

GUJARAT TECHNOLOGICAL UNIVERSITY
PDDC– SEMESTER I– • EXAMINATION –WINTER- 2016

Subject Code: X10602**Date:09/01/2017****Subject Name: Engineering Geology****Time: 10:30 AM to 1:00 PM****Total Marks: 70****Instructions:**

1. Attempt any five questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Each question carry equal marks (14 marks)

- Q.1** (a) Write explanatory note on importance of engineering geology in civil engineering. **07**
(b) Define geological fault? Explain engineering importance of geological fault. **07**
- Q.2** (a) Define rock cycle and explain its functioning. **07**
(b) Explain porosity and permeability of rocks with suitable examples. **07**
- Q.3** (a) Describe tabular classification of igneous rocks with suitable examples. **07**
(b) How are sedimentary rocks formed? Classify them based on mode of formation. **07**
- Q.4** (a) Explain process of mechanical weathering of rocks in the regions of higher altitude. **07**
(b) Define landslide and explain different components of landslide with neat diagram. **07**
- Q.5** (a) What are secondary structures in rocks? Write an illustrative note on dyke and sill. **07**
(b) Discuss the merit and demerit; when dam is proposed on metamorphic rocks. **07**
- Q.6** (a) Explain different grades of rock metamorphism. **07**
(b) Explain confined and unconfined aquifers. **07**
- Q.7** (a) Describe properties of streak, lustre and cleavage in minerals with suitable examples. **07**
(b) Define fold and classify them based on axial plane. **07**
