



B.E / B.TECH DEGREE EXAMINATIONS: DEC 2014

(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. Which of the following acts as sources and sinks of carbon?
 - a) Soil
 - b) Water
 - c) Forests
 - d) Energy
2. A layer of sediment and rocks that is highly permeable and contains water is called.....
3. The species which are restricted only to a particular area is called
 - a) Endangered species
 - b) Extinct species
 - c) Vulnerable species
 - d) Endemic species
4. The sequence of eating and being eaten in an ecosystem is called
5. Noise levels considered as threshold of pain are
 - a) 90dB
 - b) 50dB
 - c) 140dB
 - d) 180dB
6. Excess of fluoride content in water causes
7. Which of the following is the major contributor to the earth's greenhouse effect?
 - a) Methane
 - b) Ozone
 - c) Water vapour
 - d) CFC
8. World environment day is celebrated every year on
9. The first Ebola virus disease (EVD) outbreaks occurred in
 - a) Central Africa
 - b) Central Asia
 - c) United States
 - d) Australia
10. The study of designing and building aircraft that will burn less fuel, emit less greenhouse gases and reduce aircraft noise is known as.....

PART B (10 x 2 = 20 Marks)

(Not more than 40 words)

11. Enumerate the benefits and problems of dams
12. Explain the term desertification
13. Energy flow in an ecosystem is unidirectional – justify
14. Name the two hot spots of biodiversity in India
15. What are the control measures of thermal pollution?
16. Differentiate between reuse and recycling
17. Define sustainable development
18. List the consequences of global warming effect
19. What is meant by doubling time in population?
20. Distinguish between HIV and AIDS

PART C (5 x 14 = 70 Marks)

(Not more than 400 words)

Q.No. 21 is Compulsory

21. (i) What is deforestation? Discuss the causes and effects of deforestation (7)
(ii) Explain the adverse environmental impacts of modern agriculture (7)

22. a) (i) Discuss the structure and function of a desert ecosystem (7)
(ii) Write short notes on ecological pyramids (7)

(OR)

b) (i) List out and explain the major threat to biodiversity (7)
(ii) Explain the measures recommended for the conservation of biodiversity (7)

23. a) (i) Classify the air pollutants and discuss their effects (7)
(ii) What is meant by disaster management? Explain the management of earthquakes (7)

(OR)

b) (i) Explain the measures recommended for solid waste management (7)
(ii) Discuss the role of an individual in prevention of pollution (7)

24. a) (i) With a neat diagram describe rain water harvesting (7)
(ii) Write notes on acid rain and ozone layer depletion (7)

(OR)

- b) (i) Discuss in detail the water(prevention and control of pollution) act (7)
 - (ii) “Population, consumerism and waste products are inter related” - comment (7)
25. a) (i) Discuss the salient features of the universal declaration of human rights by united nations (7)
- (ii) What is population explosion? Discuss the consequences of it (7)
- (OR)**
- b) Enumerate the role of information technology in environment and human health
