

B.Sc. 6th Semester (Honours) Examination, 2020-21

PHYSICS

Course ID: 62416

Course Code: SH/PHS/603/DSE-3/T-5

Course Title: Physics of Earth (DSE T5)

Time: 2 Hours

Full Marks: 40

*The figures in the margin indicate full marks.
Candidates are required to give their answers in their own words
as far as practicable*

Section-I

1. Answer any **five** questions: 2×5=10

- (a) What is the size of our Milky Way galaxy? What is the average estimated age of our Solar system?
- (b) What is the cryosphere?
- (c) What causes a tropical cyclone?
- (d) Where is a tsunami most likely to happen?
- (e) What are the Kuiper belts?
- (f) How does 'Cloud' forms in earth's atmosphere? What is 'Cumulus' type of Cloud?
- (g) What do you mean by 'Tectonic Geomorphology'?
- (h) What do you mean by 'Asteroid' and 'Meteoroid'?

Section-II

2. Answer any **four** questions: 5×4=20

- (a) Define hydrosphere. What is hydrological cycle? Write down the importance of hydrosphere.
- (b) What are the several parts of earth's interior structure? Give a few basic characteristics of the part 'Crust' of this interior structure? What is geophysical method of Earth investigations?
- (c) What does the word 'Geothermal' mean? How does geothermal heat get up to Earth's surface? What are the benefits of using geothermal energy?
- (d) Why doesn't the Solar system expand if the whole Universe is expanding? What happens when magma and ice interact in an eruption?
- (e) What do you mean by 'Law of Atmosphere'? Give the name of an acceptable theory which explains the appearance of earth's magnetic field. How does the motion of river will be affected by coriolis force on earth surface?
- (f) Give a few arguments of the future of evolution of the Earth. Mention one truly horrifying way the earth could die.

P.T.O.

Section-III

3. Answer any *one* question:

10×1=10

(a) Explain Continental drift theory. What are the evidences behind the theory? What are the main causes of rejection of the theory? Write the concept of 'Plate Tectonic Theory'. What is plate boundary? Explain different types of plate boundary. 2+2+1+2+1+2

(b) What do you mean by 'Topography'? What are the several 'Topographical Studies' which describes the basic features of area of land of Earth surface? Give the origin of mountain and rift valley. What is the main cause of tides? What are the different types of tides? What is its frequency and why? 1+2+3+1+1+2

