

B.E./B.TECH. Degree Examination, December 2020

Seventh Semester

GE16451- Environmental Science and Engineering

(Regulation 2016)

Time: Three hours

Maximum : 80 Marks

Answer **ALL** questions

PART A - (8 X 2 = 16 marks)

1. Red data book contains data of
 - a) all plant species
 - b) all animal species
 - c) economically important species
 - d) threatened species
2. Photochemical smog pollution does not contain
 - a) PAN (peroxy acyl nitrate)
 - b) Ozone
 - c) Nitrogen dioxide
 - d) Carbon dioxide
3. In India major cause of large scale displacement of people is
 - a) Forest fires
 - b) Development projects
 - c) Earthquakes
 - d) War
4. Acid rains are produced by
 - a) excess NO_2 and SO_2 from burning fossil fuels
 - b) excess production of NH_3 by industry and coal gas
 - c) excess release of carbon monoxide by incomplete combustion
 - d) excess formation of CO_2 by combustion and animal respiration
5. Differentiate between point richness and alpha richness.
6. Enumerate the problems of over-exploitation of ground water.
7. List the objectives of watershed management.
8. Describe doubling time with respect to population growth.

PART B - (4 X16 = 64 marks)

09. (a) (i) Compare the types, characteristic features, structure and function of a Forest ecosystem with Desert ecosystem. (8)
- (ii) Evaluate the concept of food chain and food pyramid. Explain the various types of ecological pyramids with suitable examples. (8)

(OR)

- (b) (i) Elaborate the man wild life conflict. Suggest some methods to solve the problem. (8)
- (ii) Compare the in-situ and ex-situ conservation of biodiversity. (8)
10. (a) (i) With a schematic diagram explain any one of the secondary treatment to treat the sewage. (8)
- (ii) As an individual interpret the role to prevent the pollution. (8)

(OR)

- (b) (i) Classify various types of solid wastes. With the help of a flow diagram explain the proper management of the solid waste. (8)
- (ii) Identify the causes and effects of marine pollution and explain the measures taken to control it. (8)
11. (a) (i) Investigate the causes and consequences of overexploitation of forest. (8)
- (ii) Suggest few alternate energy sources and its uses for energy conservation. (8)

(OR)

- (b) (i) As an individual suggest some methods to conserve the various natural resources. (8)
- (ii) Enumerate the effect of mineral extraction on environment and human health. (8)
12. (a) (i) Discuss the role of Non-Governmental Organization in environmental management. (8)
- (ii) Elucidate the various disaster management measures during flood and earthquake. (8)

(OR)

- (b) (i) Identify the reasons for population explosion and suggest various methods of family planning and family welfare. (8)
- (ii) Investigate the role of Information Technology in environment and its management. (8)