

Code No: RT31014

**R13****SET - 1****III B. Tech I Semester Supplementary Examinations, May - 2018****ENGINEERING GEOLOGY**

(Civil Engineering)

Time: 3 hours

Max. Marks: 70

Note: 1. Question Paper consists of two parts (**Part-A** and **Part-B**)2. Answering the question in **Part-A** is compulsory3. Answer any **THREE** Questions from **Part-B****PART -A**

- 1 a) Define weathering? What is the role of oxidation in weathering of rocks? [4M]  
b) What is meant by cleavage? What are their different types? [3M]  
c) What are the problems of faults in civil engineering works? [3M]  
d) Define confined and unconfined aquifers. [4M]  
e) Write applications of magnetic method [4M]  
f) What is the influence of geology for life of reservoirs? [4M]

**PART -B**

- 2 a) Describe the process of rock weathering? [5M]  
b) Explain effects and importance of weathering of rocks with reference to civil engineering. [5M]  
c) Discuss the geological work of river? Give the depositional landforms made by rivers. [6M]
- 3 a) What is texture of a rock? Discuss the various types of textures in sedimentary rocks. [6M]  
b) What is meant by rock cycle and how does it represents the sequence of formation. [4M]  
c) Describe the petro graphic characters of i) Conglomerate ii) Basalt iii) Limestone [6M]
- 4 a) Classify and describe the different types of faults in rocks and explain how they are recognized in the field? [8M]  
b) Classify and describe different types of joints in rock with neat sketches. [8M]
- 5 a) What are landslides? What are their causes? How landslides can be prevented? [8M]  
b) Write short note on i) cone of depression ii) geological controls of ground water movement. [8M]
- 6 a) Describe the seismic wave refraction method for two layer case with horizontal interface. [8M]  
b) What are the advantages and uses of geophysical prospecting and explain gravity method of geophysical prospecting. [8M]
- 7 a) What is tunnel? Explain its types, what are their advantages. [8M]  
b) Discuss geological considerations for a successful reservoir site. [8M]

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