



ZIAUDDIN UNIVERSITY

EXAMINATION BOARD

BIOLOGY IX ASSISMENT



Assessment

➤ **The study of fossils is called:**

A Environmental Biology

C Paleontology

E Historical biology

F Social biology

The experiments on DNA molecules in chromosomes for knowing the basis of inherited diseases are conducted by :

A Molecular biologists

C Freshwater biologists

E Microbiologists

F Social biologist

Out of 92 naturally occurring chemical elements how many are considered as bio-elements:

A 6

C 26

E 16

F 15

Which one is a macromolecule?

A Polysaccharide

C Hemoglobin

E Protein

F ATP

A structure formed by groups of similar cells organized into loose sheets or bundles performing similar functions is called as:

A An organ

C A Tissue

E An organism

F A Cell

Group of living organisms of the same species living in the same place at the same time is called

A Community

C Ecosystem

E Population

F Biome

13. Science is best described as a

- a) set of facts.
- b) way of knowing.
- c) Collection of beliefs.
- d) list of rules.

14. Science differs from other disciplines, such as history and the arts, because science relies on

- a) facts.
- b) testing explanations.
- c) observations.
- d) theories

15. When conducting an investigation, a scientist's main goal should be which of the following?

- a) The scientist should include his/her opinions in the results.
- b) The scientist should aim to become famous for his work.
- c) The scientist should follow a very specific scientific method.
- d) The scientist should aim to answer questions about the natural world

16. Scientists can organize their observations using _____.

- a) charts
- b) graphs
- c) tables
- d) all of these

17. All of the following have a nucleus except

- a) Bacteria
- b) Animalia
- c) Plantae
- d) Protista

18. The first person to have created a classification system for living organisms was

- a) Carl Linneus
- b) Robert Whittaker
- c) JJ Thompson
- d) Aristotle

Assessment

➤ **The power house of cell is called**

- a) Cell wall
- b) Mitochondria
- c) Ribosomes
- d) Nucleus

2. The kitchen of the cell is called

- a) Cell wall
- b) Nucleus
- c) Vacuoles
- d) Plastids

3. The functional unit of life is called

- a) Cell
- b) Egg
- c) Nucleus
- d) None of these

4. Chloroplast is found in

- a) Plant cell only
- b) Animal cell only
- c) Both of these
- d) None of these

5. The control unit of cell is

- a) Nucleus
- b) Cell wall
- c) Cytoplasm
- d) All of these

6. Single celled organisms are called

- a) Unicellular
- b) Multi-cellular

- c) Both of these
- d) None of these

7. Tissue is a

- a) Group of organs
- b) Group of cells
- c) Group of tissues
- d) Group of organisms

8. Cell is discovered by

- a) Robert Brown
- b) Robert Hooke
- c) John Mendal
- d) Charse Darwin

9. The calls capable of changing shapes are

- a) Amoeba cell
- b) WBC
- c) Both of these
- d) None of these

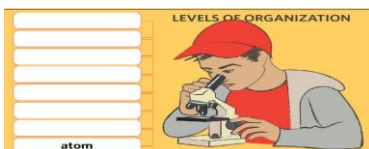
10. Hen's egg is a

- a) Tissue
- b) Organ
- c) Organ system
- d) cell

11. When you first look at an animal, you see the whole animal. What you don't immediately recognize is that the animal is made up of a large number of parts organized at many different levels.

Order the following parts of a multicellular organism from the smallest scale to the largest:

cell | organ system | organelle | tissue | organism | molecule | organ





Q12. Put your cells to work

Compose: Imagine you're a specialized cell in the human body. Your task is to research your cell type and then prepare a resumé so that you can apply for a job that suits your skills. Organize your resumé as follows:

Name: state which type of specialized cell you are. Address: identify where in the body you can be found. Place of birth: identify where in the body you were formed.

Appearance: provide two images – a drawing and a microscope image – and label your main features, such as your shape, organelles and any special extensions.

Skills: list your main roles in the body and explain how your various features allow you to perform them.

Clubs and organizations: describe your role in forming tissues and organs and your associations with any other specialized cell types.

Closing statement: write a paragraph to describe the type of job you're looking for and highlight how your skills would suit this job.

Some examples of cells you might choose to be: nerve cell (neuron), red blood cell (erythrocyte), sperm cell, egg cell, photoreceptor cell, taste bud cell, heart muscle cell, fat cell (adipocyte), macrophage.

Reference:

https://stileapp.com/static/CLL%20handouts/Lesson_050_handout.pdf

Assessment

➤ Section

If you were to take a count of the diversity of species in your town, what would you be measuring?

Genetic diversity

Habitat diversity

Biodiversity

Special richness

If you were to measure the degree of difference between all of the squirrels that share a species in a town, what would you be measuring?

Habitat diversity

Genetic diversity

Biodiversity

Species richness

Why is genetic diversity important?

Allows for species to adapt to and thrive in different environments.

Global warming threatens monocultures.

It enables species to create their own habitat.

It's not important.

Which of the following represents an ecosystem with high species abundance, but low species diversity?

An island with many rare birds and insects

An old growth forest

A farm growing thousands of sunflowers

An open field of grasses and wildflowers

5. Which of the following is the most likely cause of a decline in lobster population?

Chemical pollutants

Overharvesting

Malnourishment

Disease

6. Which of the following is the worst culprit when it comes to activities

threatening species with extinction?

Chemical pollutants

Habitat destruction

Overharvesting

Disease

7. Whose cooperation does maintaining biodiversity require?

Scientists

All of these

Informed citizens

Nations

ASSESSMENT

Arrange the events of apoptosis in sequence:

The cell membrane shows irregular buds.

Nuclear envelop breaks and DNA is fragmented.

Chromatin undergoes condensation.

The blebs break off from the cell.

Cell shrinks and becomes rounded

2. Complete the following table showing the main differences between mitosis and meiosis

	MITOSIS	MEIOSIS
Daughter cells are exactly equals to mother cell		
Generate variability		
Occur in unicellular organism		
It is related with sexual reproduction		
Generate four daughter cells		
Daughter cells are haploids while mother cell is diploid.		
Generate two daughter cells		
Mother cell divides twice		
It is the way in which somatic cells are reproduced		
It is the way gametes are generated		
It is a conservative process		