[Total No. of Printed Pages—3

Seat	
No.	

[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]

- **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.
- **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. $[7 \times 1 = 7]$
 - (b) Write a short note on Glass-uses, types and properties.

[1+2+3=6]