

(Following Paper ID and Roll No. to be filled in your Answer Book)

PAPER ID : 3151

Roll No.

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M. C. A. (Second Semester) Theory

Examination, 2010-11

ENVIRONMENTAL SCIENCE & ETHICS

Time : 3 Hours]

[Total Marks : 100

Note : The question paper contains three Sections, Sections-A, Section-B and Section-C with the weightage of 15, 25 and 60 marks respectively. Follow the instructions as given in each Section.

Section-A

This Section contains 15 questions of Fill in the blanks and True & False type questions. Attempt *all* parts of this Section.

1. Fill in the following blanks with suitable words :

1×15=15

- 'World Ozone Layer Preservation Day' is celebrated on _____.
- BOD stands for _____.
- PAN is formed by the interaction of oxides of nitrogen and _____ in presence of sun light.

- (d) PPM stands for _____.
- (e) The phenomenon of increasing average mean temperature of earth surface is called as _____.
- (f) Acid rains is caused mainly is due to _____ gas in the atmosphere.
- (g) Dental fluorosis is caused by excessive concentration of _____ in drinking water.
- (h) Which famous environmental law was enacted in 1986 _____.
- (i) Green plants are also called _____.
- (j) Provision for environment protection in the constitution were made under _____.

Indicate True and False for the following statements :

- (k) Water vapour does not cause global warming.
(True/False)
- (l) Only government can protect environment.
(True/False)
- (m) Demography is study of trends in human population growth and prediction of future growth.
(True/False)
- (n) Hydrogen is an alternative future source of energy.
(True/False)
- (o) Flow of energy in an ecosystem is unidirectional.
(True/False)

Section-B

Attempt any five parts. All parts carry equal marks.

5×5=25

- 2. (a) Define environment. Discuss the need for public awareness for the conservation and protection of environment.

- (b) What are natural resources? Classify them.
- (c) What is population explosion? Briefly discuss the main consequence of population explosion with reference to Indian context.
- (d) What are solid wastes and what are their different types? Discuss the effects of urban solid wastes.
- (e) What is an environmental policy? Write in brief about role of government in environment protection. Discuss the legislation present in India for environment protection.
- (f) What are greenhouse gases? Name and discuss their contribution to global warming. What can be the effects of global warming? What are the remedial measures?
- (g) What is air pollution? What are the physiological impacts of air pollution? How can air pollution be controlled?

Section-C

Attempt any *two* parts from each question. All questions are compulsory. 12×5=60

- 3.
- (a) Define term 'sustainable development'. How sustainability can be achieved?
 - (b) What is an ecosystem? Classify ecosystem on the basis of energy sources.
 - (c) Describe the need of public awareness about the environment.

4. (a) What is deforestation? Enumerate and discuss the various causes of deforestation.
 - (b) What is mining? Discuss the causes and impact of mining on environment.
 - (c) Describe geothermal energy. Discuss its merits and limitations.
5. (a) What are the major water pollutants? Discuss in brief about self purification mechanism of rivers.
 - (b) Briefly describe engineered solid waste management.
 - (c) What is acid rain? How is it formed? Discuss the remedial measures for controlling acid rain.
6. (a) What is animal husbandry? State and discuss the environmental concerns of animal husbandry.
 - (b) Name and discuss the major periods of growth of population.
 - (c) Write an explanatory note on food and shelter security.
7. (a) Role of NGO's in environmental protection is important. Discuss with name of some NGO's of environmental concern.
 - (b) Discuss in brief the salient features of Environment (Protection) Act, 1986.
 - (c) "Environment education can play an important role in environmental protection." Explain it.