

R09

Code: 9A01505

III B. Tech I Semester (R09) Supplementary Examinations, May 2012

ENGINEERING GEOLOGY

(Civil Engineering)

Time: 3 hours

Max Marks: 70

Answer any FIVE questions
All questions carry equal marks

- 1 What is meant by weathering of rocks? Explain in detail different geological agents responsible for weathering of rocks.
- 2 On the basis of silicate structure, classify silicate minerals into various groups. Explain the structure of each group in detail.
- 3 Explain how the sedimentary rocks are formed. Describe the various structures present in these rocks.
- 4 Classify and describe the different types of faults. Give the various minor structures found in the fault zones. Discuss the effects of faulting on various engineering projects.
- 5 Discuss, in brief, the causes and effects of earthquakes. In this connection enumerate some of the major Indian earthquakes and comment on the possible mode of origin.
- 6 Describe the principle of gravity method with the help of a neat sketch. What are the different parameters measured? Also explain different kinds of gravity methods that are followed during the investigations.
- 7 Discuss the foundation and abutment competency of rocks with reference to dams.
- 8 What is tunnel? With the help of a well-labeled neat sketch, describe the parts of a tunnel.
