Unit .3

LESSON .1

1 Choose the correct answer

1 Which of the following describes the Biosphere most accurately ?

A The layer of gases surrounding the Earth.
B Living organisms and the areas where they live on Earth.
C The water found on the Earth's surface.
D The rocks that make up the Earth's crust.

2 The biosphere extends from:

A Rivers to deserts
B Oceans to mountains
C Soil to atmosphere only
D Forests to rivers

3 The Biosphere interacts with the Hydrosphere when:

A Living organisms breathe oxygen.
B Plants absorb water from the soil.
C Mountains are formed from rocks.
D Wind moves in the atmosphere.

4 The biosphere is described as:

A Simple system
B An isolated system
C A vast integrated system
D A mechanical system

5 The lithosphere provides plant with …….…… to perform photosynthesis

A Water
B Air
C Mineral elements
D Sunlight

6 Which of the following relationships shows the integration of Earth's spheres with biosphere?

A Decomposition of dead leaves in the soil by bacteria.
B Wind movement above the sea surface only.
C Evaporation of water from the surface of rocks.
D Formation of mountains from volcanic lava.

7 Biotic factors are:

A Non-living components
B Living components
C Chemical substances
D Physical forces

8 **In an ecosystem, sunlight represents a factor that is:**

A Biotic
B Reproductive
C Abiotic
D Genetic

9 **Which of the following examples shows an interaction between Biotic and Abiotic factors?**

A A lion preying on a deer.
B A plant absorbing sunlight to produce its food.
C Fruit rotting due to fungi.
D The formation of a bird community in a forest.

10 **Organisms within an ecosystem can be classed as.....**

A Producers, consumers and fungi.
B Producers, consumers and biotics .
C Producers, consumers and decomposers.
D Producers, decomposers and fungi.

11 **Decomposers in food chains .....**

A represent the primary source of energy.
B recycle nutrients to the ecosystem.
C absorb energy from sun.
D represents base of the energy pyramid.

12 **Which of the following levels represents a group of different species living and interacting in one area?**

A Organism
B Population
C Biological Community
D Ecosystem

13 **The highest level of organization is:**

A Species
B Population
C Community
D Biosphere

14 **A Herd of antelopes in the African savanna represents .....**

A Individual
B Population
C Community
D Biosphere

15 **A biome is formed when:**

A ecosystems share similar climate and organisms
B a group of individuals of the same species living share the same place
C various populations of different species share the same area
D all are correct

16 The biosphere is:

A The air layer only
B The deep layers of the Earth's crust only
C The part of the Earth where life exists
D The land surface only

17 An ecosystem consists of :

A Population only
B Community only
C A community and interacting abiotic factors
D A biome and the biosphere

18 Which order is correct from smallest to largest?

A Ecosystem → Community → Population → Organism
B Organism → Population → Community → Ecosystem
C Community → Population → Organism → Ecosystem
D Population → Organism → Community → Ecosystem

19 The main function of food webs is to:

A Measure light in the environment
B Show the transfer of matter and energy among organisms
C Determine temperature
D Determine plant color

20 In the absence of decomposers, what usually happens?

A Nutrient cycles continue without change
B Accumulation of remains and stoppage of nutrient cycles
C Increase in oxygen production
D Increase in the number of predators

2 Explain the following

1 The Biosphere is considered an integrated system that includes all living organisms and the areas where they exist on Earth.

.....
.....
.....

2 The diversity of types of living organisms in different environments.

.....
.....
.....

3 **Plants are considered a biotic factor in the ecosystem.**

4 **The ecosystem is considered an integrated unit in nature.**

5 **The importance of decomposers in ecosystem**