IT6351 ENVIRONMENTAL SCIENCE AND ENGINEERING

UNIT V

2 MARKS

1. **What is environmental ethics?**

   Environmental ethics is refers to the issues, principles and guidelines relating to human interactions with their environment.

2. **What are all the types of Nuclear Accidents?**

   - Nuclear Test.
   - Nuclear power plant accidents.
   - Improper disposal of radioactive waste.
   - Accidents during transport.
   - Core melts down.

3. **What is nuclear Holocaust?**

   a. It means destruction of biodiversity by nuclear equipments and nuclear bombs.
   b. In a holocaust a large number of living beings are totally destroyed.
   c. It happens in nuclear war.

4. **What are all the Environmental Problems?**

   a. Deforestation.
   b. Population growth and urbanization.
   c. Pollution due to discharge of effluent and smoke discharge from the industries.
   d. Water Scarcity.
   e. Land Degradation

5. **What is Green Chemistry?**

   Green chemistry, also called sustainable chemistry, is an area of chemistry and chemical engineering focused on the designing of products and processes that minimize the use and generation of hazardous substances

6. **What are all the Acts available for environmental protection in india?**

   a. Water Act 1978
   b. Air Act 1981
   c. Wild life Protection Act 1972
   d. Forest Conservation Act 1980.
   e. Environment Act

7. **What are all the objectives of wild life protection Act in india?**

   a. To maintain essential ecological processes and life-supporting systems.
   b. To preserve biodiversity.
   c. To ensure a continuous use of species.

8. **What is Disaster management? List types of disasters we know?**

   Disaster Management can be defined as the organization and management of resources and responsibilities for dealing with all humanitarian aspects of emergencies, in particular preparedness, response and recovery in order to lessen the impact of disasters.

   Disasters:

   1. Nuclear Accidents
   2. Earthquake
   3. Cyclone
   4. Flood
   5. Tsunamis
   6. Volcano Eruptions

9. **What is population?**

   A population is a summation of all the organisms of the same group or species, which live in a particular geographical area, and have the capability of interbreeding

10. **What is population growth rate?**

    Population growth rate (PGR) is the increase in a country's population during a period of time, usually one year, expressed as a percentage of the population at the start of that period. It reflects the number of births and deaths during a period and the number of people migrating to and from a country.

11. **What is population explosion?**

    The rapid increase of population growth is referring to population explosion. The population explosion cause many problem to country,
    That is,
    a. Demand for food.
    b. Housing Problem.
    c. Pollution.
    d. Scarcity of natural resources.
    e. Economic Implications.

12. What is population density? List the factors affecting the population size.

It is expressed as the number of individuals of the population per unit area or per unit volume.

Factors affecting population size:

1. Birth rate or Natality.
2. Death rate or Mortality.
3. Immigration.
4. Emigration.

13. What is Doubling Time for population?

The Doubling Time of population is known as the time required for a population to double its size.
Td (Doubling Time) = 70 / r
r = annual growth rate.

14. What are all the causes for population growth?

a. The rapid population growth is due to decrease in death rate and increase in birth rate.
b. The availability of antibiotics, immunisation, increased food production, clean water and air decreases the famine- related deaths and infant mortality.

15. What are all the problems arise in rapid population growth?

The Problems are,

a. Demand for food.
b. Housing Problem.
c. Pollution.
d. Scarcity of natural resources.
e. Economic Implications.

16. What are all the environmental factors affecting human health?

Factors affecting human health
  ◦ Nutritional factors
  ◦ Biological factors
  ◦ Chemical factors
  ◦ Psychological factors

17. What are human rights?

Human rights are the fundamental rights, which are possessed by all human beings irrespective of their caste, nationality, gender and language.

18. List the human rights declared by UNO.

  a. Human right to freedom.
  b. Human right to property.
  c. Human right to freedom of religion.
  d. Human right to culture and education.
  e. Human right to constitutional remedies.
  f. Human right to equality.
  g. Human right against exploitation.
  h. Human right to food and environment.
  i. Human right to good health.

19. What is value education? List the values that we need to educate.

Value education is an instrument used to analyse our behaviour and provide proper direction to our youths. It teaches the values and morals of environment.

  1. Universal values.
  2. Cultural values.
  3. Individual values.
  4. Global values.
  5. Spiritual values.

20. What is HIV/AIDS? List the control measures for HIV.

HIV = human immunodeficiency virus

AIDS = acquired immune deficiency syndrome.

Control Measures are,

  a. Education.
  b. Prevention of Blood borne HIV Transmission.
  c. Primary Health care.
  d. Counselling Service.
  e. Drug Treatment.

21. **What are all the objectives for women welfare?**

    a. To Provide education.
    b. To generate awareness about the environment.
    c. To improve employment opportunities.
    d. To aware problems of population.
    e. To restore the dignity, status, equity, and respect for woman.

22. **What is the role of IT in Environmental Science?**

    There are many software application systems available that help to analyse and protect the environments,
    1. Remote Sensing.
    2. National Databases.
    3. Geographical Information Systems.
    4. Satellite Data.
    5. World Wide Web

23. **What is the role of IT in Human Health?**

    The health service technology mainly involves three systems,
    a. Finance and Accounting.
    b. Pathology.
    c. Patient Administration system

PART –B

1. Explain in detail about 12 principles of chemistry.
2. Explain in detail about Acts of India to protect the environment.
3. Explain in detail about Disaster management.
4. Explain in detail about population growth and population explosion.
5. Explain in detail about Human health and environment and Human Rights.
6. Explain in detail about Importance of Value education and HIV/AIDS.
7. Explain in detail about family welfare, Women & Child welfare.
8. Explain in detail about Role of an IT in environment protection and human health.