



B.E / B.TECH DEGREE EXAMINATIONS: JUNE 2015

(Regulation 2013)

Third Semester

U13GST001: ENVIRONMENTAL SCIENCE AND ENGINEERING

(Common to AERO/CSE/EEE/IT)

Time: Three Hours

Maximum Marks: 100

Answer all the Questions:-

PART A (10 x 1 = 10 Marks)

1. The group of organisms which convert light into food are called
 - a) autotrophs
 - b) heterotrophs
 - c) decomposers
 - d) omnivores
2. The process of evaporation, condensation and transpiration is called
3. If waste materials contaminate the source of drinking water which of the following diseases will spread?
 - a) Scurvy
 - b) Typhoid
 - c) Malaria
 - d) Anemia
4. The process of accumulation of heavy metal or pesticide in the food chain is called as
5. Medicine of quinine is provided by
 - a) eucalyptus plant
 - b) aconite plant
 - c) cinchona plant
 - d) hibiscus plant
6. A state in which species are restricted to a single region is known as.....
7. Which of the following is a likely characteristic of hazardous waste?
 - a) Reactivity
 - b) Ignitability
 - c) Corrosivity
 - d) Any of the above
8. A small ecosystem within an ecosystem is known as
9. Disease caused by eating fish inhabiting mercury contaminated water is:
 - a) Osteosclerosis
 - b) Blue baby syndrome
 - c) Mina-mata disease
 - d) Bright's disease
10. The progressive destruction or degradation of arid and semi-arid land to desert is known as

PART B (10 x 2 = 20 Marks)

(Not more than 40 words)

11. Define sustainable development.
12. Mention the major impacts of mining.
13. Differentiate between extinct and endangered species.
14. What is ecological succession?
15. List out the types of land pollution.
16. What are the major causes of earthquake?
17. What is photochemical smog?
18. Define eutrophication.
19. List out the objectives of EIA?
20. What do you mean by population explosion and doubling time?

PART C (5 x 14 = 70 Marks)

(Not more than 400 words)

Q.No. 21 is Compulsory

21. a) Write in detail on Energy resources.

22. a) (i) Explain the Grasi land ecosystem. (7)
(ii) Explain Ecological pyramids. (7)
(OR)
b) (i) Explain the various threats to biodiversity. (7)
(ii) Give a detail account on In-situ and Ex-situ conservation of biodiversity. (7)

23. a) (i) Discuss the causes, effects and control measures of thermal pollution. (7)
(ii) Explain the major water pollutants and their effects. (7)
(OR)
b) Explain the various strategies to control the municipal solid waste management.

24. a) (i) Write short note on environmental protection Act. (7)
(ii) Discuss the chemistry of ozone layer depletion (7)

(OR)

- b) (i) Explain the principle of rain water harvesting with the help of a neat diagram. (7)
- (ii) Discuss about nuclear accidents and holocaust with a suitable case study (7)
25. a) (i) Write a note on Human rights. (7)
- (ii) Explain with a neat diagram the variation in population growth among different nations. (7)

(OR)

- b) (i) Explain then steps that are being taken in India to impart value education. (7)
- (ii) Describe the various schemes launched for women and child welfare in India. (7)
