

Code No: **R1631012**

R16

SET - 1

III B. Tech I Semester Supplementary Examinations, August-2021

ENGINEERING GEOLOGY

(Civil Engineering)

Time: 3 hours

Max. Marks: 70

Note: 1. Question Paper consists of two parts (**Part-A** and **Part-B**)

2. Answer **ALL** the question in **Part-A**

3. Answer any **FOUR** Questions from **Part-B**

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**PART -A**

**(14 Marks)**

1. a) Write the importance of petrology in Civil Engineering, [2M]
- b) Define mineralogy. What is the form of kyanite? [2M]
- c) What is stratigraphy? [2M]
- d) What are the measures to be taken prevent landslides? [3M]
- e) Write advantages and uses of geophysical prospecting in civil engineering. [3M]
- f) Define dam. What are their types? [2M]

**PART -B**

**(56 Marks)**

2. a) Define denudation. Describe the processes of chemical weathering of rocks. [7M]
- b) Describe the process of the rock weathering. Distinguish between weathering and erosion. [7M]
3. a) Define mineral. Explain the structure of the silicates. [7M]
- b) Define texture of sedimentary rock. Discuss the various types of textures in sedimentary rocks. [7M]
4. a) Classify and describe with neat sketches the different types of folds in rocks. [7M]
- b) Explain briefly about Cuddapah system and the vindhyyan super group type, give economic importance of the rocks. [7M]
5. a) Define isoseismal lines. Explain seismic zone of India. [7M]
- b) Write short note on: i) Porosity and permeability; ii) confined and unconfined wells. [7M]
6. a) Explain seismic refraction method related to civil engineering. [7M]
- b) Describe the principle of magnetic method and explain it. [7M]
7. a) What is a tunnel? What are their uses and types, give at least one example of Indian tunnel. [7M]
- b) Explain the purpose of tunnels and how they influence of geology for successful tunneling? [7M]

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