

Register No:

B.E/B.TECH DEGREE EXAMINATIONS: APRIL/MAY 2011

Fourth Semester

U07GM401: ENVIRONMENTAL SCIENCE AND ENGINEERING

(Common to all branches)

Time: Three Hours

Maximum Marks = 100

Answer all the questions:-

PART A (10 x 1 = 10 Marks)

1. Green energy is produced from
a) Coal b) Uranium c) Sunlight d) Green trees
2. Which of the following forms of land degradation is more prevalent in India?
a) Desertification b) Soil erosion c) Land slide d) Soil subsidence
3. In an aquatic ecosystem phytoplankton can be considered as a
a) Consumer b) Producer c) Saprotrophic organisms d) Macro consumer
4. The term Hot spot means
a) Dangerous b) Very hot c) Very rich in species d) Very poor in species
5. Which of the following is an air pollutant?
a) Nitrogen b) Carbon monoxide c) Hydrogen d) Oxygen
6. Bio – medical waste may be disposed off by
a) Incineration b) Autoclaving and land filling c) Composting d) Neutralization
7. Acid rain is formed by
a) Dust b) snow c) O₃ d) SO₃
8. Major compound responsible for the depletion of ozone layer is
a) O₂ b) CFC c) CO₂ d) CH₄
9. The average life expectancy around the world is currently
a) Decreasing b) Increasing c) Not changing d) Stabilizing
10. The term Natality means
a) Birth rate b) Death rate c) Emigration d) Immigration

PART B (10 x 2 = 20 Marks)

11. What is meant by desertification?
12. Define the term deforestation.
13. What is food web?

14. Define the term an eco system.
15. What are the impacts of marine pollution on aquatic life?
16. Define soil pollution.
17. What is sustainable development?
18. What is climate change?
19. What is the major objective of family welfare programme in India?
20. What is meant by doubling time in population?

PART C (5 x14 = 70 Marks)

21. a) (i) Explain the adverse environmental impacts of modern agriculture. (7)
(ii) Enumerate the major arguments cited against the construction of dams. (7)

(OR)

b) (i) "Environmental damages caused by mining last long after the mine has closed".
Explain. (7)
(ii) Write a note on land degradation. (7)
22. a) (i) Explain briefly on conservation of biodiversity. (7)
(ii) Discuss the status of India as a mega diverse nation of biodiversity. (7)

(OR)

b) (i) Discuss briefly on the concept of ecological pyramids. (7)
(ii) Explain the role of producers, consumers and decomposers in an eco system. (7)
23. a) (i) Discuss the sources, effects and control measures of thermal pollution. (7)
(ii) Explain briefly on solid waste management. (7)

(OR)

b) Discuss briefly on sources, effects and control measures of air pollution.
24. a) (i) Explain the phenomenon of global warming and the factors contributing to it. (7)
(ii) Discuss the constitutional provisions in India for environmental protection. (7)

(OR)

b) (i) Write a note on rain water harvesting and water shed management. (7)
(ii) What are the major issues associated with resettlement and rehabilitation? (7)

25. a) (i) Explain the environmental problems posed by population explosion. (7)

(ii) Explain the evolution of women and child welfare programmes in India. (7)

(OR)

b) (i) Discuss the salient features of the universal declaration of human rights by UN. (7)

(ii) What are the modes of transmission of HIV and how can it be prevented? (7)
