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Code No. :14106

**VASAVI COLLEGE OF ENGINEERING (Autonomous), HYDERABAD**  
**B.E. (CBCS: Civil Engg.) IV-Semester Main Examinations, May-2018**

**Building Materials and Construction**

Time: 3 hours

Max. Marks: 70

*Note: Answer ALL questions in Part-A and any FIVE from Part-B*

**Part-A (10 × 2 = 20 Marks)**

1. State the requirements of a good building stone.
2. Write any two differences between clamp burning and kiln burning of bricks.
3. Write the chemical composition of ordinary Portland cement.
4. Explain, why gypsum is added to cement clinker during cement manufacture?
5. Classify different types of mortar.
6. Write short notes on segregation and bleeding of concrete.
7. Differentiate between varnish and distemper.
8. Draw the figure of a cross section of timber and indicate the various parts.
9. Distinguish between stone flooring and concrete flooring.
10. List out the common types of floors.

**Part-B (5 × 10 = 50 Marks)**

11. a) What are the characteristics of good building bricks? [6]  
b) Explain the role of stone as a building material? [4]
12. a) List out the various types of cement and explain any four of them? [5]  
b) What are the characteristics of good sand and classify the sand based on its fineness modulus value? [5]
13. a) What are the advantages of plastering? Describe step by step the method of plastering for brick masonry surface? [7]  
b) Give slump and compaction factor values for various concreting works? [3]
14. a) Describe the various commercial forms of timber. [5]  
b) Explain about varnishes and their applications? [5]
15. a) Mention the types of flooring and describe in detail the method of construction of concrete flooring? [7]  
b) Give any three characteristics of good flooring? [3]
16. a) Explain the working of a bull's trench kiln for burning of bricks with the help of a neat sketch. [5]  
b) How do you produce white cement and what are its uses? [5]
17. Answer any *two* of the following:
  - a) Define workability of concrete? Explain how slump test is performed on concrete. [5]
  - b) List out the characteristics of ideal paints. [5]
  - c) Briefly discuss about industrial floors. [5]

