Dr. DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY,

LONERE – RAIGAD – 402 103

Winter Semester (Regular) Examination – May – 2018

Semester: II Course: B. Arch Subject: Building Construction Technology and Materials-2 Subject Code: AR 10200003 Duration: 3 Hrs. Marks: 50 Date: 05/12/2018 **Instructions:** 1. All Questions are compulsory. 2. Do not erase construction lines. 3. Draw neat sketches wherever necessary. (10 Marks) Q. No. 1 | Solve any TWO of the following: Describe raw material used for glass and any 2 types of glass. (5 Marks) A) (5 Marks) Describe types of steel and where it is used in building industry? 3) (5 Marks) Describe different forms of plastic in building industry? C) OR (10 Marks) Solve any TWO of the following: Q. No. 1 (5 Marks) Describe mixing of concrete? A) (5 Marks) Describe manufacturing process of Steel. B) (5 Marks) What are advantages of aluminum? C) (20 Marks) Attempt any ONE of the following: Q. No. 2 (5 Marks) i) What are advantages of polymers in building industry? A) (5 Marks) ii) Describe reinforced cement concrete. iii) Explain with a neat sketch various Structural sections used in building industry. (10 Marks) What is the IS nomenclature used to describe Beams, Channels, Tees, Angles, etc. OR i) Describe water cement ratio and workability of concrete. (5 Marks) B) (5 Marks) ii) What are different materials used for wall cladding. iii)What are the different types of concrete? Describe different tests done to identify (10 Marks) strength of concrete. (20 Marks) Attempt any ONE of the following: Q. No. 3 i) Draw a neat well annotated sketch section through an external wall showing details (10 Marks) A) from foundation to roof level. ii) What are disadvantages of solid wall. Describe Rat Trap bond in detail. (10 Marks) OR i) What are advantages of composite wall and care to be taken while construction. (10 Marks) B) (10 Marks) ii) Draw neat sketches showing details of cavity wall at plinth and parapet level.

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