

**Value Added Course**  
**[Environmental Science and Sustainability]**  
**[NEP]**

**B.C.A. First Semester End Examination-2024**

**PAPER: VAC 101**

**Full Marks: 40**

**Time: 02 Hrs.**

*The figures in the right hand margin indicate marks.*

*Candidates are required to give their answers in their own words as far as practicable.*

*Illustrate the answers wherever necessary.*

**Group A**

**1. Answer any FIVE questions of the following:    5x2= 10**

- a. Define ecosystem. Who coined the term ecosystem?
- b. What are the causes of air pollution?
- c. What is eutrophication?
- d. Explain sustainable development with example.
- e. What is acid rain?
- f. Write the full form of UNESCO and UNFCCC.
- g. "Energy flow is unidirectional in the ecosystem" – explain.
- h. What do you mean by primary succession?

**Group B**

**2. Answer any FOUR questions of the following:    4x5 = 20**

- a. Differentiate between *in-situ* and *ex-situ* conservation.

(2)

- b. Write about green house effect with mentioning any two green house gases. 5
- c. What do you know about primary and secondary pollutants? Write down their effects in environment. 5
- d. What is biodiversity? Mention any four major causes of biodiversity loss. 1+4
- e. What is environment movement? Briefly discuss the "Chipko movement". 1+4
- f. What do you know about endangered species? Give example. What is Red data book? 2+1+2

**Group C**

**3. Answer any ONE question of the following: 1x10 = 10**

- a. i) What do you know about manmade disasters? Give some examples.  
ii) Write a short note on carrying capacity of an ecosystem. 5+5
  - b. i) Differentiate between food chain and food pyramid. Give example each  
ii) Describe Y-shaped energy flow model. 5+5
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