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09ARC66

Sixth Semester B.Arch. Degree Examination, Aug./Sept.2020
Estimating and Costing

Time: 3 hrs.

Max. Marks:100

Note: Q.No. 1 is compulsory and answer any FOUR questions from Q.No. 2 to 7.

- 1 Fig.Q1 shows the details of a small residential unit. Prepare a detailed estimate for below mentioned items of works by "CENTRE LINE METHOD".
 - a. Centre line calculations details. (08 Marks)
 - b. Earth work excavation for the foundation in hard soil. (08 Marks)
 - c. P.C.C bed concrete in 1 : 4 : 8 for foundation using 40 mm and down size coarse aggregates. (04 Marks)
 - d. P/C size tone masonry walls in CM 1 : 6 in foundation and plinth. (10 Marks)
 - e. P/C burnt brick masonry in cm 1 : 6 for super structure (only main walls). (10 Marks)
- 2 Write a detailed specification for any three of the following :
 - a. RCC work (1 : 2 : 4).
 - b. Cement plastering in CM (1 : 6).
 - c. Earthwork in excavation in foundation.
 - d. Brick work 1st class in CM (1 : 6). (15 Marks)
- 3 Write technical specification for any three of the following :
 - a. Ashlar masonry.
 - b. White washing.
 - c. Cement Mortar - Plastering.
 - d. Brick work 1st class. (15 Marks)
- 4 Prepare a detailed estimate of a RCC column and footing from the given drawing Fig.Q4. Steel in detail and RCC work shall be calculated separately. (15 Marks)
- 5 Calculate the volume of earth work for 100.00m length of road in a uniform ground. Height of the bank at one end is 0.75m and at the other end 1.25m. Formation width 10.0m and side slopes of embankment is 2 : 1. Calculate the volume of earth work by all four methods. (15 Marks)
- 6 Fig.Q6 shows the details of a septic tank with soak well. Prepare the estimate for.
 - a. Excavation.
 - b. BBCC (1 : 6 : 12) in foundation.
 - c. Brick masonry in CM (1 : 6) for septic tank.
 - d. Brick work with openings for soak pit.
 - e. 10 cm RCC slab (1 : 2 : 4). (15 Marks)
- 7 Explain Analysis of Rates and over head costs. (15 Marks)

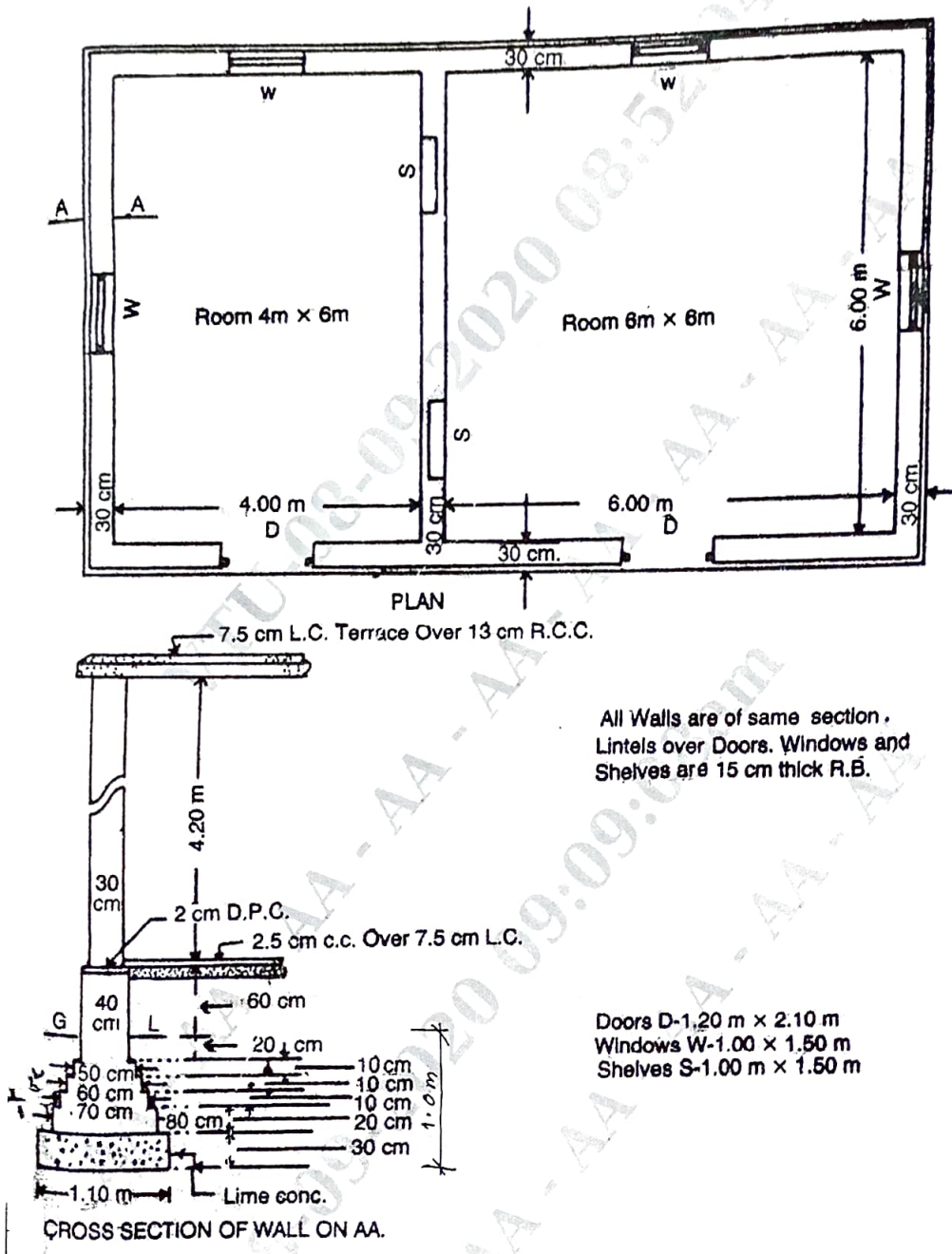


Fig.Q1.



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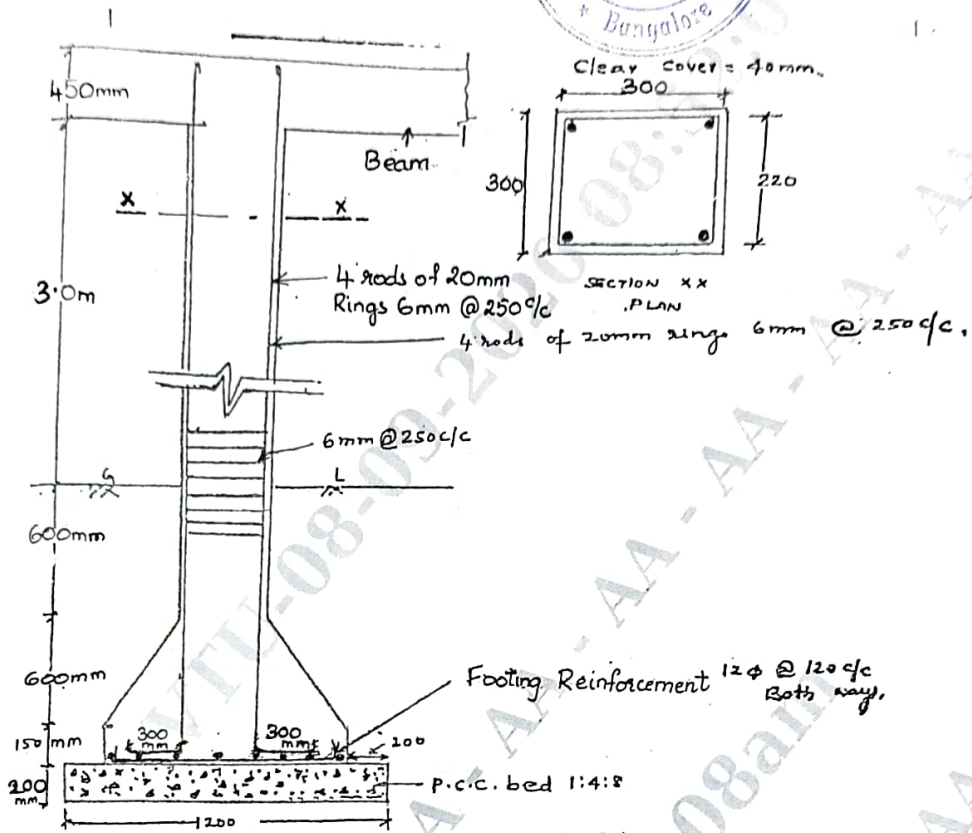


Fig.Q4.

