

(3 Hours)

[Total Marks : 100

N.B. : (1) **Question no.1 is compulsory.**(2) **Attempt any four questions from remaining six questions.**(3) **Assume any data if necessary.**

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| 1. | (a) | Mention the list of important physical properties of a building material. | 5 |
| | (b) | What are the good qualities of a good building stone ? | 5 |
| | (c) | What is meant by seasoning of timber ? What are its objects ? | 5 |
| | (d) | Explain suitability and economic aspects of framed structured over load bearing structure. | 5 |
| 2. | (a) | Design suitable stair for a public building the size of the stair hall is 4.25 X 5.25m. The vertical distance between the floors is 3.9 m. Assume suitable data if any. | 10 |
| | (b) | Explain the method of plastering in detail. | 10 |
| 3. | (a) | Compare plastering and painting. | 5 |
| | (b) | Sketch Double joist Timber floor. | 5 |
| | (c) | Compare water proofing and damp proofing | 5 |
| | (d) | Acid test on stones | 5 |
| 4. | (a) | What are the different type of metals and alloys available and their application. | 10 |
| | (b) | Explain the following :- | 10 |
| | | (i) Plumbing | |
| | | (ii) Acoustics and sound installation | |
| 5. | (a) | What are the different types of paints and varnishes used in building construction? | 10 |
| | (b) | Explain physical properties and manufacturing process for cement and lime. | 10 |
| 6. | (a) | Water absorption test on brick | 5 |
| | (b) | Different grade of cement | 5 |
| | (c) | Dry rubble masonry and ashlar fine masonry | 5 |
| | (d) | Paver blocks | 5 |
| 7. | (a) | Define glass. List various types of glasses and explain it in brief. | 10 |
| | (b) | (i) What are the effect of improper curing ? | 10 |
| | | (ii) Define and explain workability of concrete. | |