

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

PAPER ID : 3151

Roll No.

M.C.A.

(SEM II) EVEN SEMESTER THEORY EXAMINATION, 2009-2010

ENVIRONMENTAL SCIENCE AND ETHICS

Time : 3 Hours

Total Marks : 100

Note : The question paper contains three sections : **SECTION-A, SECTION-B, and SECTION-C** in the weightage of 20, 30 and 50 marks respectively. Follow the instructions as given in each section.

SECTION-A

This section contains 20 questions of multiple choice/Fill in the blanks/True, False/Matching correct answer type questions.

Attempt all parts of this section.

(20x1=20)

1. Fill in the blanks with suitable words :

- (a) World Environment day is observed on _____.
- (b) There is a continued and rapid exchange of O₂, CO₂ and H₂O in _____ ecosystem.
- (c) Photochemical smog such as PAN and PB₂N etc. are released by _____.
- (d) Cyclone separator is used to control _____ pollution.
- (e) COD is _____.

Multiple choice type questions.

- (f) Ozone day is observed on :
 - (i) 03 January
 - (ii) 26 March
 - (iii) 16 September
 - (iv) 10 November
- (g) Which of the following is not a "green-house gas" ?
 - (i) Chlorofluro carbons
 - (ii) Methane
 - (iii) Carbondioxide
 - (iv) Oxygen

(h) Soil erosion can be prevented by :

- (i) Removal of vegetation
- (ii) Overgrazing
- (iii) Deforestation
- (iv) Afforestation

(i) Environment means :

- (i) a beautiful landscape
- (ii) a place to live
- (iii) sum total of all conditions that affect the life and development of all organisms on earth.
- (iv) All the above

(j) Environmental degradation is due to :

- (i) Poverty
- (ii) Poor quality of life
- (iii) Over consumption of resources
- (iv) None

(k) Pesticide residues in crops enter the human bodies through :

- (i) birds and insects
- (ii) human food chain
- (iii) animals
- (iv) None

(l) Conventional energy resources are :

- (i) Solar energy
- (ii) Tidal wave energy
- (iii) Geothermal energy
- (iv) Fossil fuel

Indicate True or False for the following statements :

(m) Biosphere is made of atmosphere, hydrosphere and lithosphere. (T/F)

(n) Ozone layer is found in thermosphere. (T/F)

(o) The floating aquatic plants are known as nematode. (T/F)

(p) Use of computer and its peripherals has no effect on environment. (T/F)

Matching type questions :

(q) Match List-I and List-II.

List-I	List-II
(A) Insect	(i) Fungi
(B) Mammal	(ii) Annelida
(C) Invertebrate	(iii) Termite
(D) Micro organism	(iv) Bat

(r) Match List-I and List-II.

List-I	List-II
(A) Carbohydrates	(i) Butter
(B) Proteins	(ii) Maltose
(C) Fats	(iii) Soyabean
(D) Vitamin-E	(iv) Globulins

(s) Match List-I and List-II.

List-I (Pollutant)	List-II (Effects)
(A) CO	(i) Green-house effect
(B) CO ₂	(ii) Acid rains
(C) SO ₂	(iii) Acute toxicity
(D) NO _x	(iv) Ozone liberation at ground level

(t) Match List-I and List-II.

List-I	List-II
(A) Human rights	(i) NGOs
(B) Water conflict	(ii) Air pollution preventive measure
(C) Euro III	(iii) Human right commission
(D) Social work	(iv) Kavery River

SECTION-B

Note : Attempt any three parts. All parts carry equal marks.

(3x10=30)

- Describe Sustainability and Human Development.
 - What is food chain? Explain various food chains with suitable sketches for a terrestrial ecosystem.
 - Describe green-house effect and write down its advantages and disadvantages.
 - What do you mean by hazardous waste? Describe various methods of hazardous waste disposal.
 - Describe role of NGOs in environmental preservations.

SECTION-C

Note : All questions are compulsory. Attempt any two parts from each question. (5x10=50)

3. (a) Describe various segments of environment.
(b) Explain impact of population on environment.
(c) Describe factors which are responsible for land degradation.

OR

Describe renewable and non-renewable resources of energy.

4. (a) Explain principle of energy and matter in the environment.
(b) Describe Nitrogen cycle.
(c) Describe various causes of extinction of the species.
5. (a) Explain global warming and its impact on environment.
(b) Describe various sources of carbon emissions.
(c) Why Ozone shield is necessary for earth ? What are the factors responsible for Ozone depletion ? Explain.
6. (a) Describe various measure that can be taken for controlling water pollution.
(b) Differentiate between noise and sound. Give control measures for noise pollution.
(c) Describe thermal pollution and suggest suitable measures for its control.

OR

Describe salient features of Air Act.

7. (a) Explain environmental ethics.
(b) Give a note on conservation of natural resources.
(c) Describe impact of technological progress on quality of life and environment.

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