This question paper contains 3 printed pages.

Your Roll No. ..............................

B.Tech. (C) / I

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. 31/2

   (b) What are the factors which influence weathering? 31/2

   (c) Explain the significance of folds in various
       engineering operations. 31/2

   (d) Explain the geological requirement of a good
       dam site. 31/2

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.

(b) Explain in detail the intrusive and extrusive masses of Igneous rocks.

4. (a) Describe oxidation, leaching, hydration process of chemical weathering.

(b) Write short notes on deflation and abrasion of the erosive action of wind.

5. (a) With neat sketches classify the faults on the basis of general pattern.

(b) Explain in detail the tectonic and non-tectonic causes of folds.

6. (a) Explain the geological investigations to be carried out for tunnels.

(b) State the engineering properties, uses and Indian occurrence of sandstone.

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.