

U.G. 5th Semester Examination-2021**PHYSICS****[HONOURS]****Discipline Specific Elective (DSE)****Course Code : PHS-H-DSE-T-02****(Earth Science)**

Full Marks : 60

Time : 2½ 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 : $2 \times 5 = 10$
- What are the terrestrial and Jovian planets?
 - What do you mean by polar caps and ice sheets?
 - State the origin of Earth's magnetic field.
 - Mention the effect of Coriolis forces on oceanic current system.
 - What is Mohorvicic discontinuity?
 - What is Geothermal energy?
 - Write briefly on nuclear waste.
 - Write down the differences between Tsunami and cyclone.

2. Answer any **four** questions: $5 \times 4 = 20$
- Discuss Paleoclimate and recent climate changes.
 - Discuss atmospheric circulation.
 - Mention the major factors that disturbing our earth.
 - What are the differences between Meteorites and Asteroids?
 - State the law of superposition and faunal succession.
 - What are the different theories of origin of life?
3. Answer any **three** questions: $10 \times 3 = 30$
- Discuss the role of the biosphere in shaping the environment.
 - Briefly explain the Geodynamic elements of Earth.
 - What are the different cycles of biosphere? Discuss their role in maintaining steady state.
 - Explain Earth's heat budget.
 - Discuss the future of evolution of Solar and Earth system.