|||| *2595*

Quantity Surveying & Valuation (New)
(1230)

P. Pages : 4

Time : Four Hours

Max. Marks : 100

Instructions to Candidates :
1. Do not write anything on question paper except Seat No.
2. Answersheet should be written with blue ink only. Graph or diagram should be drawn with the same pen being used for writing paper or black HB pencil.
3. Students should note, no supplement will be provided.
4. Solve **any two** questions from each unit.
5. Figures to the right indicate full marks.
6. Use of non-programmable calculator is allowed.
7. Assume suitable data, wherever necessary.

UNIT - I

1. a) Enlist various data required for preparing detailed estimate. Also write factors to be considered during preparation of detailed estimate. **5**

   b) Explain the terms work - charged Establishment & contingencies. **5**

2. a) Enlist ten general items of work for building estimate with their units of measurement. **5**

   b) Write deduction rule for an opening in a masonary wall for an item of work plastering. **5**

3. a) Explain the terms "Administrative approval" and "Technical Sanction." **5**

   b) Differentiate between "Revised estimate" and "Supplementary estimate." **5**

UNIT - II

4. Calculate the quantities of following items of work for the residential building given in drawing No. I.

   a) Earth work in excavation. **5**

   b) C. R. masonary up to plinth. **5**

5.   Calculate the quantities of following items of work for the residential building given in drawing No. I.

    a)   Inside plastering wall surface in C. M.   **5**

    b)   Outside plastering wall surface in C.M.   **5**

6.   Prepare a detailed estimate of earth work for a portion of a road.   **10**
Formation width = 10m
Side slope = 2 : 1 for both cutting & filling.

Chainage (m)	R.L. of G. L. (m)	R.L. of formation (m)
0	123.90	123.20
30	125.0	123.60
60	124.60	124.0
90	122.90	123.60
120	121.60	123.20
150	121.0	122.80
180	120.40	122.40

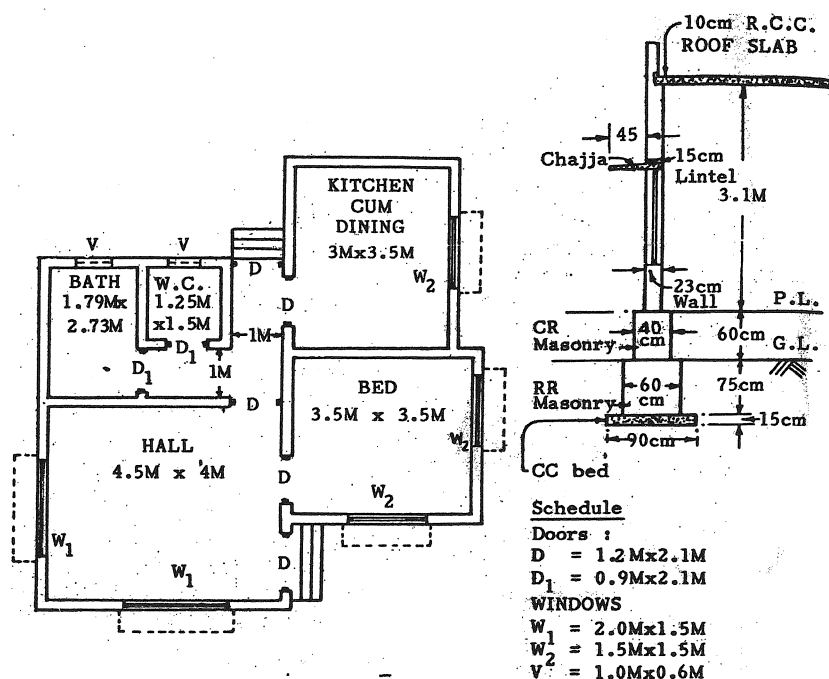## UNIT - III

7.   Calculate the quantity of steel reinforcement required for the R.C.C. beam given in drawing No. II.   **10**

8.   Calculate the quantity of steel reinforcement required for column & footing given in drawing No. III.
Assume height of column as 3.2 m, dowel length as 0.30 m and spacing of ties as 150 mm c/c.   **10**

9.   Calculate the quantity of concrete required for column & footing given in drawing No. III.   **10**
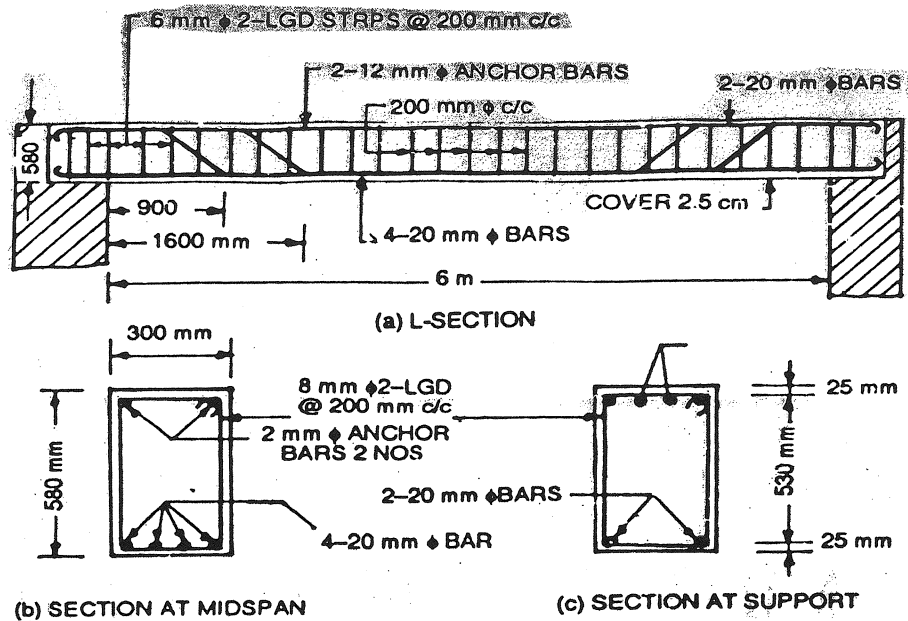
UNIT - IV

10. a)   Write task work of any five items of work.   **5**

    b)   Prepare a rate analysis for plastering 25 mm thick in C M 1 : 4 for $200m^2$ surface area.   **5**

11. a)   What is a specification, explain its necessity.   **5**

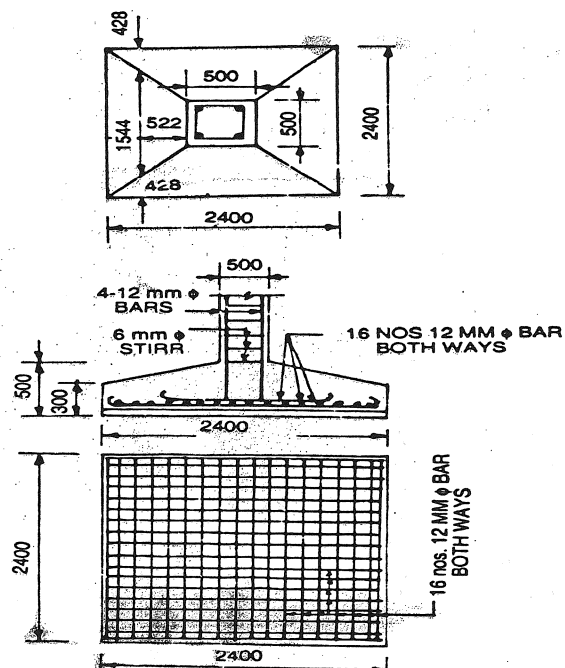b)   Prepare a rate analysis for brick masonary for superstructure in CM 1 : 4 for 10 cu. m.   5

12. a)   Write a general specification for II class building.   5

b)   Write a brief detailed specification for Brick masonary work for superstructure in CM 1 : 4.   5

UNIT - V

13. a)   Define valuation & its purposes.   5

b)   Enlist methods of valuation. Explain any one.   5

14. a)   Define depreciation, enlist various methods of depreciation.   5

b)   Explain belting method of valuation of land.   5

15. a)   Explain the term outgoings, enlist various outgoings.   5

b)   Explain sinking fund and year's purchase.   5

(Drawing No. I for Q. No. 4 & 5)

6 mm ⏀ 2-LGD STRPS @ 200 mm c/c

2–12 mm ⏀ ANCHOR BARS

2–20 mm ⏀BARS

200 mm ⏀ c/c

580

COVER 2.5 cm

900

1600 mm

4–20 mm ⏀ BARS

6 m

(a) L-SECTION

300 mm

8 mm ⏀2-LGD
@ 200 mm c/c

2 mm ⏀ ANCHOR
BARS 2 NOS

2–20 mm ⏀BARS

4–20 mm ⏀ BAR

580 mm

25 mm

530 mm

25 mm

(b) SECTION AT MIDSPAN   **(c) SECTION AT SUPPORT**

(Drawing No. II for Q. No. 7)
Assume 90° bend at the end of bar

428

500

544   522

500

2400

428

2400

500

4-12 mm ⏀
BARS

6 mm ⏀
STIRR

16 NOS 12 MM ⏀ BAR
BOTH WAYS

500   300

2400

2400

16 nos. 12 MM ⏀ BAR
BOTH WAYS

2400

(Drawing No. III for Q. No. 8 & 9)
Assume 90° bend at the end of bar

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