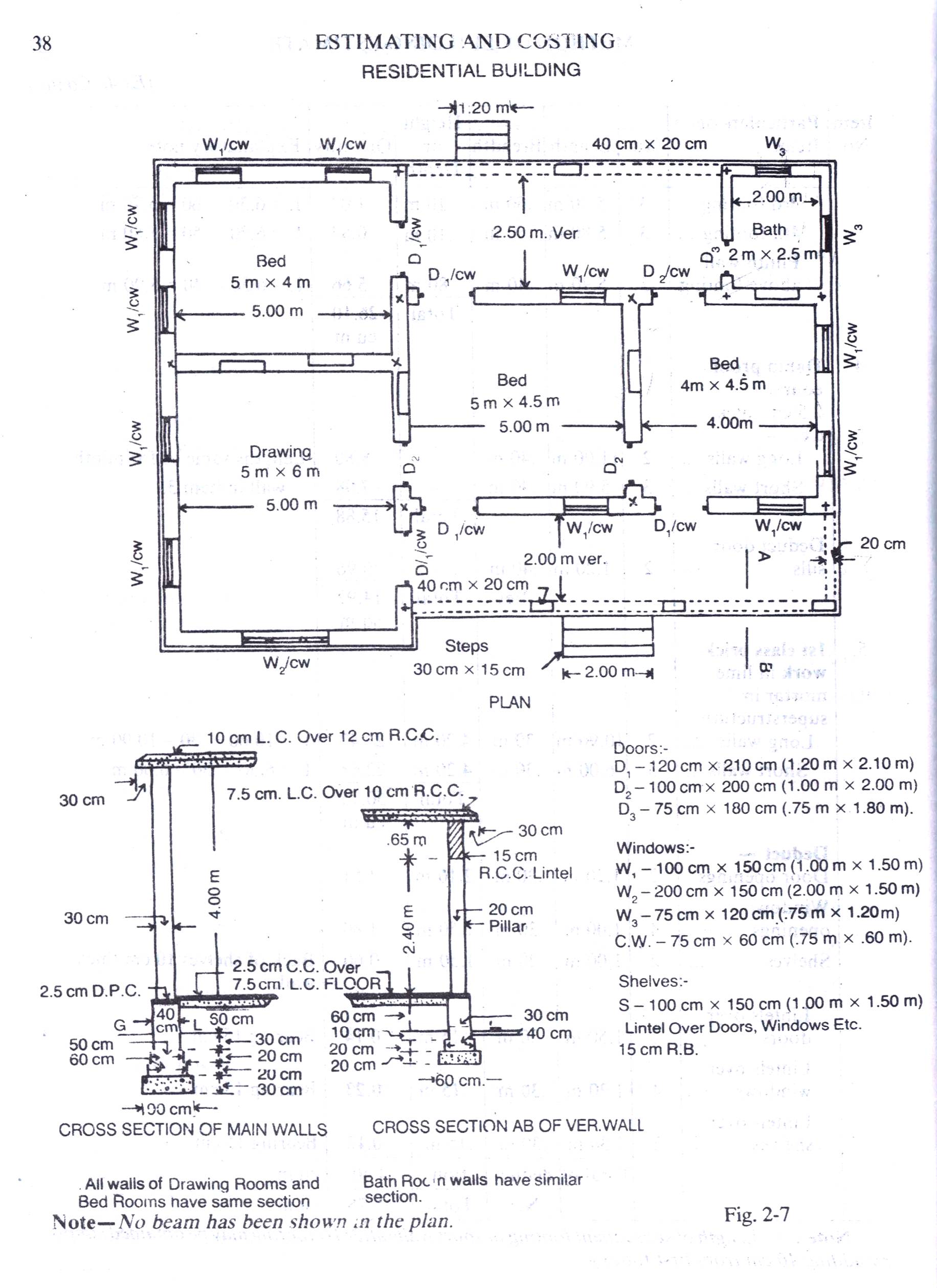
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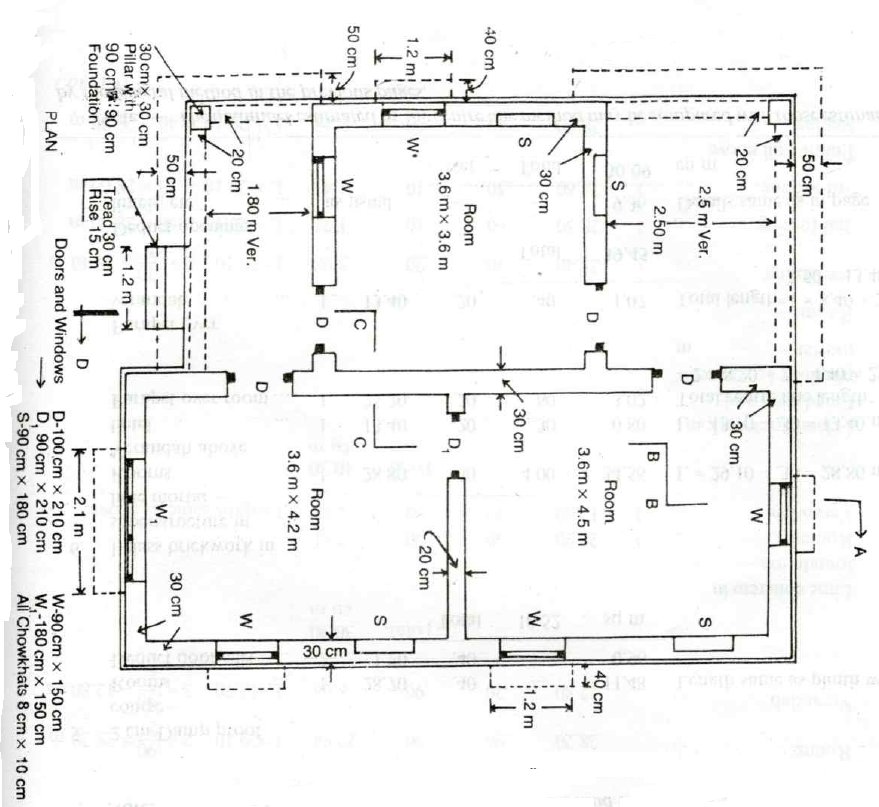


**End Semester Examination – Nov / Dec – 2019**

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| **Code :** | **18CE2003** | **Duration :** | **3hrs** |
| **Sub. Name :** | **BUILDING CONSTRUCTION AND COST ESTIMATION** | **Max. Marks :** | **100** |

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| --- | --- | --- | --- |
| **Q. No.** | **Question** | **Course Outcome** | **Marks** |
| **PART – A (20 x 1 = 20 Marks)** | | | |
| 1. | Outline the process of quarrying of stones. | CO1 | 1 |
| 2. | Specify the size of a brick used for construction, in India. | CO2 | 1 |
| 3. | When do you prefer High Alumni Bricks in Construction? | CO3 | 1 |
| 4. | State one typical purpose of providing rubber in construction. | CO2 | 1 |
| 5. | Identify one important type of timber being used in Construction. | CO2 | 1 |
| 6. | When do we prefer Silicone Rubber in Construction? | CO3 | 1 |
| 7. | Predict the type of cement used in underwater construction. | CO3 | 1 |
| 8. | How would you differentiate the two types of aggregates used in making concrete? | CO2 | 1 |
| 9. | Why do you need to know the Characteristic strength of concrete? | CO3 | 1 |
| 10. | Identify the type of steel channel sections available in Indian Market. | CO2 | 1 |
| 11. | When do you use Aluminium power based paints? | CO3 | 1 |
| 12. | How would you define ‘Thermosetting Plastics’? | CO1 | 1 |
| 13. | When do you require laminated glass in construction? | CO2 | 1 |
| 14. | Recognize the reason for the construction of combined footing in buildings. | CO3 | 1 |
| 15. | What would be the range of height of plinth from ground level? | CO2 | 1 |
| 16. | State the significant role of keystone in an arch. | CO2 | 1 |
| 17. | Which type of staircase would you recommend for a residential home when it is constructed inside the building? | CO3 | 1 |
| 18. | Why do we prefer Galvalume puffed roof sheet panels in warehouses  nowadays? | CO3 | 1 |
| 19. | Mention the two parameters on which the rate per unit depends on. | CO4 | 1 |
| 20. | What percentage of building cost estimate is being charged as contractor’s profit and overhead expenses? | CO4 | 1 |
|  |  |  |  |
|  | **PART – B (10 x 5 = 50 Marks)**  **Answer any 10 from the following** |  |  |
| 21. | List out the various properties of stones. | CO1 | 5 |
| 22. | Classify the different types of bricks stating their purpose. | CO2 | 5 |
| 23. | Categorize the aggregates based on their sizes. | CO2 | 5 |
| 24. | Distinguish different grades of concrete and state the nominal mix ratios. | CO3 | 5 |
| 25. | Itemise the different types of paints available in the market for construction purposes. | CO3 | 5 |
| 26. | List the adverse effects of dampness in buildings. | CO3 | 5 |
| 27. | Identify the different types of Indian standard steel sections used in the construction of warehouses. | CO2 | 5 |
| 28. | Describe the purpose of constructing a polyhouse. | CO2 | 5 |
| 29. | Explain the terms ‘Plinth area estimate’ and ‘Revised estimate’. | CO4 | 5 |
| 30 . | Highlight the purpose of quantity and cost estimation. | CO4 | 5 |
| 31. | When do you prefer a raft foundation for a building? | CO3 | 5 |
| 32. | List down few agricultural buildings with the purpose of constructing them. | CO3 | 5 |
| **PART – C (2 X 15 = 30 Marks)**  **Answer any 2 from the following** | | | |
| 33. | a) How would you classify the arches based on shape and number of centres?  b) Outline the characteristics of an ideal paint. | CO2  CO2 | 7  8 |
|  |  |  |  |
| 34. | a) Describe the different types of foundations used in buildings with suitable  sketches.  b) Explain how a building can be protected against Termite attach? | CO3  CO2 | 7  8 |
|  |  |  |  |
| 35. | Estimate the following quantities of a farm house given in Fig.1 and 2.  a) Earthwork excavation.  b) Cement Concrete Footing in 1:2:4.  c) Brick Work in CM 1 : 6.  d) Damp Proofing Course 2.5cm thick. | CO4 | 3  3  6  3 |





**Fig. 2**