



**Building Construction & Materials  
(1030)**

**P. Pages : 2**

**Time : Three Hours**

**Max. Marks : 100**

Instructions to Candidates :

1. Do not write anything on question paper except Seat No.
2. Answer sheet should be written with blue ink only. Graph or diagram should be drawn with the same pen being used for writing paper or black HB pencil.
3. Students should note, no supplement will be provided.
4. Attempt **all five** questions.
5. Solve **any two** questions from each unit.
6. Figures to the right indicate full marks.
7. Assume suitable data if necessary.
8. Answer all the questions of a unit at one place.

**UNIT - I**

1. a) Give detailed classification of foundation and circumstances under which each is used. **10**
- b) Explain bearing capacity of soil ? Write down methods of improvement of bearing capacity of soil. **10**
- c) Explain Load Bearing and framed structure with neat sketch. **10**

**UNIT - II**

2. a) Write down principles of brick masonry construction. State the types of brick masonry with sketch. **10**
- b) Explain cavity wall in detail and give qualities of good form works **10**
- c) List the types of stone masonry with specific use and explain any one in detail. **10**

**UNIT - III**

3. a) Explain types of staircases with neat sketches. **10**
- b) Explain about lintel & Arches in detail. **10**
- c) List the different types of doors. Explain any one in detail. **10**

**UNIT - IV**

4. a) Explain the concept of modular planning and prefabrication systems in detail. **10**
- b) Explain about white washing and scaffolding in detail. **10**
- c) List the types of trusses and explain any one with neat sketch. **10**

**UNIT - V**

5. a) State the qualities of good brick and Explain various tests on bricks. **10**
- b) What are the characteristics of good timber ? And give the good qualities of stone. **10**
- c) Explain about sound absorbent material and heat insulating material in detail. **10**

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