Ph. D. IN ENVIRONMENTAL SCIENCE (PHDEV)

Term-End Examination December, 2024

REVE-007: SUSTAINABILITY SCIENCE

Time: 3 Hours Maximum Marks: 100

Note: (i) Attempt any ten questions.

- (ii) All questions carry equal marks.
- (iii) Answer each question in about **500** words.
- Explain with suitable examples the linkages among global, social and human system from sustainability perspective.
- 2. What is Natural Capital? Why in accounting for natural capital so important? 5+5

- 3. Define the term 'Ecosystem Integrity'. Explain the *three* growth forms of ecosystems. 4+6
- 4. Discuss the concept of 'strong and weak sustainability' with suitable examples. 5+5
- 5. Define biomass. Briefly explain the different types of biomass. 3+7
- 6. What is property rights? Explain the *six* characteristics of Property Rights Regime.

4+6

- 7. Explain environment-economy interlinkageswith suitable examples.10
- 8. Discuss the role of Remote Sensing Techniques in Clean Development Mechanism (CDM). 10
- 9. What is carbon sequestration? Explain the global carbon cycle. 4+6
- 10. What are fragile ecosystems? How can traditional knowledge help to conserve fragile ecosystems?

- 11. Discuss the driving force behind the development of bioenergy and the role of bioenergy for energy security.10
- 12. How has climate change been affecting livelihoods of marginal communities? Explain with suitable examples.