

Roll No. 158230067

Total No. of Questions : 5]

[Total No. of Printed Pages : 3

**B.E. IIIrd Semester (CGPA)  
Examination, 2017**

**EFS-322**

**CIVIL. ENGG.**

**(Engg. Materials and Construction)**

**Paper : CE-303**

**Time : 3 Hours]**

**[Maximum Marks : 60**

**Note :-** Attempt all questions. Solve any *two* parts only from each question. All parts carry equal marks.

1. (a) What is dressing of stone ? Why and how it is done ?
- (b) Classify bricks and state specifications of each type.
- (c) Explain how high strength concrete is made. What are its uses ?

**SAA-322**

( 1 )

Turn Over



- (d) Differentiate between Cement mortar, Surkhi mortar and Lime mortar.
2. (a) What is the need of wood substitutes ? What are different wood substitutes available for Doors and Windows.
- (b) Differentiate between Batten boards, Hard board, Black board and particle board.
- (c) What is Flyash ? How is it obtained ? Why is it used as ad mixture in cement and concrete ?
- (d) Discuss use of different materials available for damp proof courses in building.
3. (a) Describe important points for selection of a site for school and building. Explain orientation.
- (b) What preliminary investigations are required for construction of a building ? Explain also trial Pit bearings for investigation.
- (c) What is bearing capacity ? How is it obtained ?
- (d) What type of foundation is laid in black cotton soils ? Sketch the type of foundation.



4. (a) Discuss various types of Bonds in brick masonry  
Draw neat sketches.
- (b) What are non-load bearing walls ? Give their advantages and disadvantages.
- (c) What is importance of distempering and colour washing ?
- (d) What are various causes of dampness and how is it prevented ?
5. (a) What are various types of doors used in residential buildings ? Draw at least ten common types.
- (b) What are (i) Dormer windows, (ii) Louvered windows, (iii) Striding window and (iv) Pivoted window. Explain with neat sketches.
- (c) What are various stairs (type) used in commercial building ? Sketch at least two types and label their components.
- (d) Write short note on fire protection.