

U.G. 5th Semester Examination-2024**PHYSICS****[HONOURS]****Discipline Specific Elective (DSE)****Course Code : PHS-H-DSE-T-02****(Earth Science)****[Old Syllabus]****Full Marks : 60****Time : $2\frac{1}{2}$ 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 five questions : $2 \times 5 = 10$
- a) State the origin of Earth's magnetic field.
 - b) Mention the effect of Coriolis forces on oceanic current system.
 - c) What is Mohorovicic discontinuity?
 - d) What is Geothermal energy?
 - e) What are the terrestrial and Jovian planets?
 - f) What do you mean by polar caps and ice sheets?
 - g) Write briefly on nuclear waste.
 - h) Write down the differences between Tsunami and cyclone.

[Turn Over]

2. Answer any four questions: $5 \times 4 = 20$

- a) State the law of superposition and faunal succession.
- b) What are the different theories of origin of life?
- c) Discuss atmospheric circulation.
- d) Mention the major factors that disturbing our earth.
- e) What are the differences between Meteorites and Asteroids?
- f) Discuss Paleoclimate and recent climate changes.

3. Answer any three questions: $10 \times 3 = 30$

- a) Briefly explain the Geodynamic elements of Earth.
- b) What are the different cycles of biosphere? Discuss their role in maintaining steady state.
- c) Explain Earth's heat budget.
- d) Discuss the future of evolution of Solar and Earth system.
- e) Discuss the role of the biosphere in shaping the environment.