

III B. Tech I Semester Supplementary Examinations, May - 2019**ENGINEERING GEOLOGY**

(Civil Engineering)

Time: 3 hours

Max. Marks: 70

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- 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

1. a) Define rock weathering. [2M]
- b) What is the property of mineral? [2M]
- c) Define strike. Draw neat sketch. [2M]
- d) What are the causes of the earthquake? [3M]
- e) What is the importance of geophysics in engineering? [3M]
- f) What are the benefits of dam construction? [2M]

PART -B

2. a) Define rock weathering. Explain geological work of mechanical weathering. [7M]
- b) Explain the geological action of streams. Discuss the formation of ox-bow lake. [7M]
3. a) Write megascopic study of following rocks: [7M]
i) Sandstone ii) Pegmatite iii) Gneiss
- b) What is meant by rock cycle? Discuss the different types of texture of igneous rocks. [7M]
4. a) Classify the various types of faults and explain it diagrammatically. [7M]
- b) What are unconformities? How are these recognized? [7M]
5. a) Define focus and epicenter? What are the tectonic earthquakes, and how are they caused? [7M]
- b) What are landslides? Classify landslides and their causes. How landslides can be prevented? [7M]
6. a) What is the importance of geophysical methods, classify and explain their applications. [7M]
- b) State the principle of seismic method and explain it related to civil engineering. [7M]
7. a) Describe the geological considerations relating to the construction of gravity and arch type of concrete dam. [7M]
- b) Write about factors affecting the water-tightness of a dam reservoir. [7M]
