

Roll No.

Total Pages : 03

Sep-21-00020

B. Tech. EXAMINATION, 2021

Semester III (CBCS)

BUILDING MATERIALS

CE-304

Time : 2 Hours

Maximum Marks : 60

The candidates shall limit their answers precisely within 20 pages only (A4 size sheets/assignment sheets), no extra sheet allowed. The candidates should write only on one side of the page and the back side of the page should remain blank. Only blue ball pen is admissible.

Note : Attempt *Four* questions in all, selecting *one* question from any of the Sections A, B, C and D.
Q. No. 9 is compulsory.

Section A

1. Explain physical and mechanical properties of construction materials. 15

2. Describe the materials (a) Ceramic, Terrazzo and clay tiles (b) Types and uses. **15**

Section B

3. Describe the materials used for building services (a) GI sheets (b) tubes and light weight roofing materials. **15**
4. Define the following : **15**
- (a) Seasoning of timber
 - (b) Timber market forms.

Section C

5. Define the following : **15**
- (a) Polymer Modified Bitumen
 - (b) Crumb Rubber Modified Bitumen.
6. Define Joint filler compound-Joint sealant compound, anti-stripping compound. **15**

Section D

7. Describe the Modern Materials (a) Glass, Ceramics and sealants for joints (b) Sheets for pitched roof coverings. **15**

8. Describe the following : **15**
- (a) Fibre Glass reinforced plastics
 - (b) Clay Products-Refractories.

(Compulsory Question)

9. Short answer type questions : **2.5×6=15**
- (a) How the Bricks are classified and tested ? Discuss in detail.
 - (b) Enlist several commonly used stones in Building Materials.
 - (c) Enlist various tests conducted on stones.
 - (d) Describe the roofing materials for building services made of steel and aluminum.
 - (e) Define mastic asphalt.
 - (f) Define Polymer and resins for building repair.