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Q.P. Code: 16CE107

Reg. No:

## SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR (AUTONOMOUS)

## B.Tech II Year I Semester Supplementary Examinations Nov/Dec 2019 BUILDING MATERIALS & CONSTRUCTION

(Civil Engineering) Time: 3 hours Max. Marks: 60 (Answer all Five Units  $5 \times 12 = 60$  Marks) UNIT-I a What are the classification of bricks and explain it? **6M b** Explain the sustainable materials in construction. **6M** OR a What are the characteristics of good building stones and explain it? 5M **b** What are the waste materials from buildings and how they utilize these materials? 7MUNIT-II a Describe the manufacturing process of glass. 5M b How is condensation polymerization different from addition polymerization? 7Ma What is polymerization and explain its mechanism? 7M**b** Furnish the general properties of glass. 5M UNIT-III a Distinguish between the organic and inorganic insulators. **7M b** Explain the fundamentals of heat transfer. 5M OR a What are commonly used building insulation materials? **6M b** Give common types of sound absorbent materials. **6M** UNIT-IV a Explain the structural components of building. 7M**b** Explain the different methods of preventing dampness. 5M a Compare the merits and demerits of stone masonry and brick masonry. 7M**b** Enumerate the detailed functions of a structural foundation. 5M UNIT-V a Furnish the different classifications of arches with sketches. **6M** b What are the different classifications of floors? Explain them. **6M** OR 10 a What are the different constituents of an oil paint? Describe them briefly. 7M**b** What are the requirements of a good staircase? 5M

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