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 – November/December 2011

Subject Title : ENGINEERING GEOLOGY Subject Code: 09CE203

Time : 3 hours Maximum Marks: 100

<u>Answer ALL questions</u> <u>PART – A (10 x 1 = 10 MARKS)</u>

- 1. The earth is commonly described as a _____.
- 2. The branch of science dealing with the study of earthquakes in all their aspects is called
- 3. ______ is the science that deals with the study of the earth as a whole.
- 4. The branch of geology which deals with the mode of occurrence of rock bodies is known as
- 5. _____ of a bed is direction of intersection of the bedding plane with an horizontal plane.
- 6. Granite is an example of _____ rocks.
- 7. Sedimentary rocks are also called _____ rocks.
- 8. _____ is defined as the maximum angle of slope of a bed (or) layer of rock with the horizontal.
- 9. ______ is the second concentric shell of the earth that lies beneath the crust everywhere.
- 10. _____ may be defined as underground routes (or) passages driven through the rocks (or) soft ground without disturbing the overlaying soil or rock over.

$\underline{PART} - \underline{B} \quad (5 \ge 3 = 15 \text{ MARKS})$

- 11. Define the term 'joints'.
- 12. Discuss in brief about the term 'atmosphere'.
- 13. Write short notes on mineralogy.
- 14. What is the chemical composition of igneous rocks?
- 15. Discuss in brief about dams.

$\underline{PART - C} \quad (5 \times 15 = 75 \text{ MARKS})$

16. Write a brief note on the origin and age of the earth.

(OR)

- 17. What are the causes of earthquake? Explain.
- 18. Discuss briefly the physical properties of a mineral.

(OR)

- 19. Discuss about the origin and production of coal and petroleum.
- 20. State the basis on which sedimentary rocks are classified.

(OR)

- 21. Describe the important characteristic features and uses of the following rocks:a. Graniteb. Basaltc. Limestone
- (3x5)
- 22. What are the different types of joints occurring in rocks? Explain any two of them.

(OR)

23. Explain briefly about causes and prevention of Landslides.

24. Discuss the Geological features, which are to be taken into consideration, for the proper planning of a dam site project.

(OR)

- 25. Explain briefly about the following:
 - a. Traffic Tunnels
 - b. The Hydro Power tunnels
 - c. The Public utility tunnels

(3x5)