

This question paper contains 2 printed pages]

Roll No.

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

S. No. of Question Paper : 806

Unique Paper Code : 219101

G

Name of the Paper : GEHT 101 : Earth System Science

Name of the Course : B.Sc. (Hons) Geology

Semester : I

Duration : 3 Hours

Maximum Marks : 75

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

Answer any *five* questions.

All questions carry equal marks.

1. What are Seismic waves ? How are they used to determine the interior of the Earth ?
2. Give an outline of Big Bang theory about origin of the solar system. Also discuss the merits of this theory.
3. Differentiate between any *two* of the following pairs :
 - (a) Lithosphere and Asthenosphere
 - (b) Mid-oceanic Ridges and Trenches
 - (c) El Nino and La Nino.
4. With suitable diagram discuss the process of Surface water circulation in the oceans.
5. Describe any *three* of the following with neat diagram.
 - (a) Divergent plate boundary
 - (b) Process of formation of an Island Arcs
 - (c) Compositional layering of the Earth
 - (d) Mid oceanic ridges.

P.T.O.

6. Discuss the Earth magnetic field. What do you understand by Paleomagnetism ? How does Paleomagnetism help us to decipher the paleoplate position ?
7. What are various components of Earth System and how are they interrelated with each other ?
8. Describe briefly any *three* of the following with neat diagram :
 - (a) Pycnocline
 - (b) Upwelling
 - (c) Ekman transport
 - (d) Thermocline.