

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

# Karunya University

(Karunya Institute of Technology and Sciences)

(Declared as Deemed to be University under Sec.3 of the UGC Act, 1956)

## End Semester Examination – April/May 2011

Subject Title: ENGINEERING GEOLOGY

Subject Code: 09CE203

Time: 3 hours

Maximum Marks: 100

### Answer ALL questions

#### PART – A (10 x 1 = 10 MARKS)

1. Define Mantle.
2. What are the products of weathering?
3. Define texture.
4. How are sills classified?
5. Define magma.
6. Define dip joint.
7. What is the use of electrical sounding?
8. What are the objectives of constructing dams?
9. What are the forces acting on a dam?
10. Define sandstone.

#### PART – B (5 x 3 = 15 MARKS)

11. Define weathering and explain its types.
12. Write short notes on: a. Symmetry b. Crystallographic axis
13. Describe briefly the classification of sedimentary rocks.
14. Define the term faulting in rocks. Explain the engineering significance of faults.
15. Classify different types of joints.

#### PART – C (5 x 15 = 75 MARKS)

16. Write a note on the mode of occurrence of ground water.  
(OR)
17. Explain briefly the physical and chemical weathering process.
18. Write short notes on Hardness and Lustre of minerals.  
(OR)
19. Describe the various physical properties of the minerals.
20. Describe the properties and use of following rocks:  
a. Granite      b. Sandstone      c. Marble      d. Gneiss  
(OR)
21. Explain briefly about structure and forms of an igneous rock.
22. Explain the electrical method of geophysical survey.  
(OR)
23. Explain briefly about origin of joints.
24. What are landslides? How they are caused? Describe the various types of landslides.  
(OR)
25. What are the geological considerations to be taken into account while constructing Tunnels?