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Seat No.	
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**[5057]-2002**

**S.E. (Civil) (First Semester) EXAMINATION, 2016**

**BUILDING TECHNOLOGY AND MATERIALS**

**(2015 PATTERN)**

**Time : Two Hours**

**Maximum Marks : 50**

**N.B. :-** (i) Answer Q. 1 or Q. 2, Q. 3 or Q. 4, Q. 5 or Q. 6 and Q. 7 or Q. 8, should be written in answer-books properly.

(ii) Neat diagrams must be drawn wherever necessary.

(iii) Use of logarithmic tables, slide rule, Mollier charts, electronic pocket calculator and steam table is allowed.

(iv) Assume suitable data, if necessary.

(v) Figures to the right indicate full marks.

1. (a) What do you understand by Foundation ? Briefly explain Foundation in black cotton soil. [2+4=6]

(b) Explain briefly composite masonry with respect to materials and types. [3+3=6]

P.T.O.

*Or*

2. (a) List any *four* types of building as per National Building Code 2005 ? Briefly explain commercial building. [2+4=6]
- (b) Draw neat sketch of wooden formwork for a steeped column footing. [3+3=6]
3. (a) Enlist any *four* types of flooring. Explain with neat sketch ceramic flooring ? [2+5=7]
- (b) Explain with neat sketch the fixing details of wooden door frame installation. [6]

*Or*

4. (a) Write a short note on epoxy asphalt flooring. [6]
- (b) Explain the method of Arch construction with neat sketch. [7]
5. (a) Explain with suitable example the design of Dog-legged staircase. [2+4=6]
- (b) Explain with neat sketch the defects in plastering. [3+3=6]

*Or*

6. (a) Write a short note on : Wall cladding-materials and methods. [2+4=6]
- (b) Explain the purpose and types of ventilators. [3+3=6]

7. (a) Enlist the engineering properties of the following : [3+3=6]

(i) Timber

(ii) Aluminum.

(b) Write short notes on : [3+4=7]

(i) Fiber reinforced polymers

(ii) Eco-friendly materials.

*Or*

8. (a) Enlist the seven safety precautions you will take on construction site. [7×1=7]

(b) Write a short note on Glass-uses, types and properties.

[1+2+3=6]