Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY PDDC - SEMESTER-I • EXAMINATION - SUMMER • 2014

Subject Code: X10602 Date: 17-06-2014

Bubject Code: 2110002	Date: 17-00-201-
Subject Name: Engineering Geology	
Time: 02:30 pm - 05:00 pm	Total Marks: 70

Instructions:

Q.6

Q.7

(a)

(b)

(a)

(b)

- Attempt all questions.
 Make suitable assumptions wherever necessary.
- 3. Figures to the right indicate full marks.
- **Q.1** Define the weathering of rocks. Describe the chemical weathering of rocks **07** (a) giving suitable illustrations. Define a mineral. Describe three important physical properties of minerals **(b)** 07 which help in their identification. **Q.2** Narrate the importance of geology in civil engineering practices. **07** (a) Explain the factors and kinds of metamorphism. **07 (b) Q.3** (a) State various applications of remote sensing techniques in civil engineering. **07** Explain the significance of geological maps and sections. **07 (b)** 0.4 Describe the electrical resistivity method of subsurface 07 (a) geological investigations. How are igneous rocks formed? Give their classification based on depth of 07 **(b)** origin. **Q.5** Discuss the suitability of a tunnel alignment in faulted sequence of rocks. **07** (a) Describe different components of a typical fold. **07 (b)**

Elaborate the zones of ground water movement.

Describe the rock cycle with a neat sketch.

Explain the origin of sedimentary rocks.

State how the landslides can be prevented.

07

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