

**Sketch 'W' to accompany QP Code: 991**

**October 2018**

*Time - Three hours  
(Maximum Marks: 75)*

*(Sketch 'W' 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.]*

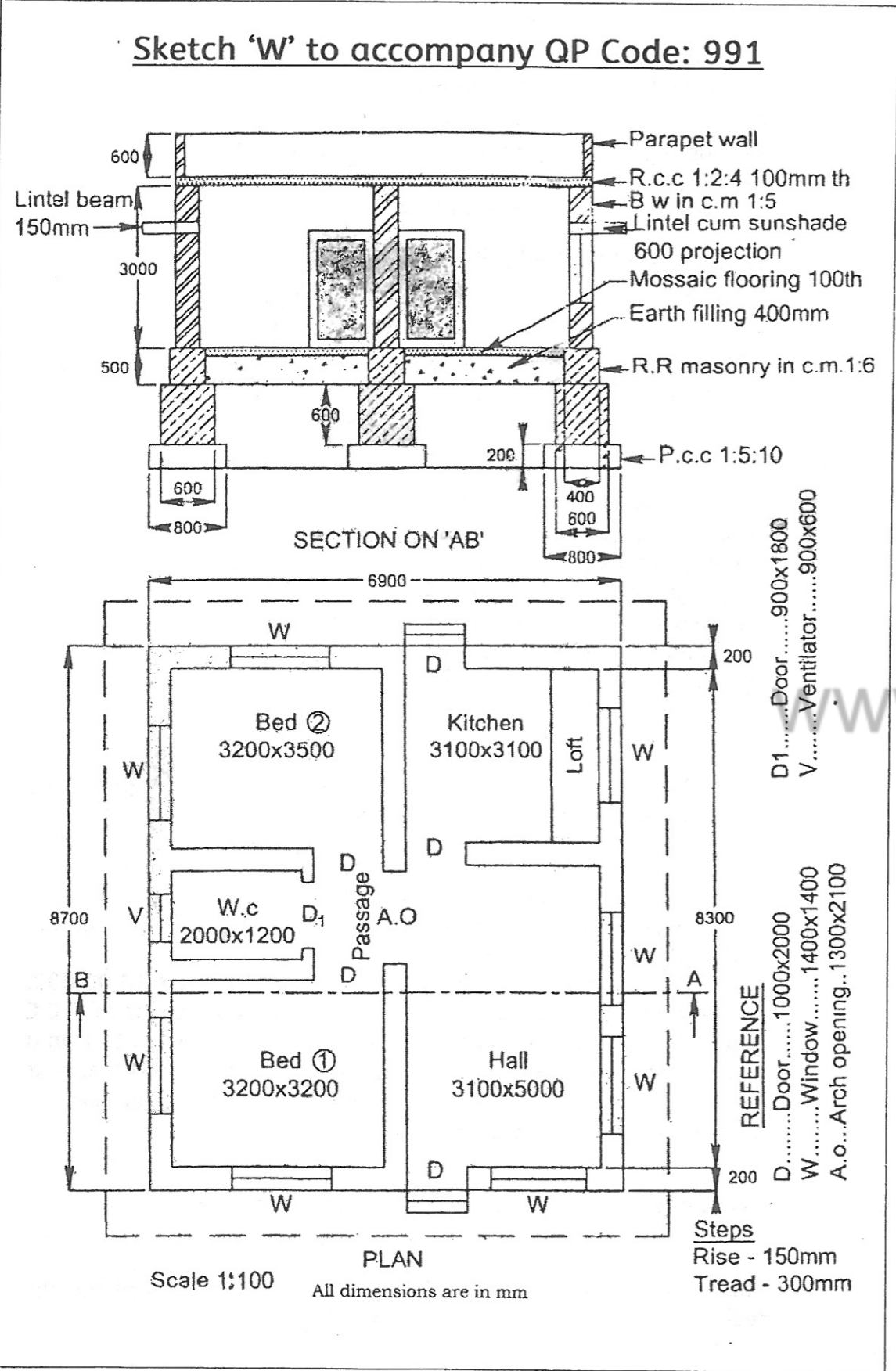
**PART - A**

1. When revised estimate is prepared?
2. Define service unit method.
3. Define specification.
4. Write any two points to be considered while writing a technical report for a project.
5. What is meant by handling charges?
6. List out the types of leases.
7. Define group system.
8. Write any two factors which govern the rent of a building.

**PART - B**

9. What are the necessities of estimate?
10. What is the use of a report?
11. What is painting co-efficient? State painting co-efficient for fully glazed steel doors and windows.
12. Define (i) Data (ii) Observed data.
13. Define depreciation.
14. What do you understand by the term standard rent of a building?
15. Explain centre line method and write its advantages.
16. Who is quantity surveyor? State any two of his duties.

[Turn over.....



PART - C

17. (a) Write short notes on (i) supplementary estimate (ii) Annual maintenance estimate (iii) Repair estimate.

(Or)

- (b) (i) Prepare a preliminary estimate with the following data. Plinth area of a building - 1600m<sup>2</sup>. Plinth area rate - ₹.15,000/m<sup>2</sup>. Water supply and sanitary installation - 10% of building cost. Electrical installation - 12% of building cost. Extra other services - 5% of building cost. Contingencies - 4% over all. Supervision charges - 3% over all.

- (ii) The plinth area of a proposed sloped roof building is 82m<sup>2</sup>. The height of main walls above floor level is to be 3m and the rise of roof above the wall 1.2m. The cube rate for a similar building is arrived at ₹.13,000 per m<sup>3</sup>. Find out the approximate cost of building.

18. (a) (i) What are the steps involved in writing standard specification?

- (ii) Write detailed specification for cement concrete flooring with cement concrete 1:2:4.

(Or)

- (b) A proposal has to be submitted to the collector for the construction of a primary health centre in a village. Write a report to accompany the proposal.

19. (a) Compute the materials requirement for the following item of work.

(i) Cement concrete 1:2:4 - 1m<sup>3</sup> (using 20mm aggregate)

(ii) B.W in C.M 1:5 with 1<sup>st</sup> class bricks - 1m<sup>3</sup>.

(Or)

- (b) Analyse and determine the rates for the following items of work with the given data: R.C.C roof slab 120mm thick of mix 1:1½:3 using 20mm broken jelly with suitable reinforcement including centring, curing etc., complete - 1m<sup>3</sup>.

Materials and labour required:

C.C. 1:1½:3 - 10m<sup>3</sup>.

Broken stone 20mm size	- 9m <sup>3</sup> .
Sand	- 4.5m <sup>3</sup> .
Cement	- 4320 kg
Masan II <sup>nd</sup> class	- 3.50 Nos.
Mazdoor 1 <sup>st</sup> class	- 21.20 Nos.
Mazdoor II <sup>nd</sup> class	- 35.30 Nos.

R.C.C. 1:1½:3 for roof slab 120mm thick - 1m<sup>2</sup>.

Concrete 1:1½:3	- As required
Steel	- 90 Kg/m <sup>3</sup> of concrete.
Binding wire	- 1% of reinforcement.
Centring	- As required as 20% extra for side.
Bar bending	- As required.

Cost of materials and labour at site.

Cement	- ₹.8000/ton
Steel	- ₹.48000/ton
Binding wire	- ₹.80/kg
Broken stone (20mm size)	- ₹.500/m <sup>3</sup>
Sand	- ₹.420/m <sup>3</sup> .

Labour charge

Mason I Class	- ₹.500
Mason II Class	- ₹.450
Mazdoor I Class	- ₹.400
Mazdoor II Class	- ₹.300
Bar bending	- ₹.250/100 kg
Centering charges	- ₹.150/m <sup>2</sup>
Mixing charges	- ₹.100/m <sup>3</sup> .

20. (a) What is the use of valuation? List the methods of valuation. Explain any two methods of valuation.

(Or)

- (b) A private building was rented for accommodating a government office. Calculate the standard rent of the building with the following available data:

Cost of the building at present day rate is ₹.10,00,000. The age of the building is 20 years and the building is of R.C.C roof with teak wood doors and windows. It is constructed on a plot of land of 200m<sup>2</sup> area. The cost of land in the locality is ₹.800 per m<sup>2</sup>. The present assessed value of water supply, sanitary and electrical fittings is ₹.1,50,000.

21. (a) Explain about trade system and group system.

(Or)

- (b) Take out the quantity of brick work in super structure for the residential building as shown in sketch 'W'.

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