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**[5252]-501**

**S.E. (Civil Engineering) (First Semester) EXAMINATION, 2017**

**BUILDING TECHNOLOGY AND MATERIALS**

**(2015 PATTERN)**

**Time : Two Hours**

**Maximum Marks : 50**

**N.B. :—** (i) Attempt Q. 1 or Q. 2, Q. 3 or Q. 4, Q. 5 or Q. 6,  
Q. 7 or Q. 8.

(ii) Figures to the right indicate full marks.

(iii) Draw neat sketch wherever necessary.

1. (a) Enlist different shallow and deep foundations and describe one in each category. [6]
- (b) Write a short note on composite masonry with explanatory sketch. [6]

*Or*

2. (a) Explain the following terms :  
Bond, Through stone, Stretcher. [6]
- (b) Explain in depth : Slip form work. [6]

3. (a) Give the detailed process of tile flooring. [6]
- (b) Draw a sketch of "Casement Window" indicating all the terms. [6]

*Or*

4. (a) Write a short note on space frames. [6]

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- (b) Explain the following terms (by drawing a sketch inclusive of all) :  
abutment. voussoirs, extrados. [6]
5. (a) Design a dog legged stair for commercial building with 3.3 m height with riser height of 0.15 m and tread width 0.3 m with flight width of 1.5 m. Draw a neat sketch for the same. [7]
- (b) Explain in depth the purpose of protective coatings. [6]
- Or*
6. (a) Write a note on "applicability of lifts and escalators". [6]
- (b) Explain the term Pointing and its applications by drawing minimum 3 types. [7]
7. (a) Why and where aluminum products are used ? [6]
- (b) Explain in depth the term shoring with explanatory sketch (any *one* category) : Shoring. [7]
- Or*
8. (a) Why ecofriendly materials are important ? Explain by giving appropriate examples. [6]
- (b) What precautions are to be taken while storing the materials on site ? Explain by giving appropriate examples. [7]