

K.S.K.COLLEGE OF ENGINEERING & TECHNOLOGY

Name of the faculty : Mrs.K.Bhuvanewari &Mrs. P.Premalatha

Sub Code : GE6351 ENVIRONMENTAL SCIENCE AND ENGINEERING

Branch / Year : CSE,ECE,CIVIL III & II Year

QUESTION BANK

UNIT - I

ENVIRONMENT ECOSYSTEM AND BIODIVERSITY

Two Marks

PART -A

1. Define Environmental science and the types of environment.
2. Mention the Scope and importance of Environmental studies.
3. What are Hazards? Explain how hazards are expressed?
4. Briefly about the types of HAZARD.
5. What are the control measures of Hazards?
6. Define Ecology?
7. Bring out the functional features of an ecosystem.
8. What are the types of ecosystem?
9. What are the classifications of biotic components? Explain in brief.
10. Briefly explain the energy flow through ecosystem.
11. What is Ecological Succession? Mention its types
12. Bring out the difference between oxygen and nitrogen cycle.
13. Mention the types and characteristics of forest ecosystem.
14. What is the importance of biodiversity?
15. Brief about the various levels of biodiversity.
16. What is the state of biodiversity at national level?
17. What are the hot- spots of biodiversity?
18. List the threats towards biodiversity?
19. How will you conserve biodiversity?
20. What are the various classifications of species?

Mrs.K.Bhuvanewari &Mrs. P.Premalatha

DEPARTMENT OF CHEMISTRY

PART - B

1. Define Hazards. What are the types and explain their health effects. (16)
2. Explain the components, Characteristics and biodiversity of Forest ecosystem(16)
3. Explain the structure and functional features of aquatic, desert and grassland Ecosystems. (16)
4. Explain oxygen and nitrogen cycle in detail. (16)
5. What are the threats faced by biodiversity. What are the solutions for the threats (or) how will you conserve bio-diversity? (16)
6. Explain in detail the energy flow through the ecosystem. (16)
7. Discuss the threats faced by Indian biodiversity. (16)
8. Write a note on the endangered and endemic species of India. (16)
9. What are the impacts of biodiversity loss? (16)
10. Define the term hot spot in biodiversity. Explain any two in detail. (16)

UNIT - II

ENVIRONMENTAL POLLUTION

Two Marks

PART-A

1. Define pollution and what are the types of pollutants?
2. What is the chemical composition of atmospheric air?
3. What are the causes of air pollution? Mention some control measures of air pollution.
4. Define PAN.
5. What is smog and how it affects health and environment?
6. Define ACID rain and its cause. What are the control measures of acid rain?
7. What are Municipal Solid Wastes?
8. What is the mechanism of ozone layer depletion?
9. What are the properties of terrestrial and marine water?
10. Mention the chemical parameters of water quality.
11. Define COD and BOD.
12. What are the advantage and disadvantages of zeolite process?
13. Brief about demineralization process.
14. Define soil pollution and what the sources of soil pollution are?
15. List some sources of urban and industrial waste.
16. What are the effects of marine pollution? How will you control it?
17. How will you control noise pollution?

18. What are the sources of thermal pollution?
19. Define radioactive pollution.
20. List out the role of an individual in preventing pollution.

PART - B

1. Mention the sources and effects of various air pollutants. Also Describe the method of control of air pollution. (16)
2. (i) Briefly describe the sources effects and control of noise pollution. (8)
(ii) Discuss about OZONE layer depletion. (8)
3. Enumerate with example the major sources of surface and ground water pollution. (16)
4. (i) Explain the method of sewage water treatment. (8)
(ii) How acid rain is formed? Explain its impact. (8)
5. What are the major sources of soil pollution? And what are the measures to be taken to prevent soil pollution? (16)
6. Explain in detail the Solid waste management techniques and the disposal of MSW. (16)
7. (i) Explain any two case studies on Nuclear pollution. (8)
(ii) Explain in detail about radioactive pollution. (8)
8. What are the sources, effects & control measures of Marine pollution? (16)
9. Explain the methods of disposal of municipal solid waste. Write notes on disposal of radioactive wastes. (16)
10. (i) What are the causes of soil erosion and methods of preventing it? (8)
(ii) Describe case study on industrial pollution (8)

UNIT - III

NATURAL RESOURCES

TWO MARKS PART -A

1. What are the types of natural resources?
2. Define deforestation and causes of deforestation.
3. Mention some consequences of deforestation.
4. Define mining and its types.
5. What are the steps involved in mining.
6. What are the effects of dams on forest?
7. Define the steps in hydrological cycle.
8. What are the types of fresh water resources?
9. What are the consequences of over utilization of ground water?
10. How minerals are formed and what are the classifications of mineral resources?

11. How minerals are exploited?
12. What are the impacts of extracting and using minerals?
13. Mention the problems in using fertilizers and pesticides.
14. What is salinity? And what are the problems faced during salinity.
15. Define OTE.
16. What is biomass energy?
17. Differentiate coal power and nuclear power.
18. Define soil erosion and its types.
19. Define desertification.
20. What is meant by bioconversion of pollutants?

PART - B

1. Explain in detail about forest resources, its functionality and benefits. (16)
2. What is deforestation? What are the causes of deforestation? And explain their impact on the environment. (16)
3. (i) Brief about timber extraction and its consequences. (8)
(ii) What is mining explain its types. (8)
4. (i) What are dams and explain their effects on forest and tribal people. Explain with any one case study. (8)
(ii) Mention the benefits and problems in constructing a dam. (8)
5. (i) Discuss in detail about water Resources. (8)
(ii) Discuss about desertification. (8)
6. (i) Briefly explain in detail about Food resources. (8)
(ii) What are the adverse effects of agricultural practices. (8)
7. Describe in detail about Renewable and nonrenewable energy resources. (16)
8. Discuss in detail about energy conversion process. (16)
9. (i) Explain in detail about soil erosion and its types (8)
(ii) Briefly explain about biochemical degradation of pollutants. (8)

UNIT - IV
SOCIAL ISSUES AND ENVIRONMENT

Two Marks

PART - A

1. Define sustainable development.
2. What are the causes of urbanization?
3. What are the measures of water conservation?
4. List out the need of rain water harvesting.
5. What are the factors affect watershed?
6. What are the roles of NGO?
7. Define environmental ethics.
8. Mention some ethical guidelines.
9. List out the principles of green chemistry.
10. Define nuclear holocaust.
11. What is the need of waste land reclamation?
12. What are the objectives of consumerism?
13. What is the environment protection act?
14. Define air prevention and control of pollution act.
15. Brief about water act.
16. Define the objectives of wildlife act and forest act.
17. What is meant by environmental audits? What are its types?
18. What are the issues involved in enforcement of environmental legislation.
19. Briefly explain the role of central and state pollution control boards.
20. Define disaster management.

PART - B

1. State the provisions in Environment protection act, Air Act and water act. (16)
2. (i) Explain in detail about sustainable Development. (8)
(ii) Discuss about bio medical waste. (8)
3. (i) Discuss in detail about water Conservation. (8)
(ii) Explain in detail the concept of Green chemistry. (8)
4. Describe in detail the role of NGO. (16)
5. What is meant by environmental ethics, mention the functions of environment and the problems and issues? (16)
6. Explain with any case study about the nuclear Accidents and Holocaust. (16)

7. (i) Describe about Waste land development and the need for it. (8)
(ii) Describe the objectives of consumerism. (8)
8. Discuss in detail about Water Act and Wildlife, Forest Act. (16)
9. Explain the concept of Disaster Management with an example case study. (16)
10. (i) What are the issues involved in Environmental legislation? (8)
(ii) How public awareness is done to conserve the environment. (8)

UNIT - V

HUMAN POPULATION AND THE ENVIRONMENT

Two Marks

PART - A

1. Write short notes on population dynamics.
2. What are the factors affecting population size?
3. What is meant by population stabilization.
4. Define the term population explosion and the reason behind it.
5. What kinds of problems are created due to Urbanisation?
6. Define population stabilization ratio.
7. What are the factors influencing human health.
8. Define NIMBY syndrome.
9. Define human rights and the universal declaration of rights.
10. What is the meant by Indian constitution.
11. What are the objectives of family welfare programme.
12. What is the role of primary health care against AIDS?
13. What do you mean by remote sensing?
14. What is doubling time, total fertility rates?
15. Define Zero Population growth.
16. Define EIA.
17. What is meant by value education? What is the need for it?
18. What is GIS?
19. Define (i) Toxins (ii) Carcinogens (iii) Tetrogenic (iv) Neurotoxins.
20. State how environment & human health are related
21. What is meant by population explosion? Discuss the Indian Scenario.

PART - B

1. Explain the population characteristics & variations among nations. (16)
2. What is meant by population stabilization? Discuss the family welfare and family planning in Indian context. (16)
3. Discuss the influence of environmental parameters and pollution on human health. (16)
4. (i) What is Universal declaration of Human rights? What is its importance in achieving the goals of equity, justice & sustainability. (8)
(ii) Discuss the salient features of Draft declaration of Human Rights on Environment. (8)
5. What are the objectives & elements of Value-education? How can the same be achieved? (16)
6. (i) Briefly discuss HIV/AIDS, mode of its spread and its effect on environment. (8)
(ii) Discuss various issues & measures for Women & Child Welfare at International & National level. (8)
7. What is the role of NMIS, ENVIS & GIS in dissemination of environmental information and environmental management? (16)
8. Explain the role of Information Technology in environment & Human health. (16)
9. (i) Discuss the environmental and social impacts of growing population. (8)
(ii) Write briefly on the effect of increasing affluence on environment. (8)
10. (i) Write briefly on implementation of family planning programme. (8)
(ii) Discuss the factors influencing the family size. (8)