

ENVIRONMENTAL STUDIES and SUSTAINABILITY - CV1005-1

MCQ Question Bank and Answers

1. The natural place of an organism or community is known as
 - **Habitat**
 - Niche
 - Biome
 - Habit

2. Which is the renewable exhaustible natural energy resource?
 - **Biomass**
 - Coal
 - Petroleum
 - Kerosene

3. Which of the following requires maximum energy?
 - **Primary producer**
 - Secondary consumer
 - Decomposer
 - Primary consumer

4. In an ecosystem, the energy flow is always
 - **Always unidirectional**
 - Always bidirectional
 - In any direction
 - Always down directional

5. The lithosphere consists of upper mantle and the
 - **Crust**
 - Atmosphere
 - Thrust
 - None of the above

6. acts as a source for nitrogen for nitrogen fixing bacteria and ammonia producing plants.
 - **Atmosphere**
 - Lithosphere
 - Hydrosphere
 - Nano sphere

7. In which of the given year does the amendment of the Forest Conservation Act take place?
 - **1988**

- 1976
- 1980
- 1971

8. Name the most frequent as well as naturally happening disaster.

- **Flood**
- Earthquake
- Tsunami
- None of the above

9. Name the day that is celebrated as the World Environment Day.

- **June 5th**
- June 6th
- June 8th
- June 10th

10. Which activity can tend to lower the water table?

- **Over extraction of groundwater**
- Overgrazing
- Human population growth
- Soil erosion

11. All species on earth with each other along with their respective environments collectively constitute

- **Biosphere**
- Atmosphere
- Hydrosphere
- Lithosphere

12. Which layer of the atmosphere contains the ozone responsible for the absorption of UV (Ultra-Violet) light?

- **Stratosphere**
- Troposphere
- Mesosphere
- None of these

13. What is the world's largest potential source of biomass energy?

- **Fibrous waste of the sugar industry**
- Animal waste
- Industrial waste
- Fibrous waste of the paper industry

14. The functional aspects of the ecosystem are

- **All of the above**
- Energy cycles
- Nutrient cycles
- Food chains

15. Which of the following is also called Detrivores?

- **Decomposers**
- Herbivores
- Carnivores
- None of the above

16. Which element is a building block of both animals and plant tissues?

- **Carbon**
- Sulfur
- Nitrogen
- None of the above

17. A large number of interlinked chains in an ecosystem together forms a:

- **Food web**
- Nitrogen cycle
- Carbon cycle
- Food chain

18. Ecology deals with the study of:

- **Reciprocal relationship between living and non-living components**
- Living beings
- Living and non-living components
- Environment

19. The source of energy in an ecosystem is

- **Sunlight**
- ATP
- DNA
- R.N.A

20. A group of individuals of a plant or animal species, inhabiting a given area is called

- **Population**
- Biome
- Ecosystem
- Community

21. The cutting down of trees is termed as

- **Deforestation**
- Forestation
- Plantation
- Biodiversity

22. Trophic levels are formed by

- **Organisms linked in food chain**
- Only plants
- Only animals
- Only carnivorous

23. The variety among species and within species is classified as

- **Diversity**
- Deduction
- Reduction
- Informatics

24. Soil conservation is the process where

- **Soil is protected against loss**
- Soil is aerated
- Sterile soil is converted to fertile soil
- Soil erosion is allowed

25. Soil erosion can be prevented by

- **Afforestation**
- Overgrazing
- Increasing birds population
- Removal of vegetation

26. Energy produced by hydel-power plant is

- **Non-polluting and renewable**
- Non-polluting and non-renewable
- Polluting and non-renewable
- Polluting and renewable

27. The removal of the top layer of a soil is called-

- **Soil erosion**
- Land slide
- Drought

- Earthquake

28. Which one of the following is an example of non-renewable resource?

- **Coal and minerals**
- Water
- Vegetation
- Wind

29. The _____ is an important requirement of the aquatic life.

- **Dissolved oxygen**
- Dissolved nitrogen
- Dissolved chlorine
- Dissolved methane

30. What is the full form of BOD?

- **Biochemical oxygen demand**
- Biological oxygen demand
- Biometric oxygen deep water
- Biological oxygen deep water

31. The ultra violet radiations in the atmosphere are absorbed by

- **Ozone**
- Sulphur dioxide
- Oxygen
- Argon

32. Ozone depletion in the stratosphere will cause

- **Increase incidence of skin cancer**
- Forest fire
- Global warming
- Soil erosion

33. Acid rain contains

- **Both a and b**
- Sulphuric acid
- Nitric acid
- Sulphuric acid, nitric acid and hydrochloric acid

34. Habitat loss and fragmentation, over exploitation, alien species invasion and co extinction are causes for

- **Biodiversity loss**
- Population exploitation

- Pollution
- Migration

35. The process of changing the solid into a liquid by supplying the heat is called as

- **Melting**
- Evaporation
- Boiling
- Condensation

36. The freshwater is mainly obtained from surface runoff and groundwater that is continually being renewed and recharged through the

- **Hydrological cycle**
- Sulfur cycle
- Rock cycle
- None of the above

37. 96.5 per cent of the total volume of the world's water is estimated to exist as ____ and only 2.5 per cent as _____.

- **Oceans, freshwater**
- Freshwater, oceans
- Groundwater, oceans
- None of the above

38. Nearly 70 per cent of freshwater occurs as ice sheets and glaciers in _____, Greenland and the mountainous regions of the world.

- **Antarctica**
- Siberia
- Alaska
- Russia

39. A little less than _____ of freshwater is stored as groundwater in the world's aquifers.

- **30%**
- 5%
- 20%
- 10%

40. India's Per capita Per day water requirement in urban place _____.

- **135**
- 130
- 175
- 98

41. As per one of the Swedish experts, water stress occurs when water availability is between ____ and ____ cubic meters per person per year.

- **1000 and 1600**
- 900 and 1000
- 500 and 1000
- 1650 and 2650

42. In India, _____ contributes approximately 22 per cent of the total electricity produced.

- **Hydroelectric power**
- Tidal power
- Nuclear power
- Thermal power

43. From ancient times, evidence of sophisticated irrigation works has also been found in Nagarjunakonda. It is located in _____.

- **Andhra Pradesh**
- Odisha
- Karnataka
- Tamil Nadu

44. In the 14th Century, the tank in _____ was constructed by Iltutmish to supply water to the Siri Fort area.

- **Hauz Khas, Delhi**
- Jaipur, Rajasthan
- Bhopal, Madhya Pradesh
- Surat, Gujarat

45. _____ is the first state in India which has made rooftop rainwater harvesting structures compulsory for all houses across the state.

- **Tamil Nadu**
- Karnataka
- Maharashtra
- Andhra Pradesh

46. _____ in the Mahanadi basin integrates the conservation of water with flood control.

- **Hirakud project**
- Krishnarajasagar project
- Teri project
- Bhakra Nangal project

47. In the Sutlej-Beas river basin, the _____ water is being used both for hydel power production and irrigation.

- **Bhakra Nangal project**

- Nagarjuna Sagar project
- Sardar Sarovar project
- Kallanai project

48. _____ proudly proclaimed the dams as the ‘temples of modern India’ as they would integrate the development of agriculture and the village economy with rapid industrialization and growth of the urban economy.

- **Jawaharlal Nehru**
- Sardar Patel
- Mahatma Gandhi
- Dr. B.R. Ambedkar

49. Bhadu song in a particular region narrates the troubles faced by people owing to the flooding of _____ known as the river of sorrow.

- **Damodar river**
- Kaveri river
- Narmada river
- Yamuna river

50. Narmada Bachao Andolan is a Non-governmental Organisation (NGO) that mobilised tribal people, farmers, environmentalists and human rights activists against the _____ dam being built across the river Narmada.

- **Sardar Sarovar**
- Tehri dam
- Nagarjuna Sagar Dam
- Bhakra Nangal Dam

51. Koyna Dam is one of the largest dams located in _____.

- **Maharashtra**
- Uttar Pradesh
- Himachal Pradesh
- Rajasthan

52. Rihand Dam is located on river Rihand, a tributary of _____.

- **Son river**
- Sutlej river
- Godavari river
- Brahmaputra river

53. The Krishna-Godavari dispute is due to the objections raised by the Karnataka and Andhra Pradesh Governments regarding the diversion of more water at Koyna by the _____ Government for a multipurpose project.

- **Maharashtra**
- Tamil Nadu

- Madhya Pradesh
- Kerala

54. In Phalodi and Barmer, almost all the houses traditionally had underground tanks or tankas for storing drinking water. Barmer and Phalodi are located in _____.

- **Rajasthan**
- Gujarat
- Himachal Pradesh
- Uttarakhand

55. A 200-year-old system of tapping stream and spring water by using bamboo pipes is prevalent in the state of _____.

- **Arunachal Pradesh**
- Meghalaya
- Tripura
- Assam

56. The species which are in danger of extinction are called

- **Endangered species**
- Vulnerable species
- Rare species
- Normal species

57. The forest cover in our country has recently increased due to:

- **Plantation by different agencies**
- Increase in natural forest growth
- Increase in net sown area
- None of the above

58. The species whose population has declined to a level from where it is likely to move into the endangered category in the near future if the negative factors continue to operate are called:

- **Vulnerable species**
- Endemic species
- Extinct species
- Normal species

59. The Himalayan brown bear is an example of:

- **Rare species**
- Vulnerable species
- Endemic species
- Extinct species

60. Substantial parts of the tribal belts in northeastern India, have been deforested by:

- **Shifting cultivation**
- Mining
- Infrastructure development
- None of the above

61. Species which are only found in some particular areas isolated by geographical barriers are called:

- **Endemic species**
- Extinct species
- Rare species
- Critical species

62. _____ is an example of Endemic Species.

- **Nicobar pigeon**
- Pink head duck
- Asiatic cheetah
- Asiatic buffalo

63. _____ was declared extinct in India long back in 1952.

- **Asiatic cheetah**
- Andaman wild pig
- Andaman teal
- Desert fox

64. _____ are the species which are in danger of extinction.

- **Endangered species**
- Rare species
- Extinct species
- Endemic species

65. Blackbuck, crocodile, Indian wild donkey and Indian rhino are examples of _____.

- Endangered species
- Normal species
- Endemic species
- Rare species

66. Substantial parts of the tribal belts, especially in the Northeastern and _____, have been deforested or degraded by shifting cultivation (Jhum), a type of 'slash and burn' agriculture.

- **Central India**
- Western India
- South India

- Northwest India

67. The Buxa Tiger Reserve in West Bengal is seriously threatened by the ongoing _____.

- **Dolomite mining**
- Coal mining
- Iron ore mining
- Copper mining

68. Teak monoculture has damaged the natural forest in _____.

- **South India**
- North India
- Central India
- Northeastern India

69. The Himalayan yew (*Taxus wallichiana*) is a medicinal plant found in various parts of _____ and _____.

- **Himachal Pradesh and Arunachal Pradesh**
- Uttarakhand and Assam
- Uttarakhand and Ladakh
- Jammu & Kashmir and Sikkim

70. A chemical compound called 'taxol', which is extracted from the bark, needles, twigs and roots of Himalayan yew, is used to treat _____, and it is the biggest-selling drug in the world for the treatment of this disease.

- **Cancer**
- Tuberculosis
- Malaria
- Diabetes

71. The Indian Wildlife (Protection) Act was implemented in _____, with various provisions for protecting habitats.

- **1972**
- 1975
- 1971
- 1974

72. Which of the following animals were gravely threatened, and the Central Government announced several projects for protecting them?

- **All of the above**
- Kashmir stag
- The Asiatic lion
- One-horned rhinoceros

73. Manas Tiger Reserve is located in _____.

- **Assam**
- Tamil Nadu
- Kerala
- Orissa

74. Which of the following is located in the state of Rajasthan?

- **Sariska Wildlife Sanctuary**
- Corbett National Park
- Bandhavgarh National Park
- Periyar Tiger Reserve

75. _____ has the largest area under permanent forests, constituting 75 per cent of its total forest area.

- **Madhya Pradesh**
- Orissa
- Chhattisgarh
- Assam

76. Which national park has most tigers in India?

- **Jim Corbett**
- Bandipura
- Nagarhole
- BR Hills

77. On the basis of origin, resources can be classified as _____ and _____.

- **Biotic and Abiotic**
- Renewable and Non-renewable
- Potential and Developed
- None of the above

78. Minerals and fossil fuels are examples of non-renewable resources which take _____ for their formation.

- **Millions of years**
- Hundreds of years
- Thousands of years
- Just a year

79. All the minerals, water resources, forests, wildlife, land within the political boundaries and oceanic area up to _____ from the coast termed as territorial water and resources therein belong to the nation.

- **12 nautical miles**
- 20 nautical miles

- 25 nautical miles
- 15 nautical miles

80. In June 1992, more than 100 heads of state met in _____ in Brazil for the first International Earth Summit.

- **Rio de Janeiro**
- São Paulo
- Brasilia
- Curitiba

81. The Rio Convention endorsed the Global Forest Principles and adopted _____ for achieving sustainable development in the 21st century.

- **Agenda 21**
- Agenda 23
- Agenda 23
- Agenda 24

82. Which of the following statements about Agenda 21 is true?

- **It aims at achieving global sustainable development.**
- Eliminating poverty
- Disease prevention.
- Every local government should draw its own local Agenda

83. The states of Jharkhand, Chhattisgarh and Madhya Pradesh are rich in minerals and _____ deposits.

- **Coal**
- Gold
- Silicon
- None of the above

84. The state of Rajasthan is very well endowed with solar and _____ energy but lacks water resources.

- **Wind**
- Geothermal
- Hydro
- Tidal

85. _____ was the famous Indian freedom fighter who made an important observation about resource conservation – “There is enough for everybody’s need and not for anybody’s greed”.

- **Mahatma Gandhi**
- Jawaharlal Nehru
- Subash Chandra Bose
- Dr B. R. Ambedkar

86. The Brundtland Commission Report published in _____, shared ideas about sustainable development and how it could be achieved.

- **1987**
- 1997
- 1992
- 1977

87. About _____ of India's land area is plain, which provides facilities for agriculture and industry.

- **43%**
- 53%
- 13%
- 33%

88. _____ account for 30% of the total surface area of India.

- **Mountains**
- Deserts
- Plains
- Plateaus

89. Land which is left without cultivation for one or less than one agricultural year is known as _____.

- **Current fallow**
- Gross cropped area
- Culturable wasteland
- Grazing land

90. Land which is left uncultivated for more than 5 agricultural years is known as _____.

- **Culturable wasteland**
- Barren land
- Pastures
- Fallow Lands

91. The pattern of the net sown area varies greatly from one state to another. It is over 80 per cent of the total area in _____.

- **Punjab**
- Madhya Pradesh
- Assam
- Rajasthan

92. Based on usability, Energy Resources are classified into _____

- **Primary, intermediate and secondary resources**

- Primary, secondary and tertiary resources
- Primary and secondary resources
- Primary, secondary, intermediate and tertiary resources

93. Which of the following is not a type of primary resource?

- **Hydrogen Energy**
- Crude Oil
- Coal
- Sunlight

94. The ratio of energy received from a raw energy source to energy spent to obtain the raw energy source is called as

- **Energy yield ratio**
- Consumption ratio
- Fuel ratio
- Joule ratio

95. Energy Resources which are being used for many decades are known as _____

- **Conventional energy sources**
- Non-conventional energy sources
- Primary energy sources
- Fuel cells

96. Which of the statements is correct about Solar Energy?

- **It is a renewable and non-conventional source of energy**
- It is a renewable and conventional source of energy
- It is a non-renewable and non-conventional source of energy
- It is a non-renewable source of energy

97. Wind and Hydrogen energy are examples of _____

- **Primary and secondary sources respectively**
- Primary sources
- Secondary source
- Tertiary sources

98. On the basis of long-term availability, resources are classified into _____

- **Renewable and non-renewable resources**
- Conventional and non-conventional resources
- Primary and secondary resources
- Commercial and non-commercial resources

99. Which of these resources does not produce CO₂ during electricity generation?

- **Uranium**
- Coal
- Methane
- Biogas

100. Half of the world's energy needs are fulfilled by renewable energy sources.

- FALSE
- **TRUE**

101. Which of the energy resources were considered for large scale use after the oil crisis of 1973?

- **Non-Conventional Sources**
- Conventional Sources
- Non-renewable sources
- Primary Sources

102. Which of the statements is correct about Solar Energy?

- **It is a renewable and non-conventional source of energy**
- It is a renewable and conventional source of energy
- It is a non-renewable and non-conventional source of energy
- It is a non-renewable source of energy

103. World Energy Needs are rising due to _____

- **Increasing population and Industrialization**
- Deforestation
- Inflation
- Natural calamities

104. Which of the following is a disadvantage of Hydro Power?

- **They cause deforestation and affect wildlife**
- They cause harmful emissions
- They are an unstable source of energy
- They are not suitable for long-distance electricity transmission

105. Which of the following statement is true about conventional energy sources?

- **They are available in limited quantity**
- They cause minimum pollution
- Coal is the most used conventional energy source in the world
- There are sufficient reserves of Coal, Petroleum and Natural gas for the next 300 years

106. All of the conventional energy sources are Non-Renewable.

- False

- **True**

107. To focus on Renewable and Other alternative sources of energy, _____ was established in March 1981 by the Government of India.

- **Commission for additional sources of energy**
- Commission for alternative sources of energy
- Council of scientific & industrial research
- Centre for science and environment

108. Indian Renewable Energy Development Agency (IREDA) was developed by the Government of India _____

- **To promote the Development of Non-Conventional Energy Sources**
- To implement more efficient methods for using Conventional Energy sources
- To develop Nuclear Energy in India
- To control pollution

109. Expand WWF

- **World Wide Fund for Nature**
- World Wide Fund for Forest
- World Wide Fund for Environment
- World Wide Fund for Biodiversity

110. Indian Prime minister who played significant role in conservation of wildlife

- **Indira Gandhi**
- Rajiv Gandhi
- Manmohan Singh
- A B Vajpai

111. Wild Life Institute of India is located in

- **Dehradun**
- Andaman
- Hyderabad
- Bangalore

112. World water Day

- **22nd March**
- 5th July
- 5th August
- 5th September

113. All forms of water that comes down on Earth, including rain, snow, hail etc. is known as

- **Precipitation**
- Calcification
- Fixation
- Accumulation

114. The portion of the earth and its environment which can support life is known as _____

- **Biosphere**
- Crust
- Exosphere
- Atmosphere

115. What is troposphere?

- **Lowest layer of atmosphere where we survive**
- Portion of air
- Portion of water
- Portion of sky

116. The main energy source for the environment is _____

- **Solar energy**
- Chemical energy
- Bioelectric energy
- Electrical energy

117. The area to which a species is biologically adapted to live is known

- **Habitat**
- Niche
- Succession
- Community

118. Study of inter-relationship between organisms and their environment is called

- **Ecology**
- Ecosystem
- Phytogeography
- Ethology

119. The objective of environmental education is

- **All of the above**
- Raise consciousness about environmental education
- To teach environmentally appropriate behaviour
- Create an environmental ethic that fosters awareness about ecological inter-dependence of economics, social and political

120. Environmental education is important only at

- **All stages**
- Primary school stage
- Secondary school stage
- College stage

121. Weather occurs in the Earth's:

- **Troposphere**
- Mesosphere
- Ionosphere
- Thermosphere

122. Which of the following is a possible producer in an ecosystem?

- **Plants**
- Animals
- Human beings
- Fish

123. The organisms which feed on dead organisms and excreta of living organisms are known

- **Decomposers**
- Consumers
- Producers
- Carnivores

124. A trophic level refers to:

- **An organism's position in an ecosystem**
- Area in the tropics
- An organism's portion in a food chain
- An organism's position in a biome

125. In a food chain animals constitute the

- **Intermediate trophic level**
- First trophic level
- Second trophic level
- Ultimate trophic level

126. The food chain in which microorganisms breakdown dead producers is called:

- **Detritus food chain**
- Consumer food chain
- Predator food chain
- Parasitic food chain

127. Food chain starts with

- **Producer**
- Herbivores
- Carnivores
- Omnivores

128. In a food chain, humans are

- **Primary and secondary consumers both**
- Secondary consumers
- Primary consumer
- Primary consumer

129. An ecological pyramid refers to the

- **All of the above**
- Pyramid of energy
- Pyramid of number
- Pyramid of biomass

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