

M 026

MODEL PAPER

B.E. DEGREE EXAMINATION.

Second Semester

Civil Engineering

AG 151 — ENGINEERING GEOLOGY

Time : Three hours

Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. Describe the internal structure of the earth.
2. Give the earthquake belts of India.
3. Define isometric system of crystals.
4. Give the physical properties of Mica.
5. What are metamorphic rocks?
6. Define 'Gneissose structure'.
7. What are outcrops?
8. Describe electrical resistivity survey.
9. What are rotational slides?

10. Explain the advantages of remote sensing techniques in geological investigations.

PART B — (5 × 16 = 80 marks)

11. Elaborate on the geological conditions required for locating tunnels with neat diagrams.

12. (a) Describe the various types of weathering of rocks.

Or

(b) Discuss in detail about the geological work of rivers.

13(a) Elaborate on the various physical properties which are helpful in the identification of minerals.

Or

(b) Explain the physical properties of Feldspar group of minerals.

14. (a) What are sedimentary rocks? Explain the properties of any FOUR sedimentary rocks.

Or

(b) Describe the engineering properties of rocks? Give the engineering properties of important igneous and metamorphic rocks.

15. (a) Explain the parts of faults with a neat diagram. Describe the important types of faults with neat diagrams.

Or

(b) What are folds? Explain the types of folds with diagrams and their bearing on the engineering constructions.
