Environmental Studies

Module-1 – Ecosystem & Biodiversity

Objective type questions & answers:

1. The term 'Environment' has been derived from the French word which means to encircle or surround

   a) Environ   b) Oikos   c) geo   d) Aqua

2. Which of the following conceptual spheres of the environment is having the least storage capacity for matter?

   a) Atmosphere   b) Lithosphere   c) Hydrosphere   **d) Biosphere**

3. Which of the following components of the environment are effective transporters of matter?

   a) Atmosphere and Hydrosphere   b) Atmosphere and Lithosphere
   c) Hydrosphere and Lithosphere   d) Biosphere and Lithosphere

4. Biosphere is

   a) The solid shell of inorganic materials on the surface of the earth
   b) The thin shell of organic matter on the surface of earth comprising of all the living things
   c) the sphere which occupies the maximum volume of all of the spheres
   d) all of the above

5. Atmosphere consists of 79 per cent Nitrogen and 21 per cent Oxygen by

   a) volume   b) weight   c) Density   d) All the three

6. Which of the following is a biotic component of an ecosystem?

   a) Fungi   b) solar light   c) temperature d) humidity

7. In an ecosystem, the flow of energy is

   a) Bidirectional   b) Cyclic   **c) Unidirectional**   d) Multidirectional

8. Which Pyramid is always upright

   a) energy   b) biomass   c) numbers   d) food chain

9. In complex ecosystems the degree of species diversity is

    a) poor   **b) high**   c) medium   d)none

10. The organisms who directly feed on producers are called

    a) Herbivores   b) Carnivores c) Decomposers   d) Saprophytes

11. The sequence of eating and being eaten in an ecosystem is called

    a) Food Chain   b) carbon cycle   c) hydrological cycle   d) anthroposystem

12. Which of the following is a producer in an ecosystem

    a) Plants and some bacteria capable of producing their own food
    b) Animals   c) Human beings   d) Fish

13. Which of the following statements is false?

    a) Inorganic nutrients are recycled in an ecosystem
    b) Energy 'flows' through the ecosystem in the form of carbon-carbon bonds
    c) Energy is recycled in an ecosystem
    d) Respiration process releases energy

14. The largest reservoir of nitrogen in our planet is

    a) Oceans   **b) Atmosphere**   c) biosphere   d) Fossil fuels

15. In aquatic ecosystem phytoplankton can be considered as a

    a) Consumer   **b) producer**   c) Saprotrophic organisms   d)
    Macroconsumer

16. The basic requirements of human beings are provided by

    a) Industrialization b) Agriculture   **c) Nature**   d) Urbanization

17. Environment is the life support system that includes

    a) Air   b) Water   c) Land   **d) All of the above**

18. In an ecosystem biological cycling of materials is maintained by

    a) Producer   b) Consumer c) Decomposer   **d) All of the above**

19. Organisms which feed directly or indirectly on producers are called

a) Prey **b) Consumers** c) Decomposers d) Detritus\

20. The primary producers in a forest ecosystem are

a) Chlorophyll containing trees and plants b) Herbivores
c) Carnivores d) Bacteria and other microorganisms

21. Abiotic component includes

a) Soil b) Temperature c) Water **d) All of the above**

22. Which of the following statement is true

a) Green plants are self nourishing b) Producers depends on consumers
c) Biotic components includes all non-living components
d) Herbivores depend on Carnivores

23. Primary consumer is

a) Herbivores b) Carnivores c) Macro consumers d) Omnivores

24. A predator is

a) An animal that is fed upon **b) An animal that feeds upon another animal**
c) Animal that feeds upon both plants and animals d) a primary consumer

25. The word 'Environment' is derived from

a) Greek b) **French** c) Spanish d) English

26. Which among the following is a climatic factor?

a) Pressure b) humidity c) temperature **d) all of the above**

27. Which of the following is the terrestrial ecosystem?

a) Forest b) Grass land c) Desert **d) All of the above**

28. World Environment day is on

a) 5th May **b) 5th June** c) 18th July d) 16th August

29. Factors responsible for balanced ecosystem are

    a) Balance between predator and prey
    b) Balance between vegetation, herbivorous and carnivorous
    c) Balance between competing species and biotic factors
    d) All of the above

30. Which of the following is absorbed by green plants from the atmosphere?

    a) Carbon dioxide   b) Water   c) Nutrients   d) All of above

31. Habitat refers to

    a) Physical conditions of the place where organisms live
    b) Chemical conditions of the place where organisms live
    c) Both a & b   d) None of a or b

32. A food web consists of

    a) a portion of a food chain   b) an organism's position in a food chain
    c) interlocking food chains   d) a set of similar consumers

33. Which of the fallowing are producers'

    a)   Animals   b) Human being   **c) Plants & Bacteria**   d) Fishes

34. Which of the fallowing is a ecosystem.

    a) Forest   b) desert   c) Mountain   **d) All**.

35. Environment means

    a) Surrounding (Biotic + Abiotic components), in which organisms live.
    b) Atmosphere around one self.
    c) Sum total of social, Economical, biological behavior of animals.
    d) Sum total of development activities around.

36. Which of the fallowing is not the meaning of ecosystem?

    a) Unit where in all organisms live a healthy life.
    b) a small unit that can be self sufficient.
    c) Co-Existence of diverse things by mutual adjustment.
    d) A unit includes all of the organisms in a given area interacting with the physical environment to form a natural unit of stability.

37. Which of it is not an example for an terrestrial ecosystem.

 a) Forest b) Desert **c) Water** d) Grassland.

38. The factor responsible for stable ecosystem are balance between.

 a) Predators & Pray b) Vegetation, Herbivores & carnivores.
 c) Competing species & Biotic factor **d) All the above.**

39. Important physical factor responsible for a good habitat of a organism.

 a) Light b) Temperature c) Humidity **d) All the above**

40. Which of the fallowing is not a prominent chemical responsible for a good habitat.

 a) O_2 b) CO_2 **c) SO_2** d) Nutrients

41. --------is termed as the life zone of the earth.

 a) Atmosphere b) Hydrosphere **c) Biosphere** d) Stratosphere.

42. An ecosystem is a region in which

 a) Dead organism interact with their environment
 b) Living organism do not interact with their environment
 c) Living organism interact with their environment
 d) All the above.

43 The term ecosystem was first proposed by

 a) Jacob van verkul **b) A G Transley** c) Costraza d) Marie Gibbs.

44. The two major components of ecosystem are

 a) Adiabatic & Isotropic b) Ecologic & climatologic
 c) Cyclic & biologic **d) Abiotic & biotic**.

45. Biotic components includes

 a) All living organisms b) water, mineral & gases
 c) Self-nourishing green plants d) Light, temperature etc.

46. Food chain is divided into ---------basic categories

 a) Four **b) Three** c) Five d) seven

47. The transfer of energy & nutrients from one feeding group of organization to another in a series is called.

a) Energy chain   **b) Food Chain**   c) Balanced ecosystem   d) Food Web

48. In which of the following place we can find the cold deserts?
   a) Bangalore
   b) Chennai
   c) **Himalaya**
   d) Rajasthan

49. What kind of climate we can find in the Thar Desert?
   a) Cold
   b) **Dry**
   c) Cool
   d) Moist

50. Where can we find babul tree?
   a) In deserts ecosystems
   b) In river deltas
   c) In grassland ecosystems
   d) In semi-arid ecosystems

51. Why Rann of Kutch attracts aquatic birds in monsoon season?
   a) Because desert land is converted to forest land
   b) Because desert land is converted to snow
   c) Because desert land do not convert
   d) Because desert land is converted to salt marshes

52. What makes desert region to become highly unproductive?

   a) Salinity   **b)** Sunlight   c) Temperature   d) Increase in the rain

53. How can desert ecosystems be conserved?

   a) By minimizing the human activity
   b) By pouring water to desert area
   c) By deforestation
   d) By killing organisms

54. Which of the following tribe protected trees from several generations in Rajasthan?

  a) Bishnoi
  b) Papadi
  c) Korvanji
  d) Gudus

55. Where can we see Indira Gandhi Canal?

  a) Gujarat
  b) Rajasthan
  c) Punjab
  d) Haryana

56. Which kind of soil we can found on the surface of Thar desert?

  a) Rocky
  b) Moist
  c) Fertile
  d) Aeolian

57. Which is the biggest desert in the world including both hot and cold deserts?

  a) Sahara
  b) Arctic
  c) Arabian
  d) Antarctica

58. How many parts are there in the forest ecosystem?

  a) One
  b) Two
  c) Three
  d) Four

59. On which factor forest type is mainly dependent?

  a) Abiotic
  b) Size of the forest
  c) Shape of trees
  d) Products from the trees

60. Where can we find coniferous forest in India?

  a) Deserts
  b) River deltas
  c) Grassland
  d) Himalayan

61. Why most of the Sun light does not penetrate to the ground in evergreen forest?
a) Because of snowfall
b) Because of less temperature
c) Because of trees overlap with each other
d) Because of less rainfall

62. Which state in India has the maximum percentage of its area covered by forests?
a) Arunachal Pradesh
b) Madhya Pradesh
c) Mizoram
d) Nagaland

63. Where can we find thorn forest in India?
a) Semi-arid regions
b) Desert regions
c) Himalayan regions
d) Northeast

64. How forests increase the atmosphere's humidity?
a) By transpiration
b) By inspiration
c) By expiration
d) By oxidation

65. Which of the following type of forest important for watersheds?
a) Tropical Evergreen forest
b) Tropical Deciduous forest
c) Tropical Montana forests
d) Grassland forest

66. How the tropical rain forest gets the name?
a) Due to less rain
b) Due to heavy rain
c) Due to moderate rain
d) Due to no rain required

67. How many types of aquatic ecosystems are there?
   a) One
   b) Two
   c) Three
   d) Four

68. Where plants and animals live in aquatic ecosystems?
   a) Water
   b) Land
   c) Air
   d) Fire

69. What made organisms to build their ecosystem in aquatic?
   a) Curiosity
   b) Evolution
   c) Force from other organisms
   d) Increase in water level

70. Where can we find both running water as well as stagnant water?
   a) Marine ecosystems
   b) Wetlands
   c) Coral reefs
   d) Freshwater ecosystems

71. Which is the largest ecosystem on Earth?
   a) Desert
   b) Forest
   c) Grassland
   d) Oceans

72. Which of the following is among the world's most productive ecosystems in terms of biomass production?
   a) Pond ecosystems
   b) Lake ecosystems
   c) Brackish water ecosystems
   d) River ecosystems

73. Which is the simplest aquatic ecosystem?
   a) Pond
   b) Stream

c) Lake

d) Marine

74. Which ecosystem is known as giant permanent pond?

a) Lake Ecosystem

b) Pond ecosystem

c) Seashore ecosystem

d) Marine ecosystem

75. How many oceans constitute the marine ecosystems around peninsular India?

a) One

b) Two

c) Three

d) Four

76. Biodiversity can be broadly classified into how many types?

a) 2

b) 5

c) 3

d) 4

77. Biodiversity is of importance as it offers:

a) Stability of ecosystems

b) Stability of atmosphere

c) Stability of species

d) Stability of research

78. The loss in biodiversity is not attributed to:

a) Explosion in the human population

b) Transforming earth's surface

c) Destruction of natural habitats

d) Use of sustainable products

79. In how many ways does the conservation of biodiversity work?

a) 5

b) 2

c) 3

d) 4

80. Which one of the following is not an in-situ conservation method?

a) Zoo

b) National Parks

c) Biosphere Reserves

d) Sanctuaries

81. Which is an advantage of ex-situ conservation?

a) Cheap method

b) Conserve large number of species together

c) Genetic process for breeding/long life

d) Existence in natural habitat

82. Hot spot areas have:

a) Low density of biodiversity

b) Only endangered plants

c) High density of hot springs

d) High density of biodiversity

83. What is the cause of discoloration in fresh water?

a) Fungal bloom

b) Viral bloom

c) An algae bloom

d) Bacterial bloom

84. The Great Smog in 1952 caused in which city?

a) Delhi

b) Lahore

c) London

d) New York

85. In which forest we can see deforestation to large extent?

a) Atlantic forest

b) Amazon forest

c) Borneo forest

d) Sumatra forest

86. The biggest driver of deforestation is_____

a) Agriculture

b) Forest fire

c) Volcanic activities

d) Soil erosion

87. The best way to reduce deforestation is by_____

    a) Using more paper

    b) Clear more area of trees to grow plant

    c) Burning forest in order to create cultivated land

    d) Clear more area of plants to grow trees

88. Due to deforestation how much fields worth of trees is lost per minute?

    a) 12 football

    b) 24 football

    c) 36 football

    d) 48 football

89. Rain forest land is most often cleared for_____

    a) Pasture

    b) Forest fire

    c) Human activities

    d) High pressure

90. The main cause of wildfire is_____

    a) Volcanic activity

    b) Lightening

    c) Pollution

    d) Human activity

91. Which nation is most affected by deforestation?

    a) Honduras

    b) Indonesia

    c) Benin

    d) Ghana

92. Which type of farming cause more amount of deforestation?

    a) Subsistence farming

    b) Commercial farming

    c) Mixed farming

    d) Dairy farming