

**U.G. 6th Semester Examination - 2021****PHYSICS****Course Code : BPHSDSHT6****Course Title : Physics of Earth**

Full Marks : 40

Time : 2 Hours

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

1. Answer any **ten** questions:  $1 \times 10 = 10$
- What is Hydrosphere?
  - What are Meteorites and Asteroids?
  - Give an example of intraplate volcanism.
  - What is continental drift?
  - Give one example of a mid-ocean ridge.
  - How do we know about earth's interior?
  - What is the most abundant element in solar system?
  - Which gas causes destruction of ozone layer in stratosphere?

- What is geothermal energy?
- What is albedo?
- What is earth's heat budget?
- What is a Transform Plate Boundary?
- What is "S-wave" shadow zone?
- What is the role of ice caps of the earth?
- What is nitrogen cycle?

2. Answer any **five** questions:  $2 \times 5 = 10$
- What is greenhouse effect?
  - What are the geophysical methods of earth investigation?
  - What is mass extinction?
  - Why the inner core of the earth is solid?
  - What is cyclone?
  - What is thermohaline circulation?
  - What is chondritic meteorite?
  - What types of energy and particle fluxes incident on the earth?

3. Answer any **two** questions:  $5 \times 2 = 10$

- a) Write a short note on earth's magnetic field.  
What do you mean by hydrologic cycle?

$$2\frac{1}{2} + 2\frac{1}{2} = 5$$

- b) Explain how Tsunamis are formed.
- c) Write shortly about Indian monsoon system.  
Discuss shortly about air pollution.

$$2\frac{1}{2} + 2\frac{1}{2} = 5$$

4. Answer any **one** question:  $10 \times 1 = 10$

- a) Write a short note on cryosphere. Discuss about mid oceanic ridges, trenches, transform faults and island arcs. Write some evidence on continental drift.

$$3 + 4 + 3 = 10$$

- b) How oceans, continents and mountains originated? Discuss shortly about extent, depth, volume and chemical composition of oceans.

$$5 + 5 = 10$$

- c) Write a short note on fresh water depletion. How life was originated and evolved to the present state? Discuss shortly ecosystem and its importance.

$$3 + 3 + 4 = 10$$

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