U.G. 5th Semester Examination-2025

PHYSICS

[HONOURS]

Discipline Specific Elective (DSE)

Course Code : PHS-H-DSE-T-02

(Earth Science)

[CBCS]

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 : $2\times5=10$

a) What are the terrestrial and Jovian planets?

b) Mention the effect of Coriolis forces on oceanic current system.

c) What is Mohorvicic discontinuity?

d) State the origin of Earth's magnetic field.

e) What is Geothermal energy?

f) Write down the differences between Tsunami and cyclone.

g) What do you mean by polar caps and ice sheets?

h) Write briefly on nuclear waste.

[Turn over]

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

a) Discuss Paleoclimate and recent climate changes.

b) What are the differences between Meteorites and Asteroids?

c) Mention the major factors that disturbing our earth.

d) State the law of superposition and faunal succession.

e) What are the different theories of origin of life?

f) Discuss atmospheric circulation.

3. Answer any **three** questions: 10×3=30

a) Discuss the role of the biosphere in shaping the environment.

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) Briefly explain the Geodynamic elements of Earth.