

English

1. The main reason for evolution of new species is

- (A) Geographical isolation
- (B) Natural selection
- (C) Reproductive barrier
- (D) Mutation

Correct Option(s): D

English

2. Main cause for loss of biodiversity is

- (A) Pollution
- (B) Population explosion
- (C) Habitat destruction
- (D) Over population

Correct Option(s): C

English

3.

Among the following environmental pollutants which has the problem of biomagnifications ?

- (A) SO_2
- (B) NO_3
- (C) Hg fungicides
- (D) O_3 and CO

Correct Option(s): C

English

4.

Nitrification is the conversion of

- (A) NO_3^- into N_2
- (B) N_2 to NH_3
- (C) Organic nitrogen into NH_4^+
- (D) NH_4^+ into NO_3^-

Correct Option(s): D

English

5.

Land plants arose during the _____ period

- (A) Ordovician
- (B) Jurassic
- (C) Cambrian
- (D) Carboniferous

Correct Option(s): A

English

6. The National herbarium in India is located at

- (A) Bombay
- (B) Calcutta
- (C) Coimbatore
- (D) Delhi

Correct Option(s): B

English

7. Ex-situ conservation method for biodiversity conservation is

- (A) Biosphere reserve
- (B) National Park
- (C) Gene bank
- (D) Historical landscape

Correct Option(s): C

English

8. Layer of Atmosphere possessing ozone is

- (A) Stratosphere
- (B) Mesosphere
- (C) Ionosphere
- (D) Troposphere

Correct Option(s): D

English

9. The enzyme used as sensitive indicator of phytotoxic pollutant is

- (A) Transaminase
- (B) Nitrogenase
- (C) Succinic dehydrogenase
- (D) Peroxidase

Correct Option(s): D

English

10. The Earth summit – 1992 was held in

- (A) Sweden
- (B) Brazil
- (C) Kenya
- (D) South Africa

Correct Option(s): B

English

11.

The upper layer of a lake is called as

- (A) Epilimnion
- (B) Hypolimnion
- (C) Thermocline
- (D) Aphotic zone

Correct Option(s): A

English

12. Synecology is the study of

- (A) Populations of a species
- (B) Ecosystem
- (C) Communities of various species and genera
- (D) Single species only

Correct Option(s): C

English

13. Secondary sewage treatment involves

- (A) Physical removal of solids from polluted water by filtration and sedimentation
- (B) Removal of chemical remains by precipitation
- (C) Removal of dissolved organic compounds by activated sludge or trickling filter
- (D) Removal of microbial pathogens by chlorination or ozonation

Correct Option(s): C

English

14.

Which of the following does not represent a strategy for phytoremediation ?

- (A) Phytodegradation
- (B) Phytomining
- (C) Continuous removal through hyper accumulators
- (D) Chelate-mediated extraction of pollutants

Correct Option(s): B

English

15.

Fertilizers that gets washed into rivers by the rain causes

- (A) Bioaccumulation
- (B) Eutrophication
- (C) Biodegradation
- (D) Biomagnification

Correct Option(s): B

English

16. In low light intensity

- (A) Sciophytes develop
- (B) Helophytes develop
- (C) Halophytes develop
- (D) Alien species develop

Correct Option(s): A

English

17.

Which of the following get accumulated during salt stress in plants ?

- (A) Auxins
- (B) Gibberellins
- (C) Abscissic acid
- (D) Ascorbic acid

Correct Option(s): C

English

18. An aquatic plant with floating leaves

- (A) Has stomata on lower surface
- (B) Has stomata only on upper surface
- (C) Has stomata on both surfaces
- (D) Does not have stomata

Correct Option(s): B

English

19. Lithosphere serves as reservoir

- (A) For carbon cycles
- (B) For oxygen cycles
- (C) For nitrogen cycles
- (D) For phosphorus cycles

Correct Option(s): D

English

20. Pedology is the study of

- (A) Soil erosion
- (B) Soil formation
- (C) Rock formation
- (D) Locomotion of animals

Correct Option(s): B

English

21. Restoration of ecological equilibrium in mined areas can be achieved through

- (A) Prevention of grazing
- (B) Prevention of soil erosion
- (C) Revegetation of the mined habitats
- (D) Conversion of mined habitats into agricultural ecosystems

Correct Option(s): C

English

22.

World Environment Day is celebrated on

- (A) May 5
- (B) June 5
- (C) July 5
- (D) August 5

Correct Option(s): B

English

23. Vivipary is found in

- (A) Cocos nucifera
- (B) Saccharum
- (C) Rhizophora
- (D) Ficus

Correct Option(s): C

English

24.

Which one of the following pairs serves as biofertilizers ?

- (A) Aspergillus and Actinomycetes
- (B) Albugo and Nostoc
- (C) Azotobacter and Nostoc
- (D) Pseudomonas and E. coli

Correct Option(s): C

English

25.

Which of the following is a clean anaerobic fuel of organic origin is

- (A) Biogas
- (B) Coal
- (C) Minerals
- (D) Solar energy

Correct Option(s): A

English

26. The first biosphere reserve established in India is

- (A) Nanda Devi
- (B) Nilgiri
- (C) Sundarbans
- (D) Gulf of Mannar

Correct Option(s): B

English

27. Biological Oxygen Demand is an index of

- (A) Number of microorganisms
- (B) Amount of organic matter
- (C) Amount of inorganic matter
- (D) Amount of detergent

Correct Option(s): B

English

28.

Who among the following is known as father of biostatistics ?

- (A) Francis Galton
- (B) Adolphe Queste
- (C) Neyman
- (D) William Gosset

Correct Option(s): A

English

29.

Which of the following bacteria cause food poisoning ?

- (A) Escherichia
- (B) Penicillium
- (C) Salmonella
- (D) Candida

Correct Option(s): C

English

30.

Acid rains have negative influences on nature as it

- (A) Influences the quality of solar radiation
- (B) Increases the movement of Ca^{2+} and certain metals in the ecosystem
- (C) Increases the amount of H_2O_2 in the atmosphere
- (D) Causes smog

Correct Option(s): B

English

31. Landscape ecology is best described as the study of

- (A) Related arrays of ecosystem
- (B) Abiotic factors and the community of species that exist in a particular area
- (C) The factors affecting the abundance of single species
- (D) Physiological and behavioural ways in which organisms meet the challenges of their environment

Correct Option(s): A

English

32.

Which of the following exhibit xerophytic characters ?

- (A) Epiphytes
- (B) All lithophytes
- (C) Halophytes
- (D) Oxalophytes

Correct Option(s): A

English

33. The assemblage of all the populations of different species that function as an integrated unit through coevolved metabolic transformation in a specific area is called

- (A) Biome
- (B) Biotic community
- (C) Population
- (D) Ecosystem

Correct Option(s): B

English

34.

According to the geographical time scale in which period the dominance of flowering plants was first observed ?

- (A) Paleocenc
- (B) Eocene
- (C) Devonian
- (D) Silurian

Correct Option(s): C

English

35.

Which symbiotic relationship is commonly found in mangrove ecosystems ?

- (A) Epiphytes living on mangrove branches
- (B) Mangrove roots hosting coral polyps
- (C) Mycorrhizal fungi with mangrove roots
- (D) Predatory fish nesting in mangrove roots

Correct Option(s): C

English

36.

Which method is most suitable for detecting and mapping invasive plant species using remote sensing ?

- (A) Thermal Infrared Imaging
- (B) Hyperspectral Remote Sensing
- (C) Radar Interferometry
- (D) Panchromatic Imaging

Correct Option(s): B

English

37.

Which of the following satellite sensors is specifically designed to monitor vegetation ?

- (A) MODIS
- (B) OLI
- (C) SAR
- (D) AVHRR

Correct Option(s): A

English

38. The most suitable sampling methods for studying rare or endangered species in a large, heterogeneous habitat is

- (A) Simple random sampling
- (B) Stratified random sampling
- (C) Systematic sampling
- (D) Adaptive cluster sampling

Correct Option(s): D

English

39.

Most suitable approach for handling missing data in ecological datasets is

- (A) Listwise deletion
- (B) Mean substitution
- (C) Multiple imputation
- (D) Single imputation

Correct Option(s): C

English

40.

Which legislation governs Environmental Impact Assessment in many countries ?

- (A) Kyoto Protocol
- (B) Environment Protection Act
- (C) Montreal Protocol
- (D) Biodiversity Conservation Act

Correct Option(s): B

English

41.

The technology that involves the thermal decomposition of organic material at elevated temperatures in the absence of oxygen is

- (A) Incineration
- (B) Pyrolysis
- (C) Gasification
- (D) Composting

Correct Option(s): B

English

42.

In a waste management context, what does RDF stand for ?

- (A) Recyclable Disposable Fabric
- (B) Refuse-Derived Fuel
- (C) Residual Degradable Food
- (D) Reusable Discarded Fibers

Correct Option(s): B

English

43.

Which characteristic is most likely to enhance a plant's ability to become invasive in a new habitat ?

- (A) Low growth rate
- (B) High genetic diversity
- (C) Obligate mutualism with a single pollinator
- (D) High water requirement

Correct Option(s): B

English

44.

Which agroforestry approach integrates trees into livestock production systems to provide shade and forage ?

- (A) Silvopasture
- (B) Agrisilviculture
- (C) Alley cropping
- (D) Agro-silviculture

Correct Option(s): A

English

45.

In bioremediation, which microorganism is primarily associated with the degradation of hydrocarbons in oil spills ?

- (A) Escherichia coli
- (B) Pseudomonas putida
- (C) Bacillus subtilis
- (D) Saccharomyces cerevisiae

Correct Option(s): B

English

46.

Which process is most effective for the removal of heavy metals from wastewater using microbial activity ?

- (A) Phytoremediation
- (B) Bioleaching
- (C) Bioaccumulation
- (D) Biosorption

Correct Option(s): D

English

47.

The genetically modified organism (GMO) that is designed to degrade organophosphates is

- (A) Agrobacterium tumefaciens
- (B) Pseudomonas fluorescens
- (C) Thermus aquaticus
- (D) Aspergillus niger

Correct Option(s): B

English

48. The term describes the phenomenon where a weed produces chemicals that inhibit the growth of surrounding plants is

- (A) Symbiosis
- (B) Allelopathy
- (C) Commensalism
- (D) Mutualism

Correct Option(s): B

English

49.

What is the function of an electrolyser in renewable energy applications ?

- (A) To convert mechanical energy into electrical energy
- (B) To split water into hydrogen and oxygen using electricity
- (C) To store electricity in chemical form
- (D) To capture and sequester carbon dioxide

Correct Option(s): B

English

50.

Which biofuel production process uses microbial action to convert organic material directly into methane ?

- (A) Pyrolysis
- (B) Fermentation
- (C) Anaerobic digestion
- (D) Transesterification

Correct Option(s): C