

CBSGS

80 Marks

3 Hours

N. B. 1. Question no. 1 **compulsory**.

2. Answer any three questions out of remaining
3. Assume any data, if required and state them clearly
4. Attempt sub questions in order
5. Illustrate answer with neat sketches wherever required
6. Figures to the right indicate full marks.

1. Differentiate between (any four) :-

[20]

- a) Load Bearing and Frame Structure
- b) Isolated and Combine footing
- c) Plastering and Pointing
- d) Damp Proofing and Water Proofing
- e) Paints and Varnishes.

2. a) Explain the terms.

i) Blistering ii) Quarry faced surface iii) King Closure

[6]

b) Explain manufacturing process of clay bricks

[10]

c) Give the sectional details of  $2\frac{1}{2}$  wall constructed in Single Flemish Bond

[4]

3. (a) List out the various types of glasses and state their properties and uses in construction.

[7]

(b) Write the properties of hydraulic lime

[5]

(c) Enumerate (any ten) ferrous and non ferrous metals and alloys used in construction. Explain the use of aluminium and steel as construction materials.

[08]

4. (a) Mention experiments performed in laboratory on brick and cement? Explain any one experiment (either of tile or of cement) in detail.

[7]

(b) What is form-work? What are the requirements of ideal formwork?

[5]

(c) What is seasoning of timber? Explain the defects in timber caused due to external natural forces with neat sketches

[8]

5. (a) Sketch the cross-section of King post roof truss and name the various members in it .

[6]

(b) Explain the field tests to find the quality of any two construction materials

[6]

(c) Define sound insulation. What is the unit of measurement of sound? Explain acoustical defects.

[8]

6. (a) Sketch the cross-sections and elevations of:

[8]

(i) Masons scaffolding (ii) Un-coursed Random Rubble Masonry.

(b) Write short notes on

[12]

(i) Anti corrosive treatment.

(ii) Ventilation

(iii) Flooring materials.

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