

Sample Question Paper

1. At the conclusion of the Earth Summit of 1992, the following were accomplished:
 - a. Agenda 21 was signed
 - b. An international agreement to reduce CO₂ outputs was signed
 - c. The Earth Charter was developed
 - d. All of the above

2. In 1992, at the Earth Summit in Rio de Janeiro, which two countries announced that they would resume whale hunting?
 - a. India and Bangladesh
 - b. Iceland and Norway
 - c. USA and Canada
 - d. Egypt and Israel

3. The United Nations Framework Convention on Climate Change was opened for signature at the Rio Earth Summit. Name the landmark protocol that was adopted 5 years later, which required industrialized nations to collectively reduce their greenhouse gas emissions 5% below their 1990 levels.
 - a. Kyoto Protocol
 - b. Vienna Convention
 - c. Basel Convention
 - d. Agenda 21

4. In recent years, the environment has become a major issue all over the world and various steps have been taken for its protection. The United Nations held its first international conference on Human Environment on 5 June 1972 in this city. Since then, the World Environment Day is also celebrated on this day. Name the city.
 - a. Berlin
 - b. Stockholm
 - c. Washington
 - d. Vienna

5. Its primary objective is the conservation and management of diversity among plants, animals, birds, etc. It also provides opportunities for the protection of indigenous knowledge practices and innovations related to the natural environment. This is known as the
 - a. Convention on Biological Diversity
 - b. Montreal Protocol
 - c. Framework Convention on Climate Change
 - d. Kyoto Protocol

6. What is Agenda 21?
 - a. A list of 21 actions that people can take to save the planet
 - b. A challenge to the government and local communities to prepare for the 21st century
 - c. The 21st of 27 agendas produced at the Rio Earth Summit in 1992
 - d. None of the above

7. Agenda 21, a United Nations document, does not use which of the following as one of its important themes:
 - a. The clean world—managing chemicals and waste
 - b. The shared world—managing global and regional resources
 - c. The equalized world—using force to take resources from rich countries
 - d. The just world—promoting sustainable living everywhere

8. According to the Agenda, this group has the foremost responsibility for bringing about changes in the environment.
 - a. Communities
 - b. National governments
 - c. Local governments
 - d. Individuals

9. The problems of pollution are growing. Maximum pollution can be seen and felt in the
 - a. Countryside
 - b. Mountains
 - c. Grasslands
 - d. Cities

10. Which group of countries has made the largest contribution to environmental degradation and pollution in the last century?
 - a. Developing countries
 - b. Developed countries
 - c. Third World countries
 - d. a and c

11. Nature endows all creatures with certain abilities to help them adapt to their surroundings. Sea mammals possess an insulating layer of fat that protects them from the cold. Name this layer.
 - a. Thermofat
 - b. Blubber
 - c. Thermocol
 - d. Sea foam

12. This 140-MW ISCC (Integrated Solar Combined Cycle) power plant with a solar thermal power generation technology will be India's first and among the world's largest. The solar thermal component is based on the parabolic trough collector technology. The combined cycle power plant of 105 MW capacity with supplementary firing during non-sunny hours will be run on naphtha / natural gas. In which state is it being set up?
 - a. Gujarat
 - b. Rajasthan
 - c. Bengal
 - d. Madhya Pradesh

13. Some organisms in the ocean use this greenhouse gas for photosynthesis and shell-formation, thereby preventing it from contributing to global warming. Name the gas.
 - a. Nitrous oxide
 - b. Sulphur dioxide
 - c. Carbon dioxide

- d. Oxygen
14. Volcanoes emit large volumes of pollutants into the air. The largest volcano on Earth rises to a height of 56 000 feet from its base in the sea. Among Earth's most active volcanoes, its the most recent eruption was in 1984. Name this volcano.
- Krakatoa
 - Vesuvius
 - Azores
 - Mauna Loa
15. In the animal kingdom, a variety of relationships exist among creatures. What type of relationship is seen between the lion and the zebra?
- Host/parasite
 - Mutualism
 - Predator/prey
 - Parasitism
16. Indian coal generally has a high ash content and low calorific value. Therefore, most coking coal must be imported. Major Indian coalfields are found in Bihar, West Bengal, and Madhya Pradesh. Along with China and the United States, India ranks as the _____ largest coal producer in the world.
- First
 - Second
 - Third
 - Fourth
17. This method of farming reduces soil erosion in hilly regions. It also creates hundreds of small dams, slows down water flow, and increases infiltration, which reduces erosion and promotes better water quality. What is this beneficial method known as?
- Contour farming
 - Multiple cropping
 - Crop rotation
 - Jhum* cultivation
18. The People's Republic of China is the world's most populous country and the second largest energy consumer (after the United States). It is also the world's largest producer and consumer of one of the following fuels. Name the fuel.
- Petroleum
 - Natural gas
 - Biomass
 - Coal
19. India was the first country to insert an amendment into its Constitution, allowing the State to protect and improve the environment for safeguarding public health, forests, and wildlife. In which year, was this 42nd amendment adopted?
- 1975
 - 1976
 - 1977
 - 1978
20. Water engineers often say, 'The solution to pollution is dilution'. This is true to some extent in the case of River Yamuna. By the time it flows through Delhi, it is considered highly polluted

but on the way to Allahabad, it is joined by another tributary and gets diluted, thereby bringing down the pollution level. Name this tributary.

- a. Chambal
- b. Beas
- c. Sutlej
- d. Kopili

21. When wood is burnt, it releases many pollutants. The visible 'smoke' that is emitted from burning wood is called _____.
- Lead
 - Ash
 - Sulphur dioxide
 - Particulate matter
22. Under this method, crops are changed year by year in a planned sequence. It is common practice on sloping soils because of its potential for soil saving. It also reduces fertilizer needs, because alfalfa and other legumes replace some of the nitrogen used up by grain crops. What is this method known as?
- Crop revolution
 - Crop rotation
 - Terracing
 - Multiple cropping
23. In March 1989, the oil tanker *Exxon Valdez* was wrecked, spilling millions of gallons of oil into the ocean. This spill affected tens of thousands of seabirds, fish, sea otters, and other creatures that lived on the shores. Where did this tragedy occur?
- California
 - Alaska
 - Long Island
 - Maryland
24. Wetlands play an important role in filtering and trapping sediment from run-off before it enters a stream or lake. Wetlands not only purify water in this manner but also provide a home to many creatures and migratory birds. Which international agreement was signed to protect these wetlands?
- Vienna Convention
 - Ramsar Convention
 - Rio Declaration
 - Montreal Protocol
25. The United Nations Conference on the Human Environment was held in Stockholm, Sweden, from 5–16 June 1972. For the first time, the political, social, and economic problems of the global environment were discussed at an intergovernmental forum with a view to actually take corrective action. Name the only developing country, whose head of government attended this conference.
- Japan
 - Indonesia
 - India
 - China
26. This study of a part of a tree is known as dendrochronology and is extensively used these days. Through this study, scientists can discover many things about the local climate of the place during the lifetime of the tree. Name the part of the tree that is studied.
- Mid-rib of the leaf
 - Rings on the trunk
 - Stamen in the flower
 - Roots

27. There are three countries that form the Golden Triangle, notorious for exporting large quantities of opium to the western world—Myanmar, Laos, and _____.
a. Cambodia
b. Indonesia
c. Malaysia
d. Thailand
28. This is that time of the year when neither the North Pole nor the South Pole is inclined towards the sun and the sun's rays fall perpendicularly on the earth. This phenomenon occurs twice in the year. What is this period known as?
a. Solstice
b. Equinox
c. Doldrums
d. Tropic
29. The Mauna Loa record is the longest continuous record of atmospheric carbon dioxide anywhere in the world. This site is considered one of the most accurate for measuring undisturbed air as local influence of vegetation or human activity is minimal. Where is this station located?
a. Hawaii
b. Caribbean Islands
c. New Zealand
d. Mauritius
30. For this group of aborigines, inhabiting an island of about 60 square km in the Andaman and Nicobar Islands, contact with the civilized world has been negligible. They are probably the world's only surviving Paleolithic people and very little is known about them. Name this tribe.
a. Jarawas
b. Onge
c. Sentinelese
d. Shompens
31. All radio waves are reflected from this layer in the atmosphere. In the last couple of decades, the height of this layer has dropped by 8 km. An analysis of records of 38 years showed that the echo of a reflected radio wave takes less time to return now than it did in 1958. Some scientists have attributed this to global warming. Name this layer.
a. Stratosphere
b. Troposphere
c. Mesosphere
d. Ionosphere
32. This insect has been of great use to humankind since thousands of years. The first mention of the insect and its extract was made in cave paintings some 8000 years ago. Name this insect, the first to be domesticated by man.
a. Butterfly
b. Fly
c. Bee
d. Grasshopper
33. In India, the Environment (Protection) Act authorizes the central government to protect and improve environmental quality, control and reduce pollution from all

sources, and prohibit or restrict the setting and operation of any industrial facility. In which year was this Act introduced?

- a. 1985
- b. 1986
- c. 1987
- d. 1989

34. Fibres of different animals are used for making this. Recently, the Indian government seized about 1000 kg of common mongoose hair, which came from the killing of approximately 50 000 mongooses, and would have ended up as this. What product are we talking about?

- a. Wig
- b. Paper
- c. Paint brush
- d. Cloth

35. Otoliths (catfish bones) have been used by scientists to study the phenomenon of El Niño. The ratio of oxygen isotopes in each individual growth band helps to determine the temperature of the water during the lifetime of the fish. Using these bones, scientists have reconstructed the water temperature history for the last 5000 years. The El Niño phenomenon originates off the coast of _____.

- a. Argentina
- b. Brazil
- c. Chile
- d. Peru

36. Pure water is normally a liquid made of molecules containing one atom of oxygen and two atoms of hydrogen. It has no colour, taste, or smell. It turns to a solid at 0 °C. At what temperature does it turn into vapour?

- a. 80 °C
- b. 90 °C
- c. 100 °C
- d. 110 °C

37. A lagoon is a shallow lake separated from the sea by sand banks, coral reefs, etc. This lagoon, in the Indian subcontinent, is not only the largest brackish water lagoon in the country but also the largest wintering ground for migratory waterfowl in the region. Name it.

- a. Pulicat
- b. Rekawa
- c. Kuttanad
- d. Chilika

38. As much as 38% of the earth's fresh water exists as ice in the form of glaciers and ice caps. Of the total world's freshwater supply, over two-thirds is found underground. Saltwater oceans and seas contain approximately 95.1% of the world's water supply. What percentage is found in freshwater lakes, rivers, and underground aquifers?

- a. 3.5%
- b. 5.5%
- c. 4%
- d. 4.5%

39. When a forest has more species than a wheat field, it is said to have a higher level of which of the following?
- Biodiversity
 - Extinction rate
 - Ozone layer
 - Ecosystem
40. Lead in the atmosphere is a major pollutant, causing a large number of health problems. Which of the following would release the most lead into the air?
- Lead pipes
 - Lead-based paint
 - Automobile exhaust
 - Batteries
41. The growing of plants without soil has developed from the findings of experiments carried out to determine which substances make these plants grow, and their composition. A primitive form of such cultivation has been carried out in Kashmir for centuries. What is such growth of crop plants in a liquid medium called?
- Hydrostatic
 - Hydroscopic
 - Hydrophobic
 - Hydroponics
42. Which animal group has the maximum number of endangered and threatened species?
- Insects
 - Mammals
 - Birds
 - All are equal
43. The development of trade routes from the Orient contributed to the rapid spread of this disease. It erupted from the Gobi Desert in Mongolia, and spread along the route to Europe. In the short span between 1347 and 1350, one-third of the population of western Europe succumbed to this disease. Which killer disease was this?
- Bubonic Plague
 - Malaria
 - Hepatitis
 - Cholera
44. Carbon is present in various forms in all the earth's spheres. Most carbon resides in one of the following spheres. Which one?
- Atmosphere
 - Hydrosphere
 - Lithosphere
 - Biosphere
45. This layer of the atmosphere contains 75% of the atmosphere's total mass, and is the most significant (meteorologically), as almost all of the earth's 'weather' occurs in it. Which layer?
- Troposphere

- b Stratosphere
 - c Mesosphere
 - d Ionosphere
46. Non-renewable sources of energy can either not be replaced or are replaced very slowly by natural processes. Overuse of these resources is currently leading to their depletion. Which of the following is not a non-renewable energy resource?
- a Natural gas
 - b Coal
 - c Oil
 - d Wind
47. The Grand Canal is 20 times longer than the Panama Canal, and was built 1300 years ago. It connects the Yangtze River with which other Chinese river?
- a Pearl River
 - b Songhua River
 - c Hai He River
 - d Hwang Ho River
48. The term GM, which stands for ‘genetically modified’, is most commonly used to refer to crop plants created by humans using advanced molecular biology techniques. These plants have been modified in the laboratory to enhance desired traits, such as increased resistance to pests or improved nutritional content. What effect does eating GM foods have on your genes?
- a It could cause your own genes to mutate.
 - b It could cause your own genes to absorb the excess genes.
 - c It has no effect on your genes.
 - d The effects on human genes are not known.
49. Identify the incorrect match in the following mountain–continent pairs.
- a Aconcagua: North America
 - b Everest: Asia
 - c Elbrus: Europe
 - d Vinson Massif: Antarctica
50. Following a nuclear holocaust, what season do scientists believe will engulf the earth and have even coined a term for it?
- a Nuclear autumn
 - b Nuclear spring
 - c Nuclear winter
 - d Nuclear summer