INTERNAL-1 QUESTION BANK OF MSC ZOOLOGY 1ST YEARS

ENVIROMENTAL AND CONSERVATION BIOLOGY [PAPER – 2]

CHOOSE THE CORRECT ANSWERS

1. What is a macronutrient that provides energy? [c]

a) Vitamin

b) Mineral

c) Carbohydrate

d) Protein

2. Which micronutrient is essential for healthy red blood cells? [b]

a) Calcium

b) Iron

c) Potassium

d) Magnesium

3. Which macronutrient is crucial for building and repairing tissues? [c]

a) Carbohydrate

b) Fat

c) Protein

d) Fiber

4. Which vitamin is important for immune function? [c]

a) Vitamin A

b) Vitamin B

c) Vitamin C

d) Vitamin D

5. Which mineral is vital for bone health? [d]

a) Iron

b) Calcium

c) Potassium

d) Sodium

6. What is eutrophication? [c]

a) A process that increases biodiversity

b) A process that decreases nutrient levels in water

c) A process that leads to excessive algal growth due to excess nutrients

d) A process that reduces water pollution

7. What is the primary cause of eutrophication? [b]

a) Climate change

b) Excessive nutrients from fertilizers and sewage

c) Overfishing

d) Industrial pollution

8. What is a consequence of eutrophication? [c]

a) Increased oxygen levels in water

b) Decreased algal growth

c) Dead zones in water bodies

d) Improved water quality

9. Which of the following is a symptom of eutrophication? [b]

a) Clear water

b) Algal blooms

c) Increased aquatic life

d) Decreased nutrient levels

10. How can eutrophication be controlled? [b]

a) By increasing fertilizer use

b) By reducing nutrient input from fertilizers and sewage

c) By introducing non-native species

d) By increasing water temperature

11. What is a biogeochemical cycle? [b]

a) The movement of energy through an ecosystem

b) The cycling of nutrients and elements between living and non-living components of the environment

c) The process of photosynthesis

d) The water cycle

12. Which of the following is an example of a biogeochemical cycle? [d]

a) Carbon cycle

b) Water cycle

c) Nitrogen cycle

d) All of the above

13. What is the primary reservoir of carbon in the Earth's biogeochemical cycle? [b]

a) Atmosphere

b) Oceans

c) Soil

d) Living organisms

14. Which process is crucial for returning nitrogen to the atmosphere in the nitrogen cycle? [b]

a) Nitrogen fixation

b) Denitrification

c) Ammonification

d) Nitrification

15. What is the role of decomposers in biogeochemical cycles? [c]

a) To produce nutrients

b) To consume nutrients

c) To break down organic matter and release nutrients

d) To fix nitrate

16. Which of the following is an inorganic pollutant? [b]

a) Pesticides

b) Heavy metals

c) Oil spills

d) Plastics

17. Which heavy metal is commonly associated with Minamata disease? [b]

a) Lead

b) Mercury

c) Arsenic

d) Cadmium

18. What is the primary source of lead pollution in the environment? [d]

a) Industrial emissions

b) Vehicle exhaust

c) Agricultural runoff

d) All of the above

19. Which of the following is a harmful effect of nitrate pollution in water? [c]

a) Eutrophication

b) Blue baby syndrome

c) Both a and b

d) None of the above

20. Which inorganic pollutant can cause bone disease and kidney damage? [d]

a) Cadmium

b) Lead

c) Mercury

d) Arsenic

FILL IN THE BLANKS

1. The phase where the population grows slowly due to limited resources is called the _____ phase [Stationary phase]

2. The phase of the growth curve population is adapting to the environment and growth is slow is called the _____ phase. [Lag phase]

3. In a growth curve, population declines due to factors like resource called the _____ phase [Decline phase]

4. The population growth in a limited environment is known as the _____ growth curve [logistic (or S-shaped)]

5. The process by which nitrogen is converted into a usable form for plants is called _____. [Nitrogen fixation]

6. The _____ cycle involves the movement of carbon between the atmosphere and living organisms. [Carbon]

7. In the water cycle, the process by which plants release water vapor into the atmosphere is called _____. [Transpiration]

8. The _____ cycle involves the conversion of living organisms. [Nitrogen]

9. Phosphorus is an essentially stored in _____. [Rocks and sediments]

10. The sigmoid growth curve is also known as the _____ growth curve.

[Logistic]

11. The J-shaped growth curve represents _____ growth in a population [Exponential]

12. In a sigmoid growth curve, the population growth rate slows down as it approaches the _____.[Carrying capacity]

13. The J-shaped curve is _____ resources on growth. [Unlimited]

14. The S-shaped curve is a more realistic model of population growth in environments with _____ resources. [Limited]

15. The _____ ecosystem is characterized by trees and a diverse range of plant and animal species. [Forest]

16. _____ ecosystems are dominated by grasses and herbaceous plants, with few trees [Grassland]

17. _____ ecosystems are cold, treeless regions found in Arctic and Antarctic areas. [Tundra]

18. _____ ecosystems are found in freshwater environments like rivers, lakes, and ponds. [Freshwater]

19. _____ ecosystems are characterized by high temperatures, high humidity, and heavy rainfall, and are often found near the equator. [Tropical rainforest]

20. _____ ecosystems are found in coastal areas where freshwater and saltwater mix. [Estuarine]

21. _____ ecosystems are dry, arid regions with very little rainfall and sparse vegetation. [Desert]

ANSWER THE FOLLOWING QUESTIONS

1.micronutrients and macronutrients

2.growth curves

3.eutrofication

4.biogeochemical cycles of NO2 & CO2

5.population characteristics