

May 2016

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Seat No.	
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[4957]-1001

**S.E. (Civil) (I Sem.) EXAMINATION, 2016**  
**BUILDING TECHNOLOGY AND MATERIALS**  
**(2012 PATTERN)**

**Time : Two Hours**

**Maximum Marks : 50**

- N.B. :—**
- (i) Answer 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) Neat diagrams must be drawn wherever necessary.
  - (iii) Figures to the right indicate full marks.
  - (iv) Use of calculator is allowed.
  - (v) Assume suitable data, if necessary.

1. (a) Define foundation. Distinguish between shallow foundation and deep foundation with sketch. [6]
- (b) Write short notes on : [6]
- (i) Formwork for trapezoidal footing
  - (ii) Cavity wall construction.

*Or*

2. (a) Define bond. Explain strap footing. [6]
- (b) State different types of composite masonry. Explain form work for plinth beam. [6]

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3. (a) State functional requirements of flooring materials. Explain lean to roof in detail. [6]
- (b) Write short notes on : [6]
- (i) Swing door
- (ii) Dormer window.

*Or*

4. (a) Explain with neat sketch construction of concrete flooring. Draw sketch of Queen post roof truss. [6]
- (b) Explain with neat sketch : [6]
- (i) Nar-mads
- (ii) Pad lock
- (iii) Springing line
- (iv) Lintel.
5. (a) Explain step by step procedure of dog-legged staircase. Give sketch of dog-legged staircase. [7]
- (b) Define protective coatings. Explain defects in plastering. [6]

*Or*

6. (a) State and explain ideal requirements of good stair. Explain any *one* modern circulation mean. [7]
- (b) Explain the following with sketches : [6]
- (i) Dots in plastering

(ii) Trowel

(iii) Rise

(iv) Going.

7. (a) Define seasoning of timber. Explain any *two* methods of seasoning of timber. [6]
- (b) Write short notes on : [7]
- (i) Gypsum a building material
  - (ii) Building glass
  - (iii) Green building materials.

*Or*

8. (a) State the defects in timber. Explain any *one* in detail. [6]
- (b) Write short notes on : [7]
- (i) Ecofriendly building materials
  - (ii) Ceramic product
  - (iii) Aluminium in cladding.