

MCQs

1. Batteries store which type of energy:
 (A) Electrical (B) Mechanical (C) Nuclear (D) Chemical
2. Population of Pakistan in the year 1947 was :
 (A) 180 million (B) 150 million (C) 50 million (D) 32.5 million
3. Study of Human Populations and the things that affect them, is called :
 (A) Human Biology (B) Sociobiology (C) Demography (D) Teratology
4. The world population is expected to be nearly doubled by :
 (A) 2040 (B) 2020 (C) 2030 (D) 2050
5. The increase of environment temperature due to high amount of CO is known as :
 (A) Stone cancer (B) Ozone depletion (C) Acid rains (D) Global warming
6. The steady internal state of homeostasis is known as :
 (A) Normal Health (B) Disorder (C) Disease (D) Abnormal Health
7. In pure form , Ozone is :
 (A) Bluish (B) Greenish (C) Yellowish (D) Reddis
8. A chemical that kills weed plants is called :
 (A) Pesticide (B) Fungicide (C) Herbicide (D) Insecticide
9. Beri Beri is caused by :
 (A) Infection (B) Nutritional Deficiency
 (C) hysical disorder (D) Chemical Cause
10. Energy from sun flows through as ecosystem in the form of :
 (A) Radiant heat (B) Light (C) Temperauter (D) Evaporation
11. It is not fossilized fuel :
 (A) Lignite (B) Natural gass (C) Peat (D) Oil
12. Which of the following act as environmental buffer ?
 (A) Deser (B) Oceans (C) Lakes (D) Forests
13. The destruction of forests leaves the soil barren and this is called :
 (A) Deforestation (B) Forestation (C) Aforestation (D) Reforestation
14. Establishment of new forests , where no forests existed before is called :
 (A) Afforestation (B) Deforestation (C) Desertification (D) Reforestation
15. As chlorofluorocarbons rise the the atmosphere , the ultraviolet rays release :
 (A) Flourine (B) Hydrogen (C) Carbon (D) Chlorine
16. Ozone molecules is made up by binding of three atoms of :

- (A) Carbon (B) Hydrogen (C) Nitrogen **(D) Oxygen**

17. Stone monuments like " Taj Mahal " are being eroded due to " Stone cancer " by :
(A) Eutrophication (B) Acid rain (C) Greenhouse effect (D) Radiation
18. The ozone layer has developed a hole over the :
 (A) Arctica **(B) Antarctica** (C) Equator (D) Tropics
19. The decline in thickness of ozone layer is caused by increasing level of:
 (A) Hydrocarbons (B) Nitrocarbons (C) Fluorocarbons **(D) Chlorofluorocarbons**
20. Ozone in the upper layer of atmosphere that filters :
 (A) IR radiation **(B) UV radiation** (C) radiation (D) radiation
21. A single chlorine atom can react with ultraviolet rays and destroy as many as :
 (A) Four million O₃ molecules (B) Three million O₃ molecules
(C) One million O₃ molecules (D) Six million O₃ molecules
22. The increase of environmental temperature due to high amount of CO₂ is known as :
 (A) Stone cancer (B) Ozone depletion (C) Acid rains **(D) Global warming**
23. Treasure of all type of resources is :
 (A) Weather (B) Climate (C) Water **(D) Environment**
24. The colour of the pure form of ozone (O₃) is :
 (A) Whitish (B) Yellowish (C) Greenish **(D) Bluish**
25. What is our principle source of energy.
 (A) Nuclear energy (B) Tidal energy **(C) Solar energy** (D) Geothermal E
26. The decline in the thickness of ozone layer is due to increasing level of :
(A) CFC₃ (B) CO₂ (C) Hydrogen (D) Hydrocarbons
27. Which of the following act as environmental buffers?
 (A) Deserts (B) Industry (C) Fossil fuels **(D) Forests**
28. Ozone depletion is commonly caused by :
 (A) CO₂ **(B) CFC₂** (C) Smoke (D) Smog
29. Which of the continent has the highest rate of human population :
 (A) Australia **(B) Asia** (C) Africa (D) North America
30. If the population is above the carrying capacity what must happen :
(A) It must eventually decline (B) It can remain stable
 (C) It must immediately cure (D) It can continue to increase

Fill in the blanks.

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- The most widely used source of energy on earth is
- When energy changes from one form to another form some is done.

3. Air, water and soil are resources which come in category of resources.
4. There are seven classes of food, water, carbohydrates, proteins, vitamins, fats, fibers and
5. To save energy actually refers to the of energy

Answers

1. Fossil Fuel	2. Work	3. Renewable
4. Minerals	5. Conservation	

Chapter : 27

Man and his Environment



1. What is Ozone layer?

Ans: It is layer of atmosphere extended from 10-50 Km above Earth which filter ultraviolet rays of sun.

2. What do you mean by non-renewable resources?

Ans: These resources are exhaustible and once consumed cannot be replaced

3. What is the difference between deforestation and afforestation?

Ans: **Deforestation:**

- ❖ Destruction of trees that leaves the soil barren is **called** deforestation.
- ❖ It may be for town planning, cultivation or to obtain timber.
- ❖ It is an important cause of desertification.

Afforestation:

- ❖ Establishment of new forests where no forests existed previously.
- ❖ Its beneficial for environment, to make atmosphere pure and healthy.
- ❖ Desertification can be prevented.

4. What do you know about biodiversity?

Ans: Number and variety of organism in an area is **called** biodiversity.

5. What is water pollution?

Ans: Anything in the water that may be harmful to living organisms is water pollution.

6. Define greenhouse effect.

Ans: Increase in temperature of earth due to retention of heat rays is known as greenhouse effect.

7. What is acid rain?

Ans: Process through which acid fall on Earth either dissolved in rain or as microscopic dry particles is **called** acid rain.

8. What is algal bloom?

Ans: It is natural process of excessive enrichment of water with nutrients by which large amount of living organic material grows in the water.

9. Differentiate between renewable and non-renewable sources?

Ans: **Renewable Sources:**

- ❖ The environmental resources, which are never depleted and are recycled in the nature.
- ❖ Amount remains almost constant by natural cycle.
- ❖ Air, Water, Wild life, Land.

Non Renewable Resources:

- ❖ These are exhaustible and once consumed cannot be replaced.
- ❖ Limited amount is present.
- ❖ Metals, Non-metals. Fossil fuel.

10. **Why trees are called environmental buffers?**

Ans: **Trees are called environmental buffers as they perform following functions:**

- ❖ They intercept heavy rainfall and release water slowly and steadily to soil.
- ❖ Roots of trees hold the soil particles in place so prevents soil erosion.
- ❖ They absorb CO₂ and release O₂ in atmosphere to keep it healthy.
- ❖ Also prevents drastic climatic changes such as heavy floods.

11. **What is the advantages and disadvantages of fossil fuels?**

Ans: **Advantages:**

- ❖ About 95% our energy requirements are fulfilled by fossil fuels.
- ❖ Its utilization is feasible and can be used in everywhere even domestic.

Disadvantages:

- ❖ They are present in fixed and limited quantities and they will exhaust sooner or later.
- ❖ Burning of fossil fuel may also cause pollution as it releases harmful gases such as CO₂, CO, SO₂, etc.

12. **Why wild life is some time also included in non-renewable resources**

Ans: Wild life is renewable as they are replenished and never depleted. But certain factors such as over hunting, over grazing, deforestation etc. may cause the extinction of wild life, which make it non-renewable resources.

13. **. How tidal barrage generate electricity?**

Ans: A tidal power station consists of a long barrage **called** tidal barrage. The difference between height of water at high and low tides causes the flow of water through this barrage, which turns its turbines that in turn drive the generator to produce electricity.

14. **What is stone cancer? Give its cause.**

Ans: In acid rain sulfuric acid is brought down with the rain water, which has corrosive effect on building stone and may damage them with the passage of time. This effect is known as stone cancer.

Cause

- ❖ Acid Rain

15. **How balance in the nutrient cycle can be upset?**

Ans: **The balance in the nutrient cycle can be upset when:**

- ❖ Not enough food is produced.
- ❖ Too much food is consumed.
- ❖ Decayed nutrients are not returned to the ground.

16. **What is nutrient cycle?**

Ans: In nature, there is no such thing as waste, dead materials decay and become food for other living things. This food is consumed or decayed and becomes food again. This is the nutrient cycle. The process that supplies food to living things.

17. **What is environment?**

Ans: Environment is treasure of all types of resources essential to maintain life on Earth.

18. **What is composition of air?**

Ans: It consists of nitrogen (79%), oxygen (20%), carbon dioxide (0.03%) and traces of inert gases **called** noble gases.

19. **In which sources energy are classified?**

Ans: Energy resources can also be classified as inexhaustible and exhaustible. Inexhaustible resources include solar energy, falling water (hydro-power), wind, ocean thermal gradients, waves, tides, currents, geothermal energy and biomass. On the other hand, fossil fuels like coal, oil and natural gas are exhaustible sources of energy.

20. **Why fossil fuels are called so?**

Ans: They are **called** fossil fuels because they are the remains of plants and animals of past which became buried due to environmental hazards and were fossilized in deeper layers of Earth and sea.

21. **What is hydroelectric power?**

Ans: The kinetic energy of falling water is harnessed to turn turbines fixed at the base of dams. The turning turbines will then drive generators to produce electricity, which is known as hydroelectric power or electricity.

22. **Where geothermal power plants are working?**

Ans: New Zealand and Iceland.

23. **What is geothermal energy?**

Ans: Volcanoes, hot springs and geysers allow the escape of hot substances from the inside of the Earth. The natural heat energy trapped underground is **called** geothermal energy.

24. **What is the use of solid wastes?**

Ans: Conversion of waste materials like trash, paper, organic manure, plastic materials, cans, agriculture and industrial waste etc. by hydrogenation, pyrolysis (destructive distillation) or bio- conversion can provide oil and gas.

25. **What is the disadvantage of nuclear energy?**

Ans: Each nuclear power station can last only for about 30 years and it also produces nuclear wastes & radiations and strict safety measures have to be taken to avoid radiation pollution.

26. **Define demography?**

Ans: Demography is the study of human populations and things that affect them.

27. **What are the consequences of population increase?**

Ans: **Consequences of population increase:**

- ❖ Overcrowding, less living space more people, more crime violence and social diseases.
- ❖ Starvation through lack of sufficient food.

- ❖ Populations will outstrip food supply
- ❖ Destruction of the countryside, plants, animals and wildlife.

28. **What is environmental pollution?**

Ans: The befouling of the environment by anything produced by humans which is or may be harmful to human life and other living organisms is **called** environmental pollution.

29. **What are pollutants?**

Ans: The harmful substances in environment which are the cause of pollution are **called** pollutants.

Examples:

Oxides of nitrogen, CFCs, SO₂, lead etc.



30. **What are the features of ozone in pure form?**

Ans: In pure form ozone is bluish, explosive and highly poisonous gas. Ozone O₃ molecules is made up of three oxygen atoms bounded together.

31. **What are the effects of ozone layer depletion on life of Earth?**

Ans: As the ozone layer becomes thinner, more ultraviolet rays from the sun are able to reach Earth. If more ultraviolet rays reach the Earth's surface, they will affect all life on Earth by increasing temperature. They cause skin cancers and cataracts in human. They can also affect crops, plants, trees and even marine plankton and distort weather patterns.

32. **Define air pollution?**

Ans: The befouling of air by anything that may be harmful to living organisms is air pollution.

33. **What is ozone depletion? What is the cause of ozone depletion?**

Ans: The decline in thickness of the ozone layer is caused by increasing level of chlorofluorocarbons (CFCs), which contains chlorine, fluorine and carbon. As CFCs rise to the atmosphere, ultraviolet rays cause chlorine to release. The chlorine released destroys the ozone molecule in the ozone layer.

34. **What are the causes of greenhouse effect?**

Ans: Over urbanization, deforestation, industrialization the causes of greenhouse effect, which is gradually increasing temperature on Earth, now being termed "**Global Warming**"

35. **What are greenhouse gases?**

Ans: Greenhouse gases are those, which prevent heat to escape out from them. E.g. CO₂, H₂O vapours nitrogen oxides.

36. **What is ocean thermal gradient? Give its importance.**

Ans: In oceans, especially in tropical regions, temperature of surface water is about 25 degree Celsius and that at the depth of a few hundred meters only 5 degree Celsius. This develops an ocean thermal gradient. Man has developed the technology to use this thermal gradient to drive a turbine for electricity generation.

37. **What are the sources of air pollution?**

Ans: **Air Pollution then their sources:**

- ❖ Chlorofluorocarbons CFCs Aerosol spray foams, air-conditioning system and refrigerants.

- ❖ Sulphur Dioxide Power Station & fossil Fuels.
- ❖ Lead compounds Combustion of leaded petrol or oil.
- ❖ Oxides of nitrogen Burning of fossil fuels.
- ❖ Carbon monoxide Incomplete burning of carbonate & carbon compounds, cigarette smoke.

38. **What are the major sources of CO? Give its health effect.**

Ans: Carbon monoxide is produced on incomplete burning of carbonate & carbon compounds, cigarette smoke etc. It combines with Hb irreversibly and blocks its O₂ carrying ability and can lead to death of that person.

39. **What is the leading cause of deforestation?**

Ans: Rapid increases in population growth, increase requirements for food and shelter, to overcome the basic need of more food, we are cutting trees to make way for agriculture and wood for houses.

40. **What are the main causes of water pollution?**

Ans: **Main sources of water pollution are:**

Sewage incomplete treatment:

- ❖ Sewage water contains harmful bacteria and poisonous chemicals. Certain bacteria cause diseases like typhoid and cholera.

Oil and detergent:

- ❖ Oil pollution of the sea may kill life in water.

41. **Why there is a need of protection and conservation of the environment?**

Ans: The energy sources on Earth are limited. Hence, there is need for us to have balanced and planned use of energy resources. Protection of environment for survival of life on Earth.

42. **What is eutrophication?**

Ans: This is the natural process of excessive enrichment of water with nutrients by which large amount of living organic matter grows in water.

43. **What is wild life?**

Ans: Wild life refers to all non-cultivated plants and non-domesticated animals.

44. **What are fertilizer?**

Ans: Fertilizers are the chemical substances used to add additional nutrients to the soil to increase its fertility.

45. **What is a pesticide?**

Ans: **A pesticide is a chemical, which destroys agricultural pests or competitors:**

- ❖ Insecticides kill Insects.
- ❖ Fungicide kills parasitic fungi.
- ❖ Herbicide kills Weed plants.

46. **What are pathogenic diseases?**

Ans: Diseases due to the organisms that can be transmitted to other e.g. diphtheria, malaria, small pox, tuberculosis, cholera, gonorrhoea, AIDS.

47. **Give at least two ways to conserve energy?**

Ans: **Ways to conserve energy:**

- ❖ Develop and use energy efficient machines, engines and manufacturing processes.
- ❖ Reduce wastage by recycling.

48. **What is erosion?**

Ans: Washing away of top soil from nutrients due to flow of water.

49. **Define soil.**

Ans: Soil can be defined as "**the upper layer of Earth's crust**"

50. **What do you mean by effluents?**

Ans: The chemical waste from industry is called effluents.

Example:

Toxic chemical and harmful liquids from industries.

51. **Write the reason for world population explosion.**

Ans: **The reasons for world population explosion are given as:**

- ❖ Disease prevention medicine, public, personal and food hygiene.
- ❖ Improved nutrition by efficient agriculture.
- ❖ Housing and living standards improved.
- ❖ Child care, maternity, parent craft and welfare services.



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