

Reg. No.: \_\_\_\_\_

Name: \_\_\_\_\_

**APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY**  
**THIRD SEMESTER B.TECH DEGREE EXAMINATION, JANUARY 2017**

**CE205: ENGINEERING GEOLOGY (CE)**

Max. Marks:100

Duration: 3 Hours

*Draw neat sketches wherever necessary*

**Part A**

*(Answer any TWO questions)*

- 1) Explain:
  - a) chemical weathering (7.5)
  - b) soil profile (7.5)
- 2) Describe vertical distribution of ground water (15)
- 3) What are:
  - a) exfoliation (4)
  - c) artesian wells (4)
  - d) Give an account of factors controlling groundwater movement (7)

**Part B**

*(Answer any TWO questions)*

- 4) Explain:
  - a) cleavage (5)
  - b) lineation and foliation (5)
  - c) chemical formulae of calcite and quartz (2.5x2= 5)
- 5) Discuss seismic waves and their properties (15)
- 6) Elucidate
  - a) Classification of rocks based on their origin (6)
  - b) Lithosphere and Asthenosphere (5)
  - c) Point load test (4)

**Part C**

*(Answer any TWO questions)*

- 7) Explain:
  - a) Folds (7)
  - b) faults (7)
  - c) their significance in civil engineering (6)
- 8) Discuss the different flood management strategies (20)
- 9) Elucidate on:
  - a) Longshore currents (7)Engineering significance of:
  - a) Dip and (7)
  - b) strike (6)