

# CONTENTS

## **PART I : INTRODUCTION TO ENVIRONMENTAL STUDIES....[1-14]**

- A. Multidisciplinary nature of environmental studies
- B. Scope and importance of environmental studies
- 2. PUBLIC AWARENESS**
  - A. Need for public awareness
  - B. Methods and approaches to public awareness

## **PART II: CONSERVATION OF NATURAL RESOURCES.... [15-103]**

- 3. NATURE OF NATURAL RESOURCES**
  - A. Natural resources
  - B. Equitable use of natural resources for sustainable lifestyles
  - C. Resource planning
  - D. Role of an individual in conservation of natural resources
- 4. FOREST RESOURCES**
  - A. Importance and uses of forests
  - B. India's forest resources
  - C. Timber extraction and forests
  - D. Effects of mining activities on forests
  - E. Effects of dam on forests
  - F. Tribal people and forests
  - G. Over-exploitation of forests
  - H. Effects of deforestation
  - I. Forest Conservation
  - J. National Forest Policy (1988)

**5. WATER RESOURCES**

- A. Sources of water and its uses
- B. Floods and droughts
- C. Conflicts over water
- D. Dams and Environment
- E. Water conservation
- F. Model Bill on Groundwater
- G. Water Cess Act of 1977
- H. National Water Policy (2002)

**6. MINERAL RESOURCES**

- A. Use and exploitation of mineral resources
- B. Environmental effects of mineral resource extraction and use
- C. Mineral conservation
- D. National Mineral Policy (1994)

**7. FOOD RESOURCES**

- A. World food problem
- B. Effects of food crisis
- C. Measures to solve food crisis
- D. Effects of modern agriculture

**8. ENERGY RESOURCES**

- A. Urban problems related to energy
- B. Renewable and non-renewable energy sources
- C. The energy crisis and uses of alternative energy sources
- D. Why to conserve energy resources
- E. Energy conservation

**9. LAND RESOURCES**

- A. Land degradation
- B. Soil conservation

**PART III: ECOSYSTEMS...[104-153]**

**10. CONCEPT, STRUCTURE AND FUNCTIONS OF AN ECOSYSTEM**

- A. Structure of an ecosystem
- B. Ecological goods and services rendered by the ecosystems
- C. Impact of human intervention on the functioning of the ecosystem
- D. Ecosystem and sustainable development

**11. ENERGY FLOW IN THE ECOSYSTEM**

- A. Basis of energy flow
- B. Productivity in ecosystem
- C. Bio Geochemical cycles

**12. ECOLOGICAL PYRAMIDS**

- A. Types of ecological pyramids
- B. Carrying capacity
- C. Population growth curve (Logistic curve)

**13. ECOLOGICAL SUCCESSION**

- A. Types of ecological succession
- B. General process and mechanism of ecological succession
- C. Importance of ecological succession

**14. TYPES AND STRUCTURE OF ECOSYSTEM**

- A. Terrestrial ecosystem
- B. Aquatic Ecosystem
- C. Artificial ecosystem

**PART IV : BIODIVERSITY AND ITS CONSERVATION....[154-179]**

**15. CONCEPTS, VALUE AND THREATS TO BIODIVERSITY**

- A. Meaning of biodiversity
- B. Biogeographical classification of India
- C. India as a mega-diversity nation
- D. Hot spots of biodiversity
- E. Value of biodiversity
- F. Man-wildlife conflicts
- G. Biodiversity at global level

H. The Convention on International Trade in Endangered Species (CITES)

162

I. The International Union for Conservation of Nature and Natural Resources (IUCNR)

J. IUCNR Red List

K. Endangered and endemic species of India

L. Biosphere reserves, national parks and wildlife sanctuaries in India

M. Threats to biodiversity

**16. CONSERVATION OF BIODIVERSITY**

A. Ex-situ conservation

B. In-situ conservation

C. Incentive measures

D. Agenda[21]

E. The Indian Biological Diversity Act (2003)

F. National Biodiversity Authority (NBA)

G. Gene banks in india

**PART V: NATURE OF ENVIRONMENTAL POLLUTION AND DISASTER MANAGEMENT....[180-248]**

**17. ENVIRONMENTAL POLLUTION**

A. Meaning of pollutants

B. Water pollution

C. Air pollution

D. Noise pollution

E. Marine pollution

F. Soil pollution

G. Thermal pollution

H. Nuclear hazards

I. Role of an individual in prevention of pollution

**18. SOLID WASTE MANAGEMENT**

A. Municipal solid waste (urban solid waste)

B. Rural Solid Waste

C. Industrial waste

D. Mining waste

- E. Biodegradable waste
- F. Non-biodegradable waste
- G. Effects of solid waste
- H. Bio-medical waste
- I. E-Waste
- J. Sustainable management of wastes
- K. Basel Convention on Hazardous Wastes
- L. Basel Convention Meeting on Waste Management for Human Health and Livelihood (June 2008 at Bali)
- M. The problem of solid waste in India

**19. DISASTER MANAGEMENT**

- A. Meaning of disaster
- B. Disaster management

**20. ROLE OF GOVERNMENT IN DISASTER MANAGEMENT**

- A. Disaster management at national level
- B. Disaster management at state level
- C. Disaster management at district level
- D. Disaster management at block level
- E. Disaster management at village level
- F. Role of army and para military forces during disaster management

**21. DISASTER MANAGEMENT ACT (2005)**

- A. Terms used in Disaster Management Act (2005)
- B. Objectives of the Act
- C. Decision making authorities
- D. The role of media

**PART VI: SOCIAL AND GLOBAL ISSUES....[249-327]**

**22. FROM UNSUSTAINABLE TO SUSTAINABLE DEVELOPMENT**

- A. Unsustainable development
- B. Sustainable development

**23. RAINWATER HARVESTING, WASTE LAND**

**RECLAMATION AND WATERSHED  
MANAGEMENT**

- A. Rainwater harvesting
- B. Wastelands and their reclamation
- C. Watershed management

**24. PROBLEMS OF RESETTLEMENT AND  
REHABILITATION OF PEOPLE**

- A. Causes of displacement
- B. Problems of displaced people
- C. Rights of displaced and rehabilitated people
- D. The National Rehabilitation and Resettlement Policy, 2007

**25. THE CLIMATE CHANGE AND GLOBAL  
WARMING**

- A. Climate change
- B. Global warming
- C. Acid rain
- D. Depletion of ozone layer in the stratosphere
- E. Global level efforts
- F. Likely impact of climate change on India
- G. National action plan on climate change (2008)
- H. Carbon footprint

**26. ENVIRONMENTAL LAWS IN INDIA**

- A. Objectives of environmental laws
- B. The role of Ministry of Environment and Forests
- C. The Water (Prevention and Control of Pollution) Act, 1974
- D. The Air (Prevention and Control of Pollution) Act, 1981
- E. The Environmental (Protection) Act, 1986
- F. The Noise Pollution (Regulation and Control) Rules, 2000
- I. The Wildlife (Protection) Act, 1972
- J. Forest (Conservation) Act, 1980
- K. Issues involved in enforcement of environmental legislation in India
- L. Public awareness

**27. ENVIRONMENTAL ETHICS**

- A. Principles of environmental ethics
- B. Ethical solutions to avoid environmental crisis and degradation

**28. NUCLEAR ACCIDENT F AND HOLOCAUST**

- A. Cherbnoyi nuclear accident and holocaust
- B. Environmental impacts and victims
- C. Atomic Energy Act (1962)

**PART VII: HUMAN POPULATION,  
ENVIRONMENT AND IT....[328-409]**

**29. BASIC CONCEPTS OF HUMAN POPULATION**

- A. Some concepts
- B. Human population pyramid
- C. Methods of projecting population growth
- D. Migration

**30. WORLD POPULATION: VARIATION AMONG  
NATIONS**

**31. POPULATION EXPLOSION AND FAMILY  
WELFARE PROGRAMMES**

- A. Population explosion
- B. Effects of population explosion
- C. Family welfare programmes

**32. ENVIRONMENT AND HUMAN HEALTH**

- A. Home and human health
- B. Slum environment and human health
- C. Hospital and community environment
- D. Biomass fuel combustion
- E. Effects of pesticides on human health
- F. Effects of small-scale industries on human health
- G. Effects of large industries on human health
- H. Effects of food adulteration on human health
  - I. Tobacco use and human health
  - J. Epidemic and Endemic Diseases
- K. Environment and public health
- L. Modern lifestyle and public health

**33. ENVIRONMENTAL HUMAN RIGHTS**

- A. Need for environment human rights
- B. Environmental human rights
- C. HIV/AIDS and human rights

**34. VALUE BASED ENVIRONMENTAL EDUCATION  
371**

- A. Need for value education
- B. Environmental education
- C. Objectives of environmental education
- D. Aims of environmental education
- E. Nature of environmental education
- F. Guiding principles of environmental education
- G. Concepts of environmental education

**35. HIV/AIDS**

- A. Symptoms and estimates of AIDS
- B. Causes of HIV/AIDS
- C. Protective and preventive measures
- D. HIV/AIDS Bill (2006)
- E. HIV/AIDS awareness
- F. National Council On AIDS (NC A)
- G. Global level efforts

**36. WOMEN, ENVIRONMENT AND WELFARE**

- A. Women and Environment
- B. Social sustainability and welfare programmes

**37. ROLE OF INFORMATION TECHNOLOGY IN  
ENVIRONMENT AND HUMAN HEALTH**

- A. Introduction to Information Technology (IT)
- B. Geographical Information System (GIS)
- C. Sources of environmental information

**QUESTION BANK....[410-465]**

- Part I (Short Notes)**
- Part II (Fill in the Blanks)**
- Part III (Multiple Choice Questions)**