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<b>Seat No.</b>	
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**[4657]-502**

**S.E. (Civil) (First Semester) EXAMINATION, 2014**

**BUILDING TECHNOLOGY AND MATERIALS**

**(2012 PTTERN)**

**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) Assume suitable data if necessary.

1. (a) It is proposed to construct a residential building on black cotton soil. As a civil engineer; you have two choices, Isolated column footing and Pile foundation. Comment with reason, which you would select.

[6]

P.T.O.

(b) Write short notes on :

(i) Laying of block

(ii) Form-work for beam. [6]

*Or*

**2.** (a) Write short notes on : [6]

(i) Strap footing

(ii) English bond.

(b) Discuss slip form-work. State advantages of block masonry. [6]

**3.** (a) State functional requirements of flooring. Draw sketch of King post truss. [6]

(b) Define the following with line sketches : [6]

(i) Door

(ii) Window

(iii) Arch

(iv) Lintel.

*Or*

4. (a) State *four* market names of flooring tiles. Draw sketch of Queen-post truss. [6]

(b) Explain the following with sketches : [6]

(i) Corner window

(ii) Corbel Arch

(iii) Barrel bolt.

5. (a) Explain the following with sketches : [6]

(i) Newel post

(ii) Dots in plastering

(iii) Winder.

(b) State ideal requirements of good stair. Explain defects in plastering. [7]

*Or*

6. (a) Write short notes on : [7]

(i) Wall papering

(ii) Quarter turn stair.

- (b) Explain the following with sketches : [6]
- (i) Scotia
  - (ii) Beaded pointing
  - (iii) Dots in plastering
  - (iv) Blistering.
7. (a) Define seasoning of timber. Explain defects in timber. [6]
- (b) Write short notes on : [7]
- (i) Ceramic products
  - (ii) Gypsum [www.sppuonline.com](http://www.sppuonline.com)
  - (iii) Repairs and Maintenance.
- Or*
8. (a) Write down engineering properties of : [7]
- (i) Glass
  - (ii) Ceramic products
  - (iii) Timber.
- (b) Write short notes on : [6]
- (i) Prevention of accidents on site
  - (ii) Storage of materials at site.