



- Notes :
1. All questions carry equal marks.
 2. Assume suitable data wherever necessary.
 3. Diagrams and Chemical equation should be given wherever necessary.
 4. Illustrate your answers wherever necessary with the help of neat sketches.

1. What are earthquakes? Explain different types of seismic waves with the help of sketches. **16**
Write zones of earthquake in India.

OR

2. What is mineral? Describe various physical properties that help in their megascopic identification. **16**

3. What are faults? Describe the classification of fault with neat sketches. Add a note on recognition of fault in the field. **16**

OR

4. a) A Limestone formation is found to be dipping in a hill side at 1:2 along N 15°E. Find the amount of its apparent dip along N30°W. Give procedure. State strike scale 1 unit = 1cm. **8**

- b) A shale bed is dipping at 45° West in a slope of 15° in same direction with its outcrop 200m wide. Find the true and vertical thickness of shale bed. Write procedure. Scale 1cm = 40m. **8**

5. What are igneous rocks? Discuss the tabular classification of igneous rocks with examples. **16**

OR

6. What are sedimentary rocks? How are they formed? Describe the classification of sedimentary rocks with examples. **16**

7. What are various geophysical methods of site investigation. Describe in detail about electrical resistivity method. **16**

OR

8. Discuss the geological conditions which leads to location, design and construction of successful dam. **16**

9. What is hydrological cycle? Write a note on vertical zones of subsurface water. **16**

OR

10. a) What is Perched Water Table? **8**

- b) Described Confined & Unconfined Aquifers. **8**
