



09ARC6.6

USN

USN registration box with 10 empty cells.

Sixth Semester B.Arch. Degree Examination, Dec.2018/Jan.2019
Estimating and Costing

Time: 3 hrs.

Max. Marks:100

Note: 1. Answer Q.No.1 compulsory and any FOUR from Q.No.2 to Q.No.8.
2. Follow written dimensions only.
3. Missing data if any may be suitably assumed.

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice.

- 1 Fig.Q.1 shows the details of a small residential unit. Prepare a detailed estimate for below mentioned items of work by "Centre-Line Method". (10 Marks)
a. Centre-line calculation details. (10 Marks)
b. Earth work in excavation for foundation @ Rs.200 per cu M. (10 Marks)
c. PCC Bed for foundation (1:4:8) @ Rs.3250 per Cu M. (10 Marks)
d. Coursed Rubble Masonry in CM (1:6) for foundation and Plinth @ Rs.3600 per Cu M. (10 Marks)
2 Write detailed technical specification for: (05 Marks)
a. Earthwork in excavation. (05 Marks)
b. DPC 1:3:6. (05 Marks)
c. Glazed tiles in skirting and Dado. (05 Marks)
3 Write short notes on: (05 Marks)
a. Schedule of Rates. (05 Marks)
b. Work-charged establishment. (05 Marks)
c. Contingencies. (05 Marks)
4 Differentiate between the following: (05 Marks)
a. Revised estimate and supplementary estimate. (05 Marks)
b. Square metre method estimate and cubic metre method estimate. (05 Marks)
c. Security deposit and retention money. (05 Marks)
5 a. Define rate analysis and mention its purposes. (05 Marks)
b. Define the term contract. What are the essential requirements of a valid contract? (05 Marks)
c. What is tender? Explain different classifications of Tender. (05 Marks)
6 Calculate the quantities of earthwork for 300m length for a portion of road in a uniform ground. The height of the banks at two ends being 1.0 and 1.3. The formation width is 6.0m and side slopes 2:1 (Horizontal Vertical). Assume that there is no transverse slope, Calculate the quantity using Mid-Section method, mean area method and Prismoidal methods. (15 Marks)
7 Fig.Q.7 shows the details of RCC column. Calculate the quantity of concrete and steel. (15 Marks)

- 8 Fig.Q.8 shows the details of septic tank calculate the quantities for:
- Earthwork in excavation.
 - PCC Bed in 1:4:8.
 - First class brickwork in CM (1:6).

(05 Marks)
 (05 Marks)
 (05 Marks)

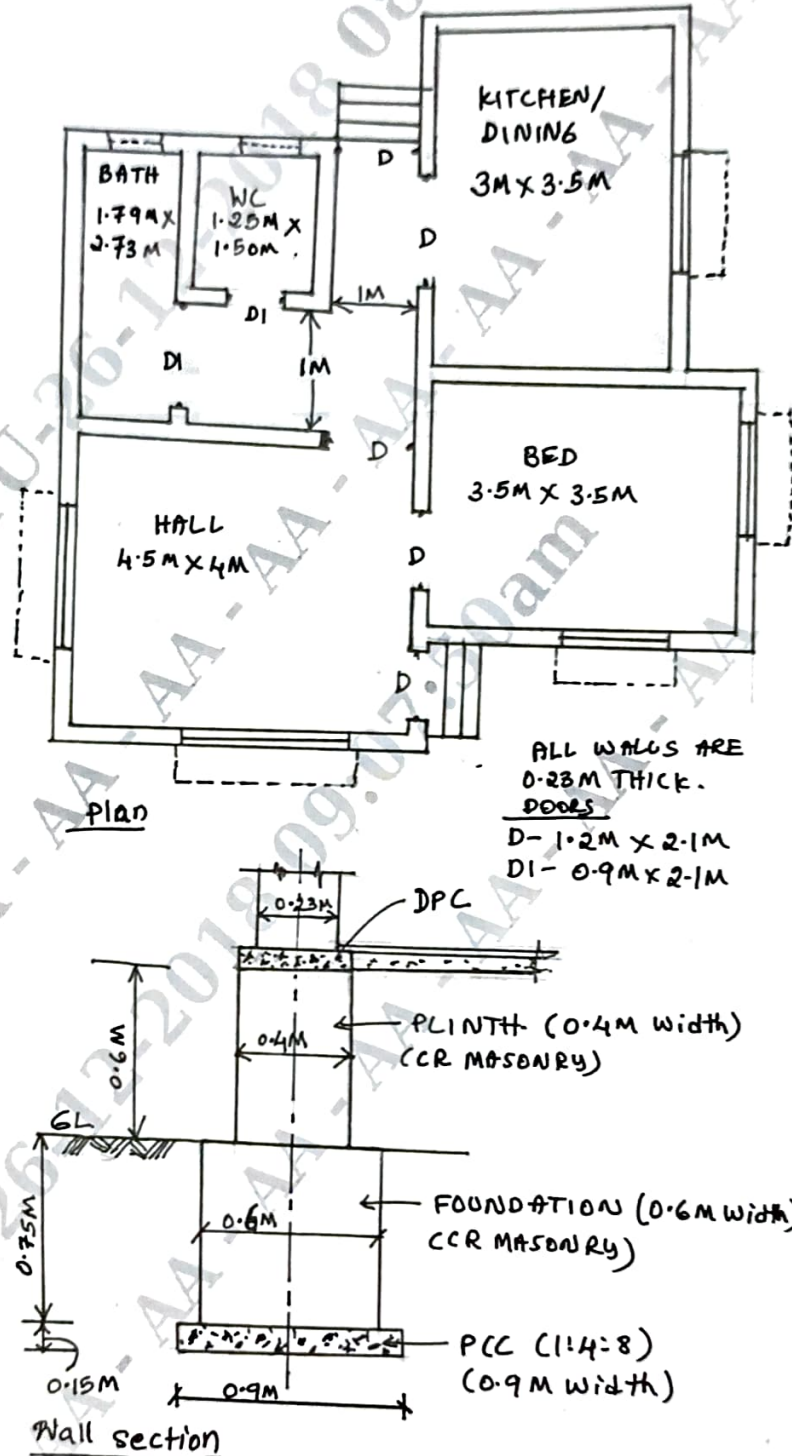


Fig.Q.1

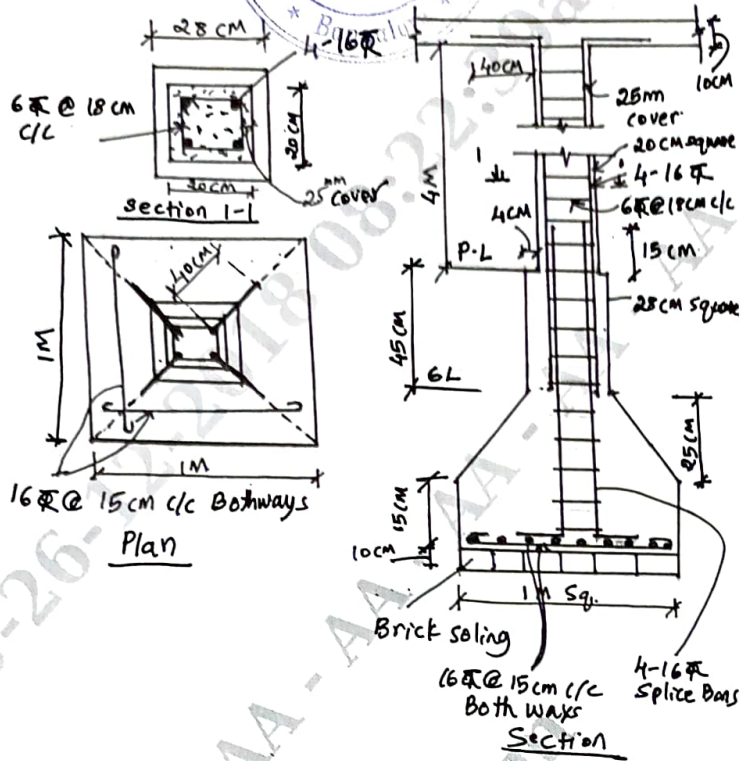


Fig.Q.7

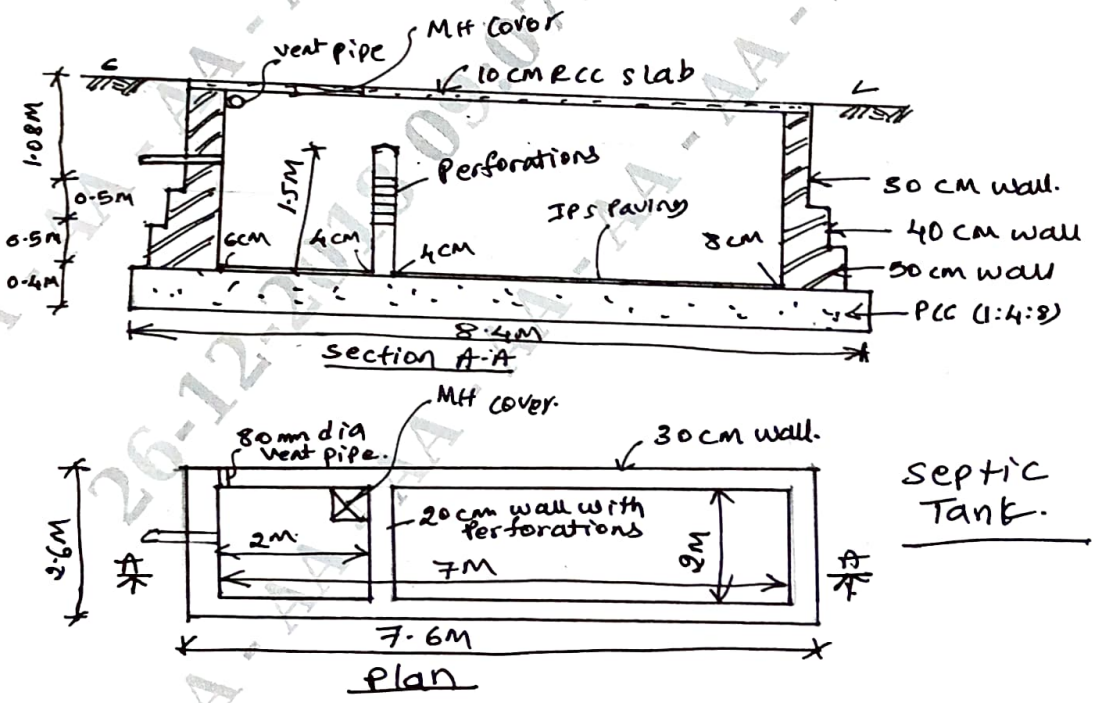


Fig.Q.8