

**II B. Tech II Semester Supplementary Examinations, February - 2022**  
**ENGINEERING GEOLOGY**  
 (Civil Engineering)

Time: 3 hours

Max. Marks: 75

Answer any **FIVE** Questions each Question from each unit  
 All Questions carry **Equal** Marks

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|----|----|---|-------|
| 1  | a) | Write the main and allied branches of geology. With their importance.                       | [8M]  |
|    | b) | Discuss the scope of geology in water resources development.                                | [7M]  |
| Or |    |   |       |
| 2  | a) | Explain briefly weathering of rock.   | [8M]  |
|    | b) | What is geology? Explain mining geology in detail.  | [7M]  |
| 3  | a) | Write the significance of metamorphic rocks in civil engineering.                           | [8M]  |
|    | b) | Write a brief note on common rock forming minerals.   | [7M]  |
| Or |    |   |       |
| 4  | a) | Explain the physical properties of Quartz group of minerals.                                | [8M]  |
|    | b) | Describe the engineering importance of igneous rocks.                                       | [7M]  |
| 5  | a) | Explain the different parts of folds.   | [8M]  |
|    | b) | Discuss the various causes of joints.   | [7M]  |
| Or |    |   |       |
| 6  | a) | Describe fault structures with neat sketches and also write their role in dam construction. | [8M]  |
|    | b) | What is meant by unconformities? Explain any two types of Unconformities.                   | [7M]  |
| 7  | a) | Write in detail about landslides. Explain the measures to prevent them.                     | [8M]  |
|    | b) | Discuss the gravity method in geophysical investigation.                                    | [7M]  |
| Or |    |   |       |
| 8  | a) | Explain any two ground water exploration techniques.  | [8M]  |
|    | b) | Describe seismic bells and Richter scale in detail.   | [7M]  |
| 9  |    | Explain briefly the purpose geology in Tunnelling.  | [15M] |
| Or |    |   |       |
| 10 |    | Discuss the geological considerations in the selection of a dam site.                       | [15M] |

