Code: 13A01701 **R13**

B.Tech IV Year I Semester (R13) Supplementary Examinations June 2017

ESTIMATION, COSTING & VALUATION

(Civil Engineering)

Time: 3 hours Max. Marks: 70

PART – A

(Compulsory Question)

*****

1 Answer the following: (10 X 02 = 20 Marks)

(a) What is estimating and what are the different types of estimating.
(b) What are the aims of specification?
(c) What are the methods of determining the value of property?
(d) What are the methods of calculating earthwork?
(e) Define depreciation.
(f) What is valuation and its objectives?
(g) List out the type of contracts.
(h) What is salvage value? Explain.
(i) What are the errors in estimates?
(j) What is the amount for overhead and contingent charges?

PART – B

(Answer all five units, 5 X 10 = 50 Marks)

UNIT – I

2 Write down the detailed specifications of the following items of work.

(a) Cement concrete and RCC work.
(b) Painting.

OR

3 Explain the principles involved in working out the quantities for detailed estimates.

UNIT – II

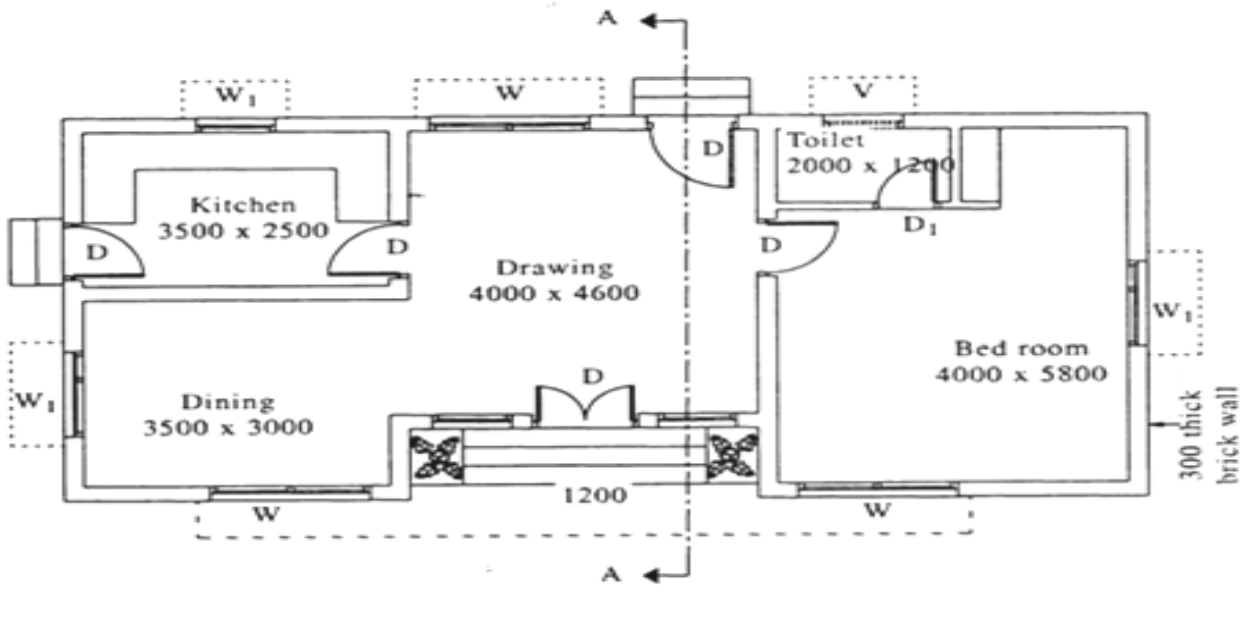
4 Estimate the quantities of the following items from the plan and section as shown in figure 1.

(a) Earth work excavation.
(b) Masonry work in super structure.

OR

5 Estimate the quantities of the following items from the plan and section as shown in figure 1.

(a) Earth work in filling.
(b) Flooring.



PLAN

Contd. in page 2

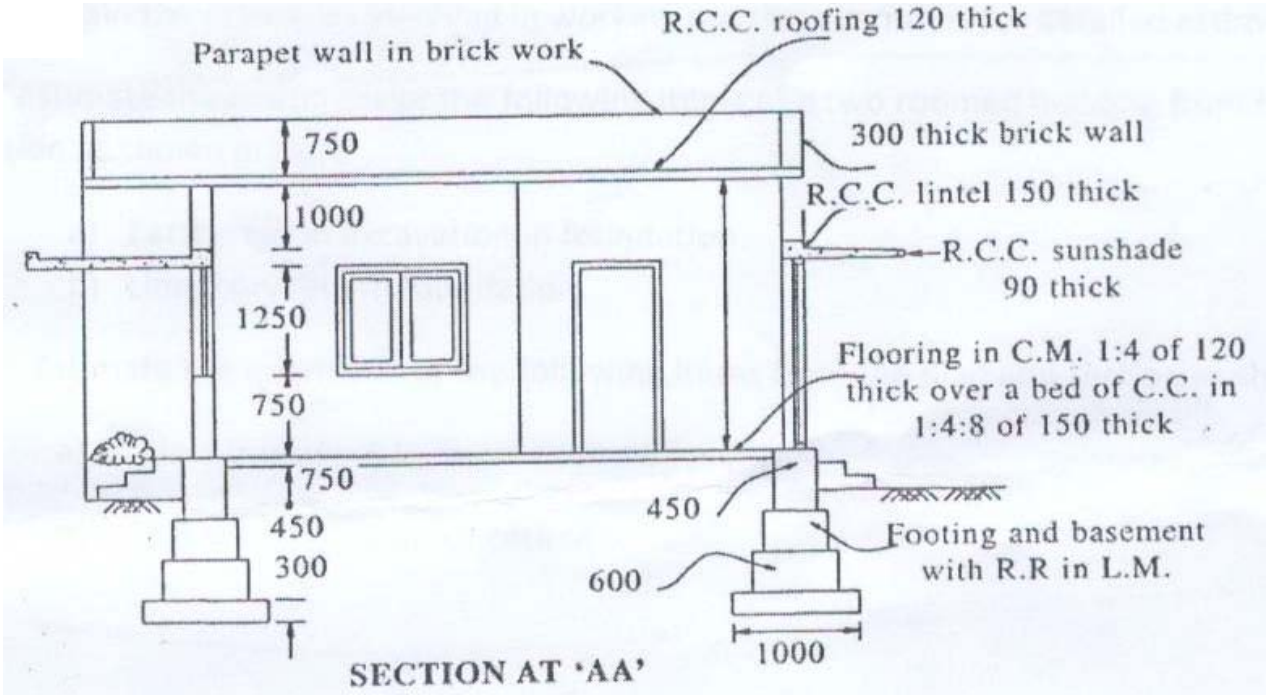


Figure : 1

UNIT – III

6 The ground levels along the center line of the road are given below.

Chainage in m	0	20 m	40 m	60 m	80 m
R.L of ground	101.5	100.9	101.5	102	102.85

The formation level throughout 80 m length is 102.75. The road has a rising gradient 1 in 40. If the width of the road is 12 m and side slopes 2:1, calculate the quantity of earthwork required by any method.

OR

7 The details of cross section of a road crest 4m wide and 6000 m length are as follows:

(a) 15 cm for boulder soiling.

(b) 100 mm wide 125 mm deep boulder edging.

(c) 10 cm consolidated stone matching.

Prepare a detailed estimate of the road.

UNIT – IV

8 Explain the contract system and the types of contracts in detail.

OR

9 Calculate the materials, labour etc required and work out the rate analysis for the following items.

(a) R.C.C work in beams slabs with 1:2:4 per m^3.

(b) I class brickwork in foundation and plinth with 20 x 10 x 10 cm bricks with 1:6 cement mortar sand per 1 cubic meter.

UNIT – V

10 Determine the present value of a building, which was constructed 35 years ago at Rs 35000/-. The estimated life of the building is 80 years, at the end of which it will have 10% scrap value of its cost of construction. Determine the value by any two methods.

OR

11 What are the requirements of tendering and explain in detail the types of tenders.

*****