PG Even Semester Examination, May 2025

ECOLOGY & ENVIRONMENTAL SCIENCE

2nd Semester

Course No. : ECGCC - 556

(Environmental Values and Ecosystem Services)

Full Marks : 70

Pass Marks : 28

Time : 3 hours

The figures in the margin indicate full marks for the questions

(Answer any five questions, selecting one from each unit)

Unit - I

1. What is ecological restoration? Outline the principles of ecological restoration and describe in detail about the Principle No. 4: Benefits to nature and people with examples. 3+5+6=14

2. Write short notes on the following : 7x2=14
   a) Use value of environmental resources
   b) Environmental standard setting

Unit - II

3. Write the main causes of the global forest

degradation. What are the impact of deforestation on humans and the Earth's biosphere? 8+6=14

4. Write short notes on the following: 7x2=14
   a) Ex-situ conservation strategies
   b) Impact of water pollution on animals

Unit - III

5. Write in detail about the advantages and potential risks of monetising of ecosystem services. 14

6. Write down the principles and limitations of ecosystem services. Write a note on scientific dimensions of ecosystem services. 8+6=14

Unit - IV

7. What do you mean by regulating ecosystem services? Give two suitable examples. Describe briefly the different drivers of regulating ecosystem services. 2+2+10=14

8. Write short notes on the following : 7x2=14
   a) Regulating ecosystem provided by forest ecosystems
   b) Regulating ecosystem provided by fresh water ecosystems

Unit - V

9. What is valuation of ecosystem services? Give an account on provisioning ecosystem services after the Millennium Ecosystem Assessment. Describe why valuation of provisioning ecosystem is essential. 2+7+5=14

10. Write short notes on the following: 7x2=14
    a) Direct and Indirect values of provisioning ecosystem services
    b) Goods and services of nature with their values and usuages

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