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**[5152]-501****S.E. (CIVIL) (I Semester) EXAMINATION, 2017****BUILDING TECHNOLOGY AND MATERIALS****(2015 PATTERN)****Time : Two Hours****Maximum Marks : 50**

- N.B. :-** (i) Attempt Q. No. 1 or Q. No. 2, Q. No. 3 or Q. No. 4, Q. No. 5 or Q. No. 6, Q. No. 7 or Q. No. 8.  
(ii) Figures to the right indicate full marks.  
(iii) Draw neat sketch wherever necessary.

1. (a) Enlist various types of Bonds. Explain any *one* with a neat figure. [6]  
(b) Explain the general procedure of foundation design. [6]  
Or
2. (a) Explain Cantilever footing with a labeled sketch. [6]  
(b) Enlist types of Scaffolding. Explain any *two* in detail. [6]
3. (a) Explain Vacuum Dewatered Flooring. [6]  
(b) Write a note on method of arch construction. [6]  
Or
4. (a) Explain with reason which type of flooring is recommended for the following : [6]  
(i) Lecture hall of a college

P.T.O.

- (ii) Laboratories of a college
  - (iii) Garage
  - (iv) Auditorium
  - (v) Machine shop
  - (vi) Canteen.
- (b) Draw a neat labeled sketch of panelled window with appropriate dimensions. [6]
- 5.** (a) Enlist various types of plastering and explain Lime plaster in detail. [6]
- (b) List any *four* types of staircases. Draw a Doglegged stair. [7]
- Or*
- 6.** (a) Write a short note on wall cladding. [6]
- (b) Explain the requirements of a good stairs with reference to the following : [7]
- (i) Pitch
  - (ii) Rise and Tread
  - (iii) Headroom
  - (iv) Width of stair
  - (v) Width of Landing
  - (vi) Number of steps in a flight
  - (vii) Location of a staircase.

7. (a) Explain the precautions to be taken for safety of workers on site. [7]
- (b) Write a note on Eco-friendly materials in construction. [6]
- Or*
8. (a) Write short notes on : [7]
- (i) Characteristics of good timber
- (ii) Types of Glass and their properties used in construction.
- (b) Explain the term Shoring. State the situations where shoring is required. [6]

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