

This question paper contains 3 printed pages.

3310

Your Roll No.

B.Tech. (C) / I

J

Paper V— GEOLOGY

(ECE-105)

Time : 3 hours

Maximum Marks : 70

*(Write your Roll No. on the top immediately
on receipt of this question paper.)*

*Question No. 1 is compulsory.
Answer any four of the remaining.*

Draw neat sketches where required.

1. (a) Brief about different branches of Geology. 3 1/2
- (b) What are the factors which influence weathering?
3 1/2
- (c) Explain the significance of folds in various engineering operations. 3 1/2
- (d) Explain the geological requirement of a good dam site. 3 1/2
2. (a) Give in detail any *four* hypotheses that support the origin of the solar system. 7
- (b) What are the different types of earthquake waves and how is the earth's interior deduced from them? 7

P. T. O.

3. (a) Explain in detail the physical properties which help in identifying different minerals. 7
- (b) Explain in detail the intrusive and extrusive masses of Igneous rocks. 7
4. (a) Describe oxidation, leaching, hydration process of chemical weathering. 7
- (b) Write short notes on deflation and abrasion of the erosive action of wind. 7
5. (a) With neat sketches classify the faults on the basis of general pattern. 7
- (b) Explain in detail the tectonic and non-tectonic causes of folds. 7
6. (a) Explain the geological investigations to be carried out for tunnels. 7
- (b) State the engineering properties, uses and Indian occurrence of sandstone. 7
7. Write short notes on any *four* of the following:
- (i) Age of the earth
 - (ii) Isostasy
 - (iii) Crystallographic axes
 - (iv) Rock cleavage
 - (v) Tension and Shear Joints

(vi) Requirements of a good building stone

(vii) Storage and circulation of ground water. 14