value. Also state six factors which affect valuation. [6]
- b) Explain two types of ownership or tenure of property. [6]
- c) State various methods of calculating 'depreciation' explain any one method in detail stating the formula used, merits / demerits of the method, etc. [6]

**OR**

- Q8)** a) Explain in brief six factors considered for valuation of a building. [6]  
b) Write notes on : [6]  
    i) Sinking fund  
    ii) Years purchase  
c) Write three differences between the following : [6]  
    i) Scrap value - Salvage value  
    ii) Building Lease - occupational Lease

- Q9)** a) Explain PWD procedure of administrative approval and technical sanction. [6]  
b) Briefly explain the essential information of a tender notice. [6]  
c) Justify earnest money and security deposit for a construction work. [4]

**OR**

- Q10)** a) Give types (Classification) of tenders (forms) and briefly explain them. [6]  
b) Write notes on : [6]  
    i) Opening of sealed tenders  
    ii) Scrutiny of tenders  
c) State and briefly explain any one method of execution of minor works in PWD. [4]

- Q11)** a) Discuss in brief essential requirements of a valid contract. [6]  
b) State merits and demerits of pre-qualification of contractors. [6]  
c) Write a note on cost plus or percentage contracts. [4]

**OR**

- Q12)** Write notes on any four of the following : [16]  
a) Lump-sum contracts.  
b) Arbitration and arbitrator.  
c) Responsibilities of contractor regarding execution of work.  
d) Registration of contractors.  
e) Contents of F.I.D.I.C. document.

