

April 2018

Time - Three hours  
(Maximum Marks: 75)

(Sketch 'X' and 'Y' 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.]

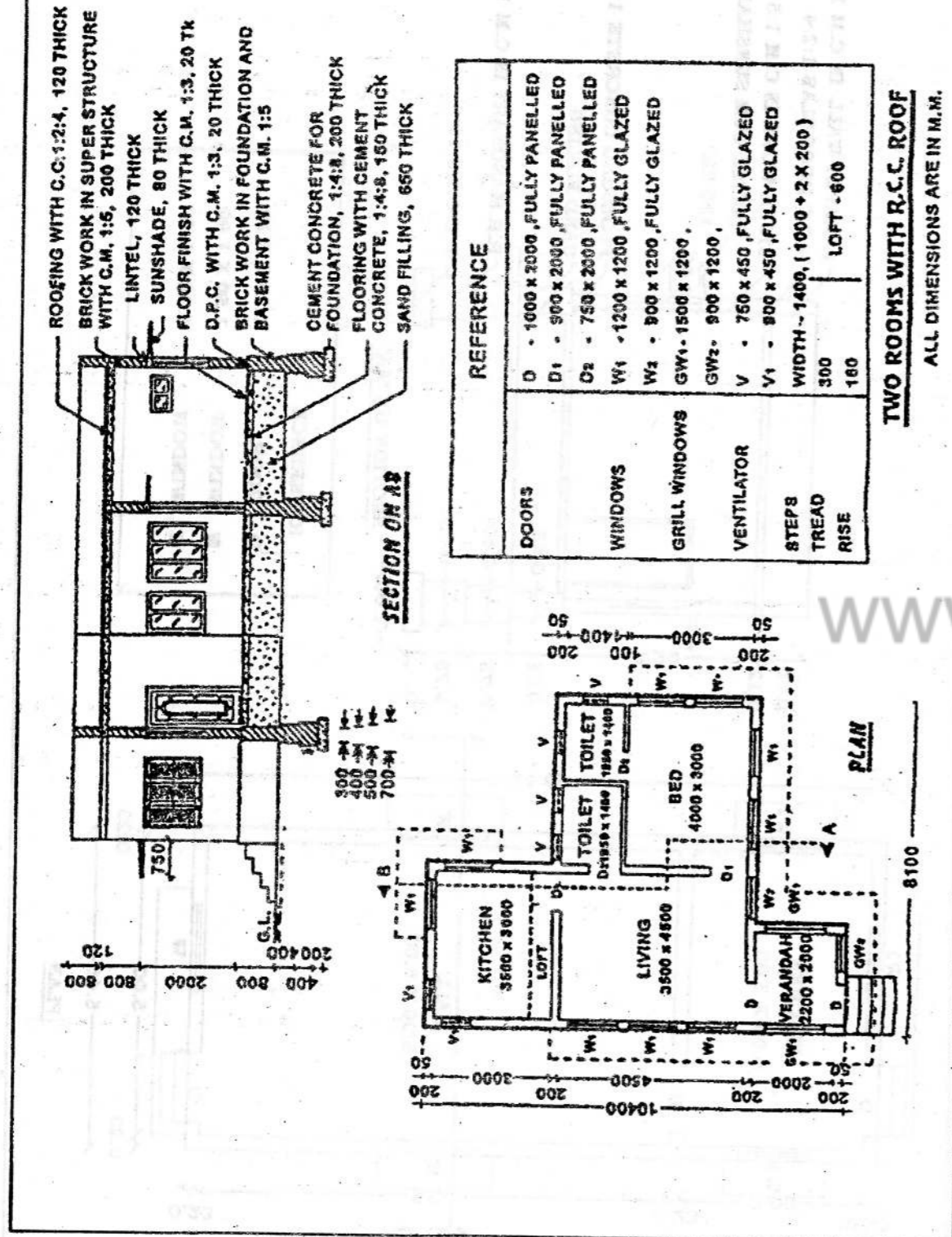
PART - A

1. What is measurement book?
2. Why cubical content method of estimation is better than plinth area method?
3. Define two level section.
4. State prismoidal rule for calculating the volume of an irregular solid.
5. Write any two factors which affect the rates of materials.
6. What is standard data book?
7. Define the term squaring the dimension.
8. Differentiate group system from trade system.

PART - B

9. What is meant by estimate and what are the different types of estimates?
10. Give a brief notes about lumpsum and contingency provisions in estimates.
11. Write the methods used for computation of volume of irregular solids. Explain any one of them.
12. The ground level is +108.45m. The formation level of the proposed canal bed is +110.55m at that section. Whether there will be embankment or cutting? How much will be its value?

Sketch 'Y' to accompany QP Code: 702



13. What is meant by lead statement? Draw a model statement.
14. What particulars are furnished in the schedule of rates?
15. State the uses of abstract.
16. What is billing? Write any two points to be remembered while checking the bill.

PART - C

17. (a) (i) State the various duties and requirements of a good quantity surveyor.  
(ii) Explain painting co-efficient and schedule of rates.

(Or)

- (b) A hospital building with 100 beds had been constructed 5 years back at a total cost of ₹.90 lakhs with the following breakup. The expenditure towards cost of materials was 63 lakhs, towards cost of labour was 22.5 lakhs and towards services was 4.5 lakhs. Now there is an escalation of 25% in the cost of materials, 40% in the wages of labours and 20% in the cost of services. It is now proposed to construct a similar hospital building in the same area with 140 beds. Find out the approximate cost of the building.
18. (a) A reservoir has the following water spread areas. Find the volume of the reservoir by (i)Trapezoidal rule (ii)Prismoidal rule.

Contour level in 'm'	100	105	110	115	120
Area under the contour (m <sup>2</sup> )	450	680	1125	2850	7250

(Or)

- (b) A hill road is to be formed in cutting from chainage 1000 to 1200. Its formation width is 8.0m and side slopes is 1 vertical to 2 horizontal. Compute the volume of cutting using prismoidal rule with the following data.

Cross section at chainage	Depth of cutting at centre in 'm'	Cross slope of ground
1000	0.8	1 in 10
1100	1.2	1 in 12
1200	1.6	1 in 8

Sketch 'X' to accompany QP Code: 702

