2021

ENVIRONMENTAL SCIENCE

[HONOURS]

Paper : VII

Full Marks : 80 Time : 4 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 **seven** of the following: 1×7=7

   a) In which year the Water (Pollution and Prevention Act) was enacted?

   b) State the command and control strategy in environmental policy.

   c) What is CITES?

   d) What is the major contribution of The Supreme Court for environment protection in India?

   e) State the interrelationship between the environment and economy.

   f) Define "Environmental pollution" according to Environmental Protection Act, 1986.

   g) What is CBD?

   h) What do you mean by cabon trading?

   i) Choose the incorrect statement:

      i) The Montreal protocol is associated with the control of emission of ozone depleting substances.

      ii) Methane and carbon dioxide are green house gases.

      iii) Dobson unit is used to measure oxygen content.

      iv) Use of incinerators is crucial to disposal of hospital wastes.

2. Answer any **six** questions: 2×6=12

   a) Why ANOVA Test is done? When do we use One-way ANOVA?

   b) What is the origin of Silent Valley movement?

   c) Mention two main objectives of Eco-mark.

   d) Differentiate between primary and secondary data collection.

   e) State two objectives of NEP, 2006.

   f) What is the importance of Kyoto protocol?

   g) Name two Schedule-I mammals according to Wildlife Protection Act.

   h) Write two principle functions of CPCB.

3. Answer any **three** of the following: 7×3=21

a) Explain the concept of green tax for reducing pollution. What do you mean by use value and non-use value of environment?

b) Briefly describe sustainable national income accounting.

c) Describe the Gaussian plume model of air pollutants' dispersal.

d) Discuss three appendices on which CITES regulates the trading of species.

e) Briefly write a note on Tehri Dam movement.

4. Answer any **four** of the following: 10×4=40

a) Write short notes on (i) Hedonic Pricing Method and (ii) Carbon tax (iii) Cost-benefit analysis. 5+5

b) What is the measuring stick of environmental benefits? Discuss about one direct method and one indirect method for valuation of environmental goods and services. 4+6

c) Calculate simple correlation coefficient. The data given below are height (cm) and weight (kg) from 9 college students. 10

Heights (cm)	Weights (kg)
165	58.5
182	60
170	52

d) Discuss the criteria required for identifying wetlands of National/ International importance according to Ramsar Convention.

e) Calculate the mean and median of the following frequency distribution of body weights (kg) in a sample of humans. 5+5

Class intervals	**Frequencies**
51-53	5
54-56	7
57-59	14
60-62	28
63-65	15
66-68	8
69-71	3

f) Discuss the power of the State and Central Pollution Control Boards in enforcement of environmental law.

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