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Seat No.	
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[5352]-501

S.E. (Civil) (I Sem.) EXAMINATION, 2018
BUILDING TECHNOLOGY AND MATERIALS
(2015 PATTERN)

Time : Two Hours

Maximum Marks : 50

- N.B. :—** (i) Solve 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) Figures to the right indicate full marks.
(iii) Assume suitable data, if necessary.
(iv) Use of non-programmable scientific calculator is allowed.

- Q 1 a) Write a short note on : causes of failure of foundations. 5
b) Explain in depth Reinforced Brick Masonry. 5
OR
Q 2 a) Write a short note on silica bricks, considering following points: ingredients, 6
properties, applications.
b) Write a short note on "slip formwork" 4
Q 3 a) Write a short note on :functional requirements of flooring. 4
b) Explain in depth i) folding doors ii) casement window. 6
OR
Q 4 a) Write a short note on pneumatic structures. 5
b) Write a short note on "construction of an arch" 5
Q 5 a) Write a short note on i) lifts and ii) escalators . 8
b) Explain in depth , "pointing". 7
OR
Q 6 a) Design a dog legged staircase using following data: i) Floor to floor height- 3.2 m, 7
ii) Riser- 160 mm, iii) Tread : 275 mm, iv) Landing width- 1.2 m (observed on
either side of flight). Find the internal dimensions of staircase room. Draw the
plan for the same.
b) Write a short note on "wall cladding and white washing"; considering following 8
points- meaning, purpose, material, process.

P.T.O.

- Q 7 a) Write a short note on :application of i) ceramic and ii) ecofriendly materials in construction industry. 8
- b) Explain in depth "Shoring". 7
- OR
- Q 8 a) Write a short note on : application of i) aluminum and ii) timber in construction industry. 8
- b) Write a short note on "causes and prevention of accidents" on construction site. 7