

**BACHELOR OF TECHNOLOGY (C.B.C.S.) (2021-COURSE)**  
**B. Tech. Sem - I :SUMMER- 2022**  
**SUBJECT : CIVIL ENGINEERING STRUCTURES & GEOLOGY**

Day : *Thursday*  
Date : 21-07-2022

**S-24033-2022**

Time *10:00AM TO 1:00 P.M.*  
Max. Marks : 60

**N.B.**

- 1) All questions are **COMPULSORY**.
- 2) Figures to the **RIGHT** indicate **FULL** marks.
- 3) Use of non-programmable calculator is **allowed**.
- 4) Assume suitable data **WHEREVER** necessary.
- 5) Draw neat labeled diagrams **wherever** necessary.

**Q.1** Explain various functions served by Civil Engineering Structures. Give the details of load bearing structures. (10)

**OR**

**Q.1** Explain various special structure like nuclear reactors, towers, chimneys. (10)

**Q.2** What are the Solid structures and tabular structures? Explain in detail. (10)

**OR**

**Q.2** Write a detailed note on following: (10)

- a) Cavity walls    b) Shear walls.

**Q.3** Explain in detail: i) Green building ii) Intelligent building. (10)

**OR**

**Q.3** Describe water and soil conservation from a structure. (10)

**Q.4** What is a mineral? Give classification of minerals. (10)

**OR**

**Q.4** Elaborate different textures of Igneous Rocks. (10)

**Q.5** Elaborate mode of occurrence of Igneous Rocks. (10)

**OR**

**Q.5** What is unconformity? Elaborate types of unconformities. (10)

**Q.6** Elaborate surface investigation for Civil Engineering Structures. (10)

**OR**

**Q.6** Elaborate preliminary geological investigation for tunnel. (10)

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