Q.P. Code: 16CE121 Reg. No: SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR (AUTONOMOUS) B.Tech III Year I Semester Supplementary Examinations August-2021 **ENGINEERING GEOLOGY** (Civil Engineering) Time: 3 hours Max. Marks: 60 (Answer all Five Units $5 \times 12 = 60$ Marks) **UNIT-I** What is weathering? Enumerate the various mechanisms of rock weathering. Describe 1 chemical Weathering in detail? OR Distinguish between weathering and erosion. Describe the various process of 12M 2 weathering? UNIT-II What is a rock forming mineral? Discuss process of formation of minerals in nature. **12M** 3 4 Explain the important physical properties of minerals that are commonly studied for 12M their identification? UNIT-III Explain the classification of sedimentary rocks giving suitable example? 5 12M OR Describe the columnar, flow and sheet structures of igneous rocks. 12M 6 UNIT-IV What is an unconformity? Describe different types of unconformity. Add a note on 12M 7 the Importance of Unconformity? OR What are landslides? Describe the causes and methods to prevent them and also 12M 8

explain how are landslides measured?

UNIT-V

Explain the geological structural controls on selection of dam site & also explain the 12M 9 methods to control reservoir silting.

OR

10 What is a geological structure? How the geological structures are responsible for the 12M failure of any tunnel alignment? Explain.

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