

Code : 011202

B.Tech 2nd Semester Examination, 2017

Environmental Science

Time : 3 hours

Full Marks : 70

Instructions :

- (i) There are **Nine** Questions in this Paper.
 - (ii) Attempt **Five** questions in all.
 - (iii) **Question No. 1 is Compulsory.**
 - (iv) The marks are indicated in the right-hand margin.
1. Choose the correct answer (any seven). 2×7
- (a) At lower temperature the rate of biological activity
 - (i) increases
 - ~~(ii) decreases~~
 - (iii) doesnot increase or decrease
 - (iv) none of these
 - (b) The turbidity is measured photo metrically by
 - (i) Jackson turbidimeter
 - (ii) Nephlo turbidimeter
 - ~~(iii) both (i) and (ii)~~
 - (iv) only (ii)
 - (c) The upper limit of total dissolved solids on potable water is recommended as

P.T.O.

- (i) 500 mg/l
 - (ii) 1000 mg/l
 - (iii) 1500 mg/l
 - ~~(iv) 800 mg/l~~
- (d) Collection of solid waste is
 - (i) the gathering of solid wastes
 - (ii) the hauling of wastes after collection to the location where the collection vehicle is empties
 - ~~(iii) both (a) and (ii)~~
 - (iv) none of these
- (e) The landfills may take the following form
 - (i) above ground landfills only
 - (ii) below ground land fills only
 - ~~(iii) a combination of the above~~
 - (iv) all of the above
- (f) To obtain the dry weight, the solid waste material is dried in an oven at
 - ~~(i) 77°C for 1 hr~~
 - (ii) 105°C for 24 hr
 - ~~(iii) 77°C for 24hr~~
 - (iv) none of these
- (g) Separation is a necessary operation
 - (i) for sources recovery from wastes

- (ii) for energy recovery
- (iii) where conversion products are to be recovered from processed waste
- (iv) all of the above

(i) In fabric filters, the electrostatic force between particles and filters

- (i) decreases the collection efficiency
- (ii) increases the collection efficiency
- (iii) are responsible for diffusion.
- (iv) none of these

(j) The atmospheric concentration of NO_2 for sensitive areas as given by CPCB

- (i) $50 \mu\text{g}/\text{m}^3$
- (ii) $80 \mu\text{g}/\text{m}^3$
- (iii) $30 \mu\text{g}/\text{m}^3$
- (iv) $20-40 \mu\text{g}/\text{m}^3$

(h) Ozone depletion in stratosphere will result in

- (i) Forest-Fires
- (ii) increased incidence of skin cancer
- (iii) global warming
- (iv) eye Irritation

2. (a) Discuss the impact of Air pollution on environment? 7
 (b) Explain depletion of ozone layer. 7

3. (a) Give the methods for control of noise pollutions? 7
 (b) Define biodiversity? Discuss the methods to protect biodiversity? 7

4. (a) What are the reasons for decline of biodiversity? 7
 (b) Define Soil Degradation? Also give its causes and effects? 7

5. (a) Explain source path receiver concept for noise pollution control. 7

- (b) Explain the main component of our environment. 7

6. Discuss any two environmental laws enforced by the government in order to protect the environment. 14

7. (a) Explain the importance of biodiversity in detail? 7

- (b) Explain the methods how can control soil pollution? 7

8. (a) What do you mean by Acid Rain? Also write its effects on plant? 7

- (b) What is Ozone Layer Depletion? Explain its causes and effects? 7

9. (a) Explain impact of water quality on human health. 7

- (b) Explain the impact of climate change and human health. 7