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SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)**B.Tech III Year I Semester Regular & Supplementary Examinations Nov/Dec 2019**
ENGINEERING GEOLOGY
(Civil Engineering)

Time: 3 hours

Max. Marks: 60

(Answer all Five Units **5 x 12 = 60** Marks)**UNIT-I**

- 1 a No structure however is better than its foundation and the material it is made of - 7M
Justify.
- b Explain briefly volcanism. 5M

OR

- 2 a Enlist and explain the various landforms formed by the action of glaciers. 6M
- b Describe in brief the important geological actions of river. 6M

UNIT-II

- 3 a Explain the important physical properties of the minerals to be studied from the 6M
point of civil engineering.
- b Describe the following minerals. 6M
i) Quartz ii) Calcite iii) Garnet.

OR

- 4 a Explain the following mineral groups. 6M
i) Feldspar ii) Olivine.
- b Distinguish the following minerals from one another. 6M
i) Hornblende and Augite ii) Kyanite and mica iii) Quartz and Calcite.

UNIT-III

- 5 a Explain the classification of rocks and their characteristics. 6M
- b Enlist and explain the argillaceous rocks. 6M

OR

- 6 a Explain the structures of the metamorphic rocks 4M
- b How do you distinguish from following one from the other 8M
i) Limestone and Marble ii) Sandstone and Quartzite
iii) Shale and Slate iv) Schist and Gneiss

UNIT-IV

- 7 a Define soil. How is it formed? Explain various types of soils occurring in India. 8M
- b Give the classification of unconformities. 4M

OR

- 8 a Explain various investigations used in groundwater exploration. 6M
- b Enlist and explain the terminology used in earthquakes. 6M

UNIT-V

- 9 a Describe the various investigations to be carried out for the protection of reservoir 6M
life.
- b Explain the importance of joint in the tunnel excavations. 6M

OR

- 10 a Explain the problems likely to be encountered by the tunnels through folded and 6M
faulted rocks.
- b Describe the geology of the Nagarjuna sagar dam site in Andhra Pradesh. 6M

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