

SE | Civil | sem IV | CBCRS | R-19 | C-scheme | BMECT | SH-25

(03 HOURS)

TOTAL MARKS: 80 10/12/25

G.P. 20000258

- Instructions:** (1) Question N0.1 is compulsory
 (2) Answer any **Three Questions** from the remaining questions.
 (3) Each full question carries 20 marks.
 (4) Draw neat sketches wherever essential.

Q1. Attempt any four out of six.**5 Marks Each**

- A) Enlist in detail classification of engineering materials
 B) Explain preservative treatment for stones
 C) Explain bulking phenomenon of sand
 D) Write a short note on the grade of concrete.
 E) Write a short note on Ready Mix Concrete.
 F) Explain the types of vibrators used in concrete.

Q2. A) Explain bricks and their manufacturing process (10M)**B) Explain briefly the factors affecting the requirement of construction material (05M)****C) State the engineering properties of ceramics with its uses (05M)****Q3. A) Explain various tests carried on lime. (10M)****B) Enlist components of RMC plant & Draw a neat layout sketch of it. (10M)****Q4. A) What is "Durability" of concrete? Explain the factors affecting it and means to ensure a durable concrete. (10M)****B) What is admixture? What is the purpose of admixture? Enlist the different types of mineral admixture and explain any one in detail. (10M)****Q5. A) Explain following non-destructive testing methods : (10M)**

- a) Rebound Hammer Test
 b) Ultrasonic Pulse velocity Test.

B) Explain defects in timber with neat sketch (10M)**Q6. A) Explain demerits of distemper as compared to paints. (05M)****B) Explain quarrying of stones. (05M)****C) Explain stepwise procedure of Concrete Mix Design by IS 10262 Method. (10M)**

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