

Code No: R1642011

R16

Set No. 1

IV B.Tech II Semester Advanced Supplementary Examinations, Aug/Sep - 2022
ESTIMATION SPECIFICATIONS & CONTRACTS

(Civil Engineering)

Time: 3 hours

Max. Marks: 70

Question paper consists of Part-A and Part-B

Answer any THREE questions from Part-A

Part-B is compulsory

PART-A (3x14=42 Marks)

1. a) Discuss the various methods of working out the approximate cost of a building. [7]
b) Mention the general principles for deciding the units of measurements of various items of works. [7]
2. a) Discuss the importance of rate analysis and mention its purpose. [7]
b) Work out the rate analysis for RCC work for beams proportion (1:2:4) with steel reinforcements. [7]
3. Calculate the volume of earthwork using prismoidal formula for a proposed road having following details: [14]
1) Formation width of road is 10m, 2) side slope in filling is 2:1, 3) side slope in cutting is 1.5:1, 4) formation level is 108.00m at 0 chainage 5) Road has no slope in longitudinal direction.

Ch (m)	0	20	40	60	80	100	120
G.L(m)	107.20	107.90	108.00	108.8	109.0	110.80	109.10
4. a) Define the term contract. Write the advantages and disadvantages of the contract systems. [7]
b) Explain the various forms of cost-plus or percentage contracts. [7]
5. a) Define valuation and explain the doctrine of estate. [7]
b) Write short notes on new horizons of valuation. [7]
6. Write the specification for the following: [14]
a) Brickwork 1st class
b) Plastering cement mortar or lime mortar



PART-B (1x28 = 28 Marks)

7. The plan and section of a residential building is shown in figure 1 below. Prepare [28]
quantities for the following items of work by using any one Method.
- Earthwork in excavation in foundation
 - Cement concrete 1:6:18 in foundation
 - 1st class brick work in cm (1:6) in foundation and plinth
 - 12mm thick single coat cement plaster in cm (1:4)

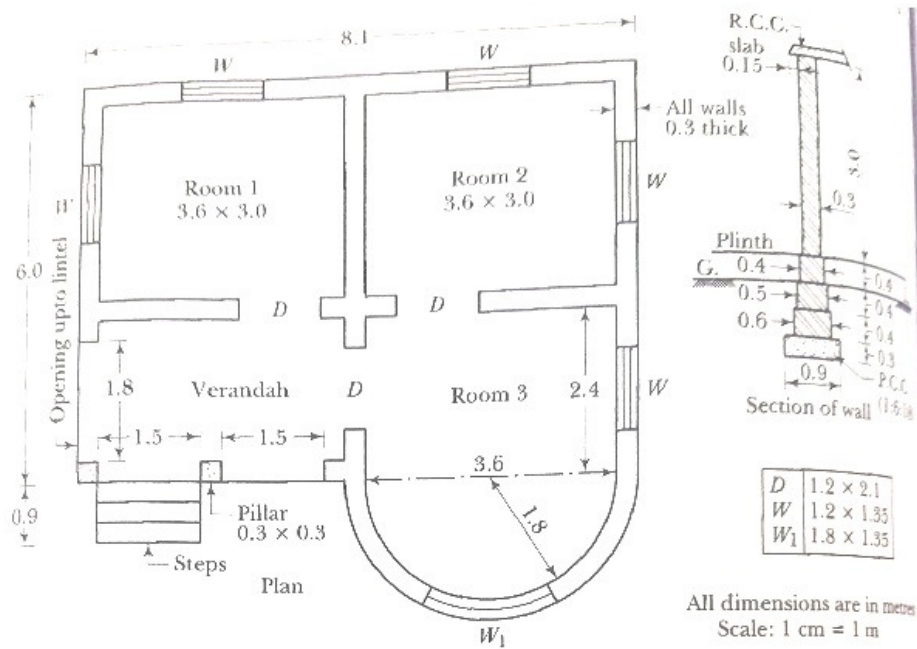


Figure1