

3E1211**3E1211****B.Tech. III Sem. (Main) Examination, April/May - 2022****Civil Engg.****3CE4-07, Building Materials and Construction****Time : 3 Hours****Maximum Marks : 70****Instructions to Candidates:**

Attempt all ten questions From Part A, All five Questions from Part B and three questions out of five questions from Part C .

Schematic diagrams must be shown wherever necessary. Any data missing may suitably be assumed and stated clearly Units of quantities used/calculated must be stated clearly.

Use of following supporting material is permitted during examination (As mentioned in form No.205)

PART - A(Word limit 25)

1. Draw a standard Brick with dimensions? (10×2=20)
2. What are the major classifications of stones? Give 2 examples in each?
3. What do you mean by Decay of Timber?
4. Write down the causes of dampness?
5. What is load bearing structure use in building construction?
6. What is Ashlar masonry?
7. List the various types of Roofs? ersahilkagyan.com
8. Enumerate the different name of foundation?
9. Differentiate between Headers and stretchers in brick bonds?
10. What are the different methods of plastering?

PART - B(Word limit 100)

1. What are the characteristics of a good timber? Define seasoning of timber.(5×4=20)
2. What are the various types of floors? Explain the utility of any two.
3. Explain causes of failure of foundation?
4. What are different tools required in the process of blasting and explain the process of blasting with neat sketches?
5. Differentiate between English and Flemish bond of brick masonry?

PART - C (Any three)

(3×10=30)

1. What are the tests to which a stone should be subjected before it is selected for building purpose?
 2. What are the major types of foundations used in buildings? Sketch and explain their suitability?
 3. A hospital building is under construction. Being a civil Engineer, what are the various building services you have to keep in mind for the hospital building?
 4. Explain the requirements of good staircase. Describe the suitability of different types of stairs?
 5. State various component of a building? Discuss the functional requirement of super structures?
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