ANNA UNIVERSITY OF TECHNOLOGY, COIMBATORE

B.E. / B.TECH. DEGREE EXAMINATIONS: NOV / DEC 2010

REGULATIONS: 2008

THIRD SEMESTER: CIVIL ENGINEERING

080100009 - APPLIED GEOLOGY

TIME: 3 Hours

Max. Marks: 100

PART A

 $(20 \times 2 = 40 \text{ Marks})$

ANSWER ALL QUESTIONS

- 1. Name any four branches of geology.
- 2. What are the layers earth's interior?
- 3. What is weathering?
- 4. Define "Aquifer".
- 5. What is centre of symmetry?
- 6. Name two examples for metallic and non metallic minerals.
- 7. What is ore mineral?
- 8. Name any two mica group minerals
- 9. What is igneous rock?
 - 10. What is classic rock?
 - 11. What are the agents of metamorphism?
 - 12. Define "Fossils".
- 13. What is Attitude of beds?
- 14. What is the use of Clinometer Compass?
- 15. Define "joint"
 - 16. Write any two uses of geological maps.

- 17. What is geological profile?
- 18. What is silting?
- 19. What is Spillway of dam?
- 20. What is an aerial mosaic?

PART - B

 $(5 \times 12 = 60 \text{ Marks})$

ANSWER ANY FIVE QUESTIONS

- 21. Describe various geological works of wind.
- 22. Explain in detail landslide and its engineering importance.
- 23. Describe in detail, symmetry elements and forms present in the normal class of Isometric system.
- 24. Explain in detail the various Physical Properties of the minerals.
- Write the description and occurrence, engineering properties and uses of the following rocks. i. Granite ii. Sandstone iii. Marble.
- 26. What is a Fault? How are they classified? Explain its engineering significance.
- 27. Explain in detail the seismic method used in exploring the subsurface.
- Write in detail the geological condition necessary for construction of dams and reservoirs.

*****THE END****