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**[5057]-202**

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

**Time : Two Hours**

**Maximum Marks : 50**

- N.B. :—** (i) Neat diagrams must be drawn wherever necessary.  
(ii) Figures to the right indicate full marks.  
(iii) Your answers will be valued as a whole.

- 1.** (a) Define settlement. Explain the functions of foundation. [6]  
(b) Write short notes on : [6]  
(i) Formwork for plinth beam  
(ii) Composite masonry.

*Or*

- 2.** (a) Differentiate between strap footing and mat foundation. [6]  
(b) Write short notes on : [6]  
(i) Flemish bond  
(ii) Formwork.

- 3.** (a) State functional requirements of flooring. Draw neat and labelled sketch of queen post truss. [6]

P.T.O.

- (b) Write short notes on : [6]
- (i) Arches in monumental buildings
  - (ii) Dormer window.

*Or*

4. (a) State and write salient features of any *six* flooring tiles available in market. [6]
- (b) Explain the following with sketches : [6]
- (i) Extrados
  - (ii) Intrados
  - (iii) Narmadi
  - (iv) Barrel bolt.
5. (a) Define circulation. State modern means of circulation. Explain any *one*. [7]
- (b) Explain the following with sketches : [6]
- (i) Dots in plastering
  - (ii) Pitch
  - (iii) Riser.

*Or*

6. (a) Write short notes on : [6]
- (i) Defects in Painting
  - (ii) Ramps.

- (b) Comment on location of staircase in public building. Explain defects in plastering. [7]
7. (a) Define timber. Write down requirements of building timber. [7]  
(b) Write short notes on : [6]  
(i) Green building materials  
(ii) Safety measures at tunnel site.

*Or*

8. (a) Define seasoning of timber. Explain any *two* methods of seasoning of timber. [6]  
(b) Write short notes on : [7]  
(i) Eco-friendly materials  
(ii) Glass  
(iii) Gypsum.