

M.Sc.IV Sem.

ENVIRONMENTAL BIOLOGY

multiple choice questions

1 Most stable ecosystem is

- (a) Forest
- (b) Desert
- (c) Ocean
- (d) Mountain

2 Which of the following statement about the forest is not correct

- (a) Forest reduces soil erosion
- (b) Provides recreational opportunities
- (c) Provides economic development
- (d) None of the above

3 Lignite, bituminous and anthracite are different types of

- (a) Nuclear fuel
- (b) Coal
- (c) Natural gas
- (d) Biogas

4 Which of the following is the example of impact of development activities on hydrosphere?

- (a) Air pollution
- (b) Soil pollution
- (c) Noise pollution
- (d) Water pollution

5 Study of trends in human population growth and prediction of future growth is called

- (a) Demography
- (b) Biography
- (c) paleography
- (d) psychology

6 Which of the following is not a method of water conservation

- (a) rain water harvesting
- (b) ground water extraction
- (c) improving irrigation efficiency
- (d) avoiding water wastge

7 Formation of ozone is

- (a) oxidation reaction
- (b) reduction reaction
- (c) photochemical reaction
- (d) none of these

8 The drop in air temperature at a rate of 6.50 C per 1000 m increase in altitude of troposphere is known as

- (a) Environmental lapse rate
- (b) Environmental degradation
- (c) Green house effect
- (d) Global warming

9 Zone consisting air, water and soil is known as

- (a) Hydrosphere
- (b) Atmosphere
- (c) Lithosphere
- (d) Biosphere

10 Word oikos means _____ and logos means _____

- (a) Houses and study of
- (b) Study and houses
- (c) Only houses

(d) Study of people

11 Nitrogen gets oxidized into

(a) Nitrates and ammonia

(b) Ammonia and urea

(c) Urea and nitrite

(d) Nitrates and nitrites

12 Earthworms and bacteria are called

(a) Producers

(b) Consumers

(c) Decomposers

(e) None of these

13 Region where fresh water meets salt water is called

(a) Sea

(b) Lake

(c) River

(d) Estuarine

14 The Ecological pyramid that is always upright

(a) Pyramid of energy

(b) Pyramid of biomass

(c) Pyramid of number

(d) None of these

15 “Green house effect” with respect to global warming refers to-

(a) Cooling & moist condition

(b) Warming effect

(c) Increased rainfall & greenery

(d) Desertification

16 In India, Tropical rain forest occurs in-

- (a) Jammu and Kashmir
- (b) Andaman & Nicobar
- (c) Uttar Pradesh
- (d) Himachal Pradesh

17 Atmospheric ozone layer which protect us from UV-B & C is getting depleted most by addition of-

- (a) Chloro fluorocarbon
- (b) Carbon monoxide
- (c) Carbon dioxide
- (d) Sulphur dioxide

18 5th June is observed as

- (a) World forest day
- (b) World environment day
- (c) World wildlife day
- (d) World population day

19 21st March is observed as

- (a) World forest day
- (b) World environment day
- (c) World wildlife day
- (d) World population day

20 Noise is measured using sound meter and the unit is

- (a) Hertz
- (b) Decibel
- (c) Joule

(d) Sound

21 Important abiotic factors in ecosystems include which of the following?

(a) temperature

(b) water

(c) wind

(d) both (a) and (b)

22 All of the following statements about ecology are correct except:

(a) Ecology is the study of the interactions between biotic and abiotic aspects of the environment

(b) Ecology is a discipline that is independent from natural selection and evolutionary history

(c) Ecologists may study populations and communities of organisms.

(d) Ecology spans increasingly comprehensive levels of organization from individuals to ecosystems

23 Which of the following are important biotic factors that can affect the structure and organization of biological communities?

(a) nutrient availability, soil pH, light intensity

(b) precipitation, wind, temperature

(c) predation, competition, disease (d) all of the above

24 The term "Environment" means

(a) Sum total of all conditions that the life and development of all organisms on earth

(b) A beautiful earth

(c) Earth and water

(d) A combination of plants and animals

25 Elements of environment are

(a) Nitrogen, Carbondioxide, Oxygen

(b) Nitrogen, Oxygen, Ozone

(c) Carbondioxide, Oxygen, Ozone

(d) Lithosphere, Atmosphere, Hydrosphere and Biosphere

26 The term Environment is derived from an old French word “enviro” means

- (a) Outside
- (b) Surroundings
- (c) Inside
- (d) Biotic community

27 Hydrosphere includes

- (a) Animals
- (b) Soil
- (c) Plants
- (d) Water bodies

28 Area of land, water and air where the life exists is called

- (a) Biosphere
- (b) Lithosphere
- (c) Atmosphere
- (d) Hydrosphere

29 Atmosphere may extends to a height of about following kms above the earth surface

- (a) 80 km
- (b) 8000 km
- (c) 800 km
- (d) 8 km

30 The layers of atmosphere consists of

- (a) Troposphere, Stratosphere, Mesosphere and Temperature
- (b) Hydrosphere and biosphere
- (c) Lithosphere and Hydrosphere
- (d) Biosphere and Hydrosphere

31 Lowest layer of atmosphere is called

- (a) Thermosphere
- (b) Stratosphere
- (c) Troposphere
- (d) Mesosphere

32 Troposphere has altitude range of

- (a) 8 to 18 km from earth surface
- (b) 50 km from earth surface
- (c) 800 km from earth surface
- (d) 80 km from earth surface

33 The layer of atmosphere containing much of ozone gas is

- (a) Thermosphere
- (b) Stratosphere
- (c) Troposphere
- (d) Mesosphere

34 The coldest layer of temperature having minimum temperature range of -950°C is

- (a) Thermosphere
- (b) Mesosphere
- (c) Stratosphere
- (d) Troposphere

35 Thermosphere has two layers of

- (a) Ionosphere and Exosphere
- (b) Stratosphere and Troposphere
- (c) Mesosphere and Troposphere
- (d) Mesosphere and Stratosphere

36 The layer which provides ideal site for flying of jet planes is

- (a) Thermosphere
- (b) Stratosphere
- (c) Mesosphere
- (d) Troposphere

37 As per IPAT equation impact of environment degradation depend

- (a) population, Affluence and technology
- (b) Population and industrialization
- (c) Urbanization and poverty
- (d) Population, Pollution

38 Scientific study of the interactions of organisms with the physical environment is called

- (a) Ecosystem
- (b) Ecology
- (c) Environment
- (d) Trophic structure

39 The three major living components of an ecosystem are

- (a) Producers, consumers and Decomposers
- (b) Producers, Autotrophs and Decomposers
- (c) Heterotrophs, Consumers and Reducers
- (d) Detritivores, Consumers and Phototrophs

40 The green plants are also called

- (a) Producers
- (b) Consumers
- (c) Reducers

(d) Detritivores

41 Example of omnivores is

(a) Lion

(b) Hawk

(c) Human

(d) Snake

42 The most important organisms of an ecosystem are

(a) Herbivores

(b) Producers

(c) Carnivores

(d) Protozon

43 Consumers are also called

(a) Photoautotrophs

(b) Saprotrophs

(c) Heterotrophs

(d) Reducers

44 Sequence of eating and being eaten in a ecosystem is called

(a) Food web

(b) Natural cycle

(c) Ecological Pyramid

(d) Food chain

45 Detritus food chain starts from

(a) Green plants

(b) Grass

(c) Dead organic matter

(d) Phytoplankton

46 Nutrients are recycled in ecosystem by

(a) Biogeochemical cycle

(b) Energy flow

(c) Producers

(d) Consumers

47 The flow of energy is,

(a) Oneway

(b) Cyclic

(c) Linear and oneway

(d) None of these

48 Biodiversity means

(a) The living natural resources

(b) Land and forest

(c) Oceans and sea

(d) Atmosphere

49 Food chain always starts with

(a) Respiration

(b) Transpiration

(c) Nitrogen fixation

(d) Photosynthesis

50 The ecological pyramid always starts with the following at the base

(a) Decomposer

(b) Producer

(c) Consumer

(d) None of these

51 Hydrological cycle provides us

(a) Fresh water

(b) Nitrogen

(c) Carbon dioxide

(d) None of these

52 Gaseous nitrogen can be used by plants only after the process of

(a) Nitrogen cycling

(b) Nitrogen fixation

(c) Ammonification

(d) Nitrifications

53 Conversion of ammonia to nitrite and then nitrate is called

- (a) Nitrogen fixation
- (b) De nitrification
- (c) Nitrification
- (d) Ammonification

54 The loss of water from plants and tree leaves is called

- (a) Precipitation
- (b) Respiration
- (c) Evaporation
- (d) Transpiration

55 Which of the following is a non-renewable resource?

- (a) Coal
- (b) Forest
- (c) Water
- (d) Wildlife

56 Deforestation generally decreases

- (a) Rainfall
- (b) Soil erosion
- (c) Draught
- (d) Global warming

57 Chipko movement was started to conserve

- (a) Forests
- (b) Grasslands
- (c) Deserts
- (d) Soil

58 Fossil fuel and metallic minerals are

- (a) Renewable resources
- (b) Non-renewable resources
- (c) Inexhaustible
- (d) None of these

59 Examples of conventional type of renewable resources may be

- (a) Plants
- (b) Wild life
- (c) Aquaculture
- (d) All of these

60 The subsurface sources of water is

- (a) River
- (b) Dug well
- (c) Stream
- (d) Ocean

61 Afforestation is necessary for

- (a) Soil conservation
- (b) Soil erosion
- (c) Well control
- (d) Low humidity

62 In the hills forest cover is affected by,

- (a) Overgrazing by cattle
- (b) Soil erosion
- (c) Leaching of soil
- (d) Soil pollution

63 Air pollution is caused by

- (a) Insecticides
- (b) Sewage
- (c) Smoke
- (d) Loud speakers

64 If waste materials contaminate the source of drinking water which of the following diseases will spread?

- (a) Scurvy
- (b) Typhoid
- (c) Malaria
- (d) Anaemia

65 When trees are cut, amount of oxygen

- (a) decreases
- (b) increases
- (c) both (a) and (b)
- (d) remains same

66 71% of earth surface is covered with:

- (a) land
- (b) air
- (c) water
- (d) coal

67 Which of the following is secondary pollutant

- (a) CO_2
- (b) CO
- (c) O_3
- (d) SO_2

68 Carbon monoxide is a pollutant because

- (a) It react with O_2
- (b) It inhibit its glycolysis
- (c) Make nervous system inactive

(d) React with hemoglobin

69 All are particulate pollutants except

(a) Dust (b) ozone (c) soot (d) smoke

70 Major cause of increment in population growth

(a) decrease in birth rate

(b) decrease in mortality rate

(c) illiteracy

(d) none of the above

71 Main objective of family welfare program is

(a) population control

(b) disease control

(c) a & b

(d) none of the above

72 The sudden increase in the population of the species is

(a) population growth

(b) population explosion

(c) over population

(d) all above

73 According to Thomas Malthus human population increase in

(a) arithmetic ratio

(b) geometric ratio

(c) exponential ratio

(d) all above

74 Which of the following is an air pollutant

(a) ozone (b) CFC (c) Carbon dioxide (d) oxygen

75 Noise is

- (a) loud sound
- (b) constant sound
- (c) unwanted sound
- (d) slow sound

76 Which of the following are major causes of land degradation?

- (a) soil erosion
- (b) deforestation
- (c) water logging
- (d) desertification

77 Biochemical oxygen demand means

- (a) industrial pollution
- (b) air pollution
- (c) polluting capacity of effluent
- (d) dissolved O₂ needed by microbes to decompose organic waste

78 Eutrophication means

- (a) thermal change in water
- (b) filling up of water body with aquatic due to extra nourishment
- (c) solid waste
- (d) none of the above

79 The main components of photochemical smog is

- (a) water vapour
- (b) sulphur dioxide
- (c) oxides of nitrogen
- (d) all of the above

80 The TAJ MAHAL at AGRA may be damaged by

- (a) sulphur dioxide
- (b) chlorine
- (c) hydrogen
- (d) oxygen

81 Sound becomes hazardous noise pollution at decibels

- (a) above 30
- (b) above 80
- (c) above 100
- (d) above 120

82 Effect of noise pollution is mainly on,

- (a) physical factor
- (b) chemical factor
- (c) biological factor
- (d) all of the above

83 The important component of environment is

- (a) Biosphere
- (b) Lithosphere
- (c) Atmosphere
- (d) all of the above

84 The pollutant free energy resource are,

- (a) coal
- (b) nuclear power
- (c) petroleum
- (d) solar energy

85 The atmosphere of big cities is polluted most by,

- (a) household waste
- (b) radioactive falls out
- (c) automobile exhausts
- (d) pesticides

86 The concentration of which gas is highest in our environment?

- (a) Oxygen
- (b) Hydrogen
- (c) Nitrogen
- (d) Carbon dioxide

87 Which of the following are the example of Municipal and industrial discharge pipes

- (a) Nonpoint sources of pollution.
- (b) Violations of the Clean Water Act.
- (c) Point sources of pollution.
- (d) Irrigation.

88 Which of the following is not a major source of groundwater contamination?

- (a) agricultural products
- (b) landfills
- (c) underground storage tanks
- (d) all of the above are major sources of groundwater contamination