



# KINGS

COLLEGE OF ENGINEERING



DEPARTMENT OF MECHANICAL ENGINEERING

## QUESTION BANK

**SUB CODE\NAME:CY1201 ENVIRONMENTAL SCIENCE  
AND ENGINEERING**

**YEAR/SEM: III/V**

### **UNIT-I**

#### **PART- A (2Marks)**

1. What is environment?
2. Give in detail the scope and importance of environment?
3. What is the need for the public awareness of the environmental engineering?
4. Give in detail the world forest distribution.
5. What is deforestation?
6. List and discuss the causes of land degradation
7. Name and discuss the factors that influence soil erosion
8. What is the role of an individual in the conservation of natural resources?
9. How do you protect forest?
10. What is biosphere?

#### **PART-B**

1. a. Explain the effects of Deforestation and over utilization of ground water (8)  
b. What are the measures recommended for conservation of natural resources? (8)
2. a. Explain briefly the various methods of harvesting solar energy (8)  
b. Write a note on tidal power (3)  
c. Write briefly on the Hydrologic cycle (5)

3. a. What is the role of an individual in the conservation of natural resources (8)  
b. Discuss the Indian scenario in solar energy utilization and development (8)
4. a. Discuss the consequence of overdrawing of ground water (8)  
b. Explain the effects of over utilization of surface water (8)
5. a. Discuss the development of modern agriculture and its effect (8)  
b. Explain the Adverse effects of Agricultural Practices away from the farm (8)
6. a. List and discuss the causes of land degradation. (8)  
b. Name and discuss the factors that influence soil erosion (8)
7. a. Explain in details the scope and importance of environment (8)  
b. Name and discuss the two major food problems (8)

**UNIT -2**  
**PART- A (2Marks)**

1. What is ecosystem?
2. What are the types of ecosystem?
3. What is terrestrial ecosystem? Give examples
4. What is aquatic ecosystem?
5. What is food chain?
6. What is food web?
7. Define ecological succession.
8. What is pioneer community?
9. What are hot spots of biodiversity? 10. What is poaching of wild life?

**PART-B**

1. a. Briefly discuss the structural and functional components of an ecosystem (8)  
b. Explain the following (i) Forest ecosystem (ii) Ecological succession (8)
2. a. State the four components of ecosystem (4)  
b. Discuss energy flow in the ecosystem (4)  
c. Write briefly on types of food chain (4)  
d. Explain ecological Pyramids (4)

3. a. Discuss the four kinds of diversity (4)  
b. Write a note on measuring Biodiversity (4)  
c. Why biodiversity is rich in the tropics (4)  
d. What are the causes of for loss of Biodiversity (4)
  
4. Write short notes on the following
  - a. Pond ecosystem (4)
  - b. Threats to biodiversity (4)
  - c. Nitrogen cycle (4)
  - d. In-situ & Ex-situ conservation(4)
  
5. Explain the following
  - a. Aquatic ecosystem (4)
  - b. Effects of extracting mineral resources (4)
  - c. Carbon cycle (4)
  - d. Structure of atmosphere (4)
  
6. a. Discuss the threats faced by Indian Biodiversity (8)  
b. Explain (i) Red Data book (ii) Biodiversity at global level(8)
  
7. a. What are the threats to biodiversity? Explain.(8)  
b. Compare and contrast In-situ and Ex-situ conservation.(8)

**UNIT- 3**

**PART- A (2Marks)**

1. Define air pollution.
2. What are the sources of air pollution?
3. Define noise pollution.
4. Write any three effects of radio active pollution?
5. What are the sources of urban solid waste?
6. Define thermal pollution
7. What are the sources of soil pollution?
8. What do you understand about cyclone?

9. What are the causes of flooding?
10. Define pollution prevention.

**PART-B**

1. Explain the causes, effects and control measures of water pollution (16)
2. a. What are the effects of improper municipal solid waste management? (8)  
b. State the measures recommended for proper management of the solid wastes(8)
3. What are the major pollutants of atmosphere? Enumerate the adverse effects caused by the pollutants (16)
4. Discuss the causes and effects of the following (8+8)  
(i) Global warming  
(ii) Acid rain
5. a. Explain the effects of CO, SO<sub>2</sub>, Hydrocarbons and chromium on human beings (8)  
b. Explain the effects of nuclear and radiation pollution (8)
6. a. Explain Bhopal Gas tragedy (8)  
b. What is meant by rain water harvesting? Why it is necessary nowadays? (8)
7. What is earthquake? Enumerate its effects. What measures should be taken to mitigate this Disaster? (16)
8. What are the causes, effects and control measures of marine pollution? (16)
9. Explain the role of an individual in the prevention of pollution. (16)
10. What are the causes, effects and control measures of air pollution (16)

**UNIT- 4**

**PART- A      (2Marks)**

1. Define sustainable development.
2. Define watershed
3. What is meant by rain water harvesting?

4. What are the major global effects of air pollution?
5. What are green house gases and their percentages?
6. What is the effect of ozone depletion?
7. What do you meant by acid rain?
8. Define Wasteland.
9. Define consumerism.
10. Define Rehabilitation & Resettlement.

**PART B**

- 1 a. Discuss the objectives for prevention of hazardous wastes (8)  
b. Write a note on integrated wasteland development program (8)
2. a. Write short notes on (8+8)  
( i) Environmental ethics  
(ii) Waste land Reclamation
3. State the important provisions in Environmental Protection act, Air Act and water Act (16)
4. a. Discuss the agenda for sustainable development (8)  
b. Write in detail about global warming (8)
5. a. Explain the mechanism of ozone layer depletion (6)  
b. Writ briefly on the community participation in environment in programs (4)  
c. Discuss briefly on the Indian environmental acts (6)
6. a. What is meant by rain water harvesting? Why it is necessary nowadays? (8)  
b. Write the factors that influence the sustainable and unsustainable act (8)
7. a. Explain forest conservation act (8)  
b. Explain nuclear accidents and nuclear holocaust (8)

**UNIT 5**  
**PART- A      (2Marks)**

1. What is the formula of Birth rate and Death rate calculation?
2. Give the reasons for human population.

3. What are the effects of increasing human population?
4. Write two types of population growth curves.
5. Give examples of diseases due to polluted water.
6. List out the fundamental rights.
7. What are the major symptoms of AIDS?
8. Write the screening tests for AIDS.
9. What are the types of values?
10. What are the applications of GIS?

### **PART B**

- 1.a. Give an account of population explosion. (8)  
b. Explain the impacts of population growth (8)
- 2.a. Discuss the environmental and social impacts of growing population. (8)  
b. Write briefly on implementation of family planning program. (8)
3. a. Write an essay on environment and human health. (8)  
b. Explain about human rights. (8)
4. a. Explain value education. (8)  
b. How to implement value education successfully? (8)
5. a. Write short notes on AIDS. (8)  
b. Explain the control methods of AIDS. (8)
6. a. Write an essay on women and child welfare. (8)  
b. Explain the role of I.T on environment and human health. (8)
7. a. Explain the importance of human education. (8)  
b. What is population dispersion? Explain. (4)  
c. What is AIDS? How to prevent it? (4)