

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

PHYSICS
(Physics of Earth)
Paper: 603/DSE-3/T-5
Course ID: 62416

Time: 1 Hour 15 Minutes**Full Marks: 20**

The figures in the margin indicate full marks.

Candidates are required to give their answer in their own words as far as practicable.

Section - I

1. Answer any three (03) of the following questions: 2×3=6

- a) State Nebular hypothesis of our planetary system creation.
- b) Define Oceanography.
- c) What do you mean by Jovian planet?
- d) What is the difference between Meteorite & Asteroids?
- e) What is the main difference between magma and lava?
- f) Write down the names of four main branches of earth science.
- g) Differentiate between cosmology and cosmogony.
- h) How did scientists predict that our universe is dynamic?
- i) What is Cryosphere?

Section - II

2. Answer any one (01) of the following questions: 5×1=5

- (a) Write a short note on earth's rotation and spin. 5
- (b) What is greenhouse gas? Do greenhouse gases cause air pollution? Indicate few precautionary measures we can take to prevent climate change. 1+2+2
- (c) State Wegener's theory of continental drift. What is the connection between seafloor spreading and continental drift theory? $2\frac{1}{2} + 2\frac{1}{2}$

Please Turn Over

Section - III

3. Answer *any one (01)* of the following questions:

9×1=9

(a) What do you mean by 'Mechanical Layering' of earth?

What is earth's tectonic plate? How does it influence earthquake?

Write down the source of geothermal energy.

Considering earth to be a sphere, deduce the average density of earth.

2+ (1+2) + 2+2

(b) What is galaxy?

Write a short note on our solar system in the milky-way galaxy.

What is incident radiation flux?

What is the effect of cosmic rays on the earth's environment?

2+3+2+2

(c) What is dynamo theory to explain the appearance of earth's magnetic field?

Give the origin of mountain and rift valley.

Write the types and production of volcanoes. How does cyclone form due to oceanic depression?

2+2+(3+2)
