

B.Tech 2nd Semester Exam., 2016

ENVIRONMENTAL SCIENCE

Time : 3 hours

Full Marks : 70

Instructions :

- (i) All questions carry equal marks.
- (ii) There are **NINE** questions in this paper.
- (iii) Attempt **FIVE** questions in all.
- (iv) Question No. 1 is compulsory.

1. Choose the correct answer (any seven) :

- (a) Groundwater is usually free from
  - (i) suspended impurities
  - (ii) dissolved impurities
  - (iii) Both (i) and (ii)
  - (iv) None of the above
- (b) Acid precipitation results from human modification of
  - (i) the nitrogen and phosphorous cycle
  - (ii) the nitrogen and sulfur cycle
  - (iii) the carbon and sulfur cycle
  - (iv) the carbon and nitrogen cycle

- (c) Carnivorous plants are found on
  - (i) nitrogen deficient soil
  - (ii) O<sub>2</sub> deficient soil
  - (iii) CO<sub>2</sub> deficient soil
  - (iv) All of the above
- (d) Increase in concentration of toxins from one trophic level to another trophic level is called
  - (i) biomagnification
  - (ii) bioaccumulation
  - (iii) ecological toxication
  - (iv) All of the above
- (e) Modern turbidity meters, working on the principle of 'scattering of light', are known as
  - (i) Jackson's turbidity meter
  - (ii) turbidity rod or tape
  - (iii) nephelometric turbidity meter
  - (iv) None of the above
- (f) Fluoride pollution most commonly affects
  - (i) teeth
  - (ii) kidney
  - (iii) brain
  - (iv) heart

(g) Chlorofluorocarbons are not recommended to be used in refrigerators because they

- (i) increase temperature
- (ii) deplete ozone layer
- (iii) affect environment
- (iv) affects human body

(h) The main reason for extinction of species is

- (i) hunting
- (ii) destruction of habitat
- (iii) pollution
- (iv) None of the above

(i) Which pollutant does leave any residue?

- (i) Organic matter
- (ii) Ionic radiation
- (iii) Insect hormone
- (iv) DDT

(j) World Environment Day is celebrated on

- (i) 5th June
- (ii) 11th July
- (iii) 5th September
- (iv) None of the above

2. What are the main components of our environment? Explain each of them.

3. What is greenhouse effect? Why is it so called? What are its consequences?

4. Mention the sources of particulate that pollute air. What are the effects of particulate matters on human health? Explain in brief.

5. What do you mean by natural resources? Enumerate various natural resources. Explain their importance.

6. Define biodiversity. What are the major components of biodiversity? Explain the values of biodiversity in brief.

7. Define water pollution. Classify and explain about various constituents of water pollution.

8. With a schematic diagram, explain various components of municipal wastewater treatment.

9. What is noise? What are the sources of noise pollution? Explain source-path-receiver concept for noise pollution control.

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