

April 2019

Time - Three hours  
(Maximum Marks: 75)

(Sketch 'T' to accompany)

- (N.B: (1) Q.No. 8 in PART - A and Q.No. 16 in PART - B are compulsory. Answer any FOUR questions from the remaining in each PART - A and PART - B  
(2) Answer division (a) or division (b) of each question in PART - C.  
(3) Each question carries 2 marks in PART - A, 3 marks in Part - B and 10 marks in PART - C.]

PART - A

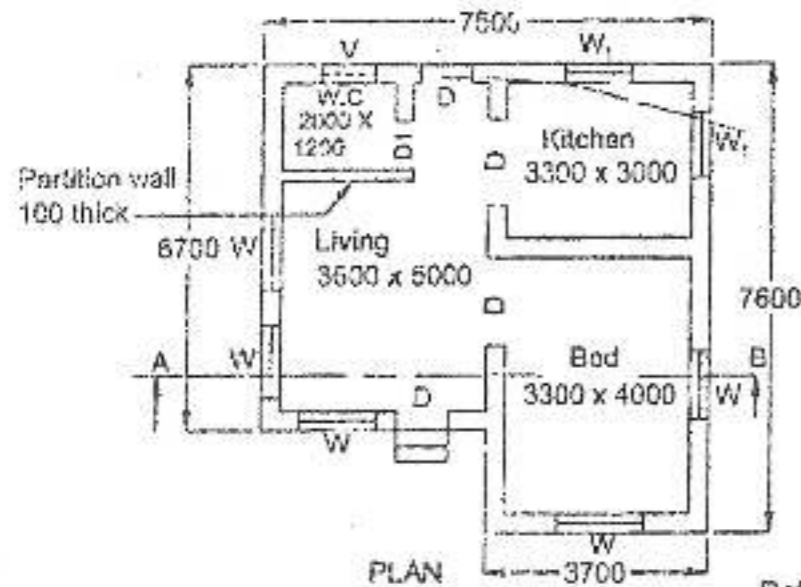
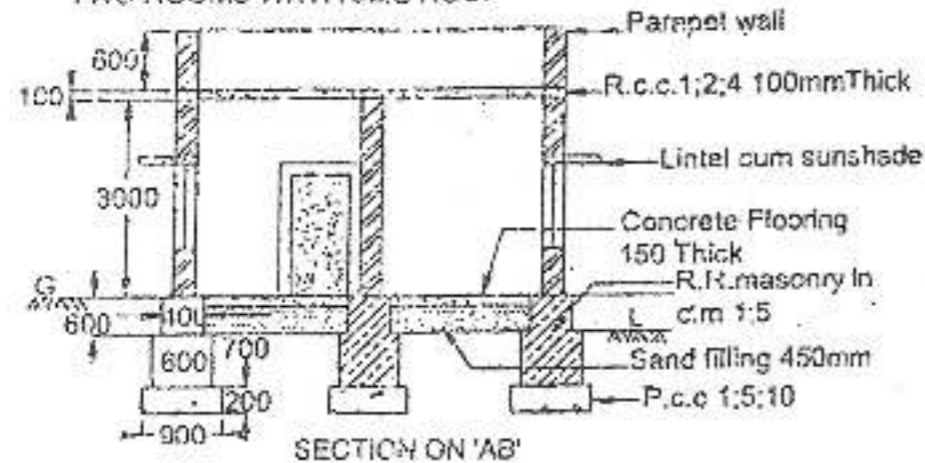
1. Write the necessity of estimate.
2. List the types of specification.
3. Define report writing.
4. What do you mean by out-turn of works?
5. Define sinking fund.
6. Mention five important outgoings of a property.
7. Name the various methods used to take dimensions from the drawing.
8. What do you understand by supplementary estimate?

PART - B

9. Write briefly about plinth area method of preparing approximate estimate.
10. State some essential requirements of specification.
11. List some important points to be included in a report.
12. Write short notes on units of measurements.
13. What do you understand by the terms scrap value and salvage value?
14. Write short notes on (i) Individual wall method (ii) Centre line method.
15. Write any five duties of quantity surveyor.
16. What do you mean by schedule of rates?

Sketch 'T' to accompany QP Code: 211

A SMALL RESIDENTIAL BUILDING WITH TWO ROOMS WITH R.C.C ROOF



- Reference
- D-Door-1000x2100
  - D<sub>p</sub>-Door-900x1800
  - W-Window-1400x1400
  - W<sub>p</sub>-Window-1200x1400
  - V-Ventilator-900x600
  - Steps
  - Rise - 200mm
  - Tread - 300mm

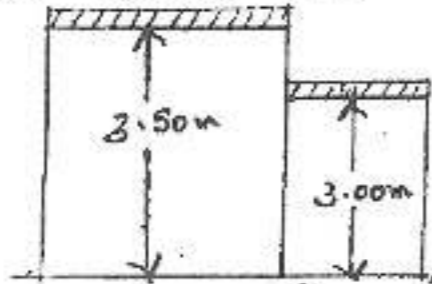
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PART - C

17. (a) The actual expenditure incurred in the construction of a single storey residential building of plinth area  $98\text{m}^2$  is found to be ₹. 28,55,000 in which 55% towards the cost of materials and remaining is towards the cost of labour. It is now proposed to construct a similar building of same height and specification with the plinth area of  $74\text{m}^2$  at the place where the cost of materials are 13% more and cost of labour is 19% less. Estimate approximately the cost of proposed building.

(Or)

- (b) (i) Calculate the approximate cost of the building with RCC flat roof shown in the figure by using cubic content method. If the cost per cubic metre is ₹. 16,000/- Plinth area of portion 1 =  $100\text{m}^2$ , Portion 2 =  $16\text{m}^2$ .



- (ii) Consider a warehouse of 4m wide and 16m long has GI sheet roofing supported over roof trusses. Brick walls are provided at all sides. Warehouse may be divided into 4 bays. Cost of previous work per bay is ₹. 1,20,000. If there is a proposal of future extension for 3 more bays, find approximate cost of the new proposal.

18. (a) (i) Write general specifications for any five works involved in the construction of a residential building.  
(ii) Write detailed specification for plastering with CM 1:3, 12mm thick.

(Or)

- (b) An estimate has been prepared to give water supply to a village. Write a report for this estimate.

19. (a) (i) What is painting co-efficient? State painting co-efficient for fully glazed steel doors and windows.  
(ii) Determine the materials required for the following items given an allowance of 5% for breakage and wastage. Brickwork in C.M 1:5 using  $190 \times 90 \times 57\text{mm}$  size bricks -  $1\text{m}^3$ .

(Or)

- (b) Prepare the data for painting new iron work one coat using ready mixed enamel paint over red oxide priming coat -  $10\text{m}^2$ .

a) Painting priming coat on new iron work -  $10\text{m}^2$ .

Ready mixed red oxide paint	- 1.33 litres
Painter I class	- 0.7 nos.
Sundries including brushes, soaps, Putty etc	- L.S.

- b) Painting new iron work one coat using ready mixed enamel paint -  $10\text{m}^2$ .

Synthetic enamel paint	- 1.33 litre
Painter I class	- 0.7 nos.
Sundries including brushes, soaps, Putty etc.	- L.S.

- c) Painting new iron work one coat using ready mixed enamel paint over red oxide priming coat -  $10\text{m}^2$ .

Red oxide priming coat	- $10\text{m}^2$
Painting one coat using ready mixed enamel paint	- $10\text{m}^2$

Cost of materials and labour

Priming coat: Ready mixed red oxide paint	- ₹ 150/Litre.
Painting coat: Synthetic enamel paint	- ₹ 250/litre.
Painter I class	- ₹ 435 each/day.

Sundries for brushes, soaps, putty etc

- (a) Priming coat - ₹ 20  
(b) Painting coat - ₹ 30.

20. (a) The cost of a building constructed 10 years back was ₹ 3 lakhs. The standard rate of depreciation is 2%. Calculate the present value of the building when

- (i) No allowance is made for appreciation value.  
(ii) When an allowance of 5% per annum is allowed for the increase of material cost.

(Or)

- (b) Calculate the standard rent of a government residential building newly constructed from the following data: cost of construction of the building ₹ 12,00,000. Cost of construction of outhouse ₹ 1,20,000. Cost of sanitary, electrical and internal water supply arrangements ₹ 1,80,000. Cost of establishment incurred for the construction work ₹ 40,000. Cost of compound wall ₹ 40,000. Cost of site ₹ 2,00,000.

21. (a) (i) Differentiate between trade and group system.  
(ii) Find out the quantity of earth filling in basement for the residential building shown in sketch 'T'.

(Or)

- (b) Take out the quantity for the work RCC 1:2:4 for roof works for the given sketch 'T'.