

[This question paper contains 2 printed pages.]

5876

Your Roll No.

B.Sc. (Hons.) Geology / Sem. I **B**

Paper – GEHT-101 – Earth System Science

Time : 3 Hours

Maximum Marks : 70

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

Attempt any five questions.

All questions carry equal marks.

1. Discuss the various components of Earth System and interactions amongst them with examples.
2. Discuss the origin of Earth's magnetic field. What do you understand by Paleomagnetism? How does paleomagnetism help us to understand paleo-position of continents?
3. Write short notes on any **two** of the following :
 - (a) Mechanical vs Compositional layering of Earth
 - (b) Aurora Borealis and Aurora Australis
 - (c) Principle of Uniformitarianism
4. Enumerate various hypotheses of the origin of Earth. Discuss the most acceptable hypothesis and explain how is it able to explain the various facts of our solar system.

P.T.O.

5. Discuss the distribution of worldwide Earthquake and volcanic belts. In what way the major Earthquake and volcanic belts are related ?
6. Write short notes on any **two** of the following :
 - (a) Distribution of elements in the solar system
 - (b) Isotopic fractionation
 - (c) Principle of faunal succession
7. What is Coriolis effect ? Discuss the effect of coriolis force on a fast moving object eastward in northern Hemisphere.
8. Explain
 - (a) The formation of trade winds
 - (b) Upwelling at the coast of Peru
 - (c) Equatorial bulge of the Earth