

This question paper contains 3 printed pages]

Roll No.

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S. No. of Question Paper : 7825

Unique Paper Code : 2191101

F-1

Name of the Paper : Earth System Science

Name of the Course : B.Sc. (Hons.) (Geology) [DC-1.1]

Semester : I

Duration : 3 Hours

Maximum Marks : 75

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

Attempt any Five questions.

All questions carry equal marks.

1. Answer any ten of the following :

- (i) Boundary between Crust and Mantle is termed as
- (ii) Where does the effect of Coriolis force become maximum ?
- (iii) What is epicenter ?
- (iv) What is the age of oldest rock on the Earth ?
- (v) What is the present day concentration of Carbon Dioxide in the atmosphere ?
- (vi) Any moving object in northern hemisphere will deflect in which direction ?

P.T.O.

- (vii) What is the composition of Lakshadweep Island ?
- (viii) Where will you find ozone layer in the atmosphere ?
- (ix) Write the name of deepest trench on the earth.
- (x) What is CCD ?
- (xi) What is the age of Cretaceous/Tertiary boundary ?
- (xii) Which planet is known as 'The Red Planet' ?
2. Give an outline of Big Bang Theory about the origin of the solar system.
3. Write short notes on any *two* of the following :
- (i) Isostasy
- (ii) Mantle convection
- (iii) El Nino.
4. What are earthquake waves ? What are P and S waves ? Describe shadow zone with neat diagram.
5. Describe any *two* of the following with neat diagram :
- (a) Earth's magnetic field
- (b) Ekman spiral
- (c) Soil profile.

6. Discuss the Heat budget of the earth and its impact on the global climate.
7. Discuss the Plate tectonic Theory and with the help of suitable diagrams describe the various types of plate boundaries.
8. Describe briefly any *three* of the following :
 - (a) Pycnocline
 - (b) Upwelling
 - (c) Island Arcs
 - (d) Shadow Zone.