

TEST NO.1
CH - 1

BIOLOGY

Time Allowed: 15 Minutes

CLASS 9TH - 019

Paper: (Objective Type)
Maximum Marks: 12

Note : Write answers to the questions on the objective answer sheet provided. Four possible answers A, B, C and D to each question are given. Which answer you consider correct, fill the circle in front of A, B, C or D with pen ink to each question on the answer sheet provided.

S.NO	QUESTIONS	(A)	(B)	(C)	(D)
1.	Stomach is an example of	Tissue level	Organ level	Organ system level	None
2.	As a bio element the percentage of carbon is.	18 %	10%	2%	3%
3.	Which one are not vegetative organs?	Roots	Stems	Leaves	Flowers
4.	Which of the following is not unicellular organism?	Amoeba	Paramecium	Frog	Euglena
5.	The example of colonial organism is	Amoeba	Volvox	Frog	Mustard plant
6.	Microscopic study of tissues is called.	Physiology	Morphology	Histology	Anatomy
7.	Which for the following are supporting tissues in animals?	Nervous	Epithelial	Muscular	Connective
8.	Scientific name of frog is.	Rana tigrina	Rana tagrina	Rosa indica	Brassica Compestric
9.	The author of "Al-Qanun-fial-Tib" is.	Jabir Bin Hayan	Bu Ali Sina	Abdul Malik Asmai	None
10.	Similar cells organized into groups and performing same functions, are known as.	Organelle	Tissues	Organ	Organ System
11.	The study of internal structure is called.	Anatomy	Histology	Entomology	Taxonomy
12.	Which of the following group include organisms all of which are absorptive in their nutrition?	Protists	Animals	Bacteria	Fungi

A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
1	☐	☒	☐	☐	4	☐	☐	☒	☐	7	☐	☐	☐	☒	10	☐	☒	☐	☐
2	☒	☐	☐	☐	5	☐	☒	☐	☐	8	☒	☐	☐	☐	11	☒	☐	☐	☐
3	☐	☐	☐	☒	6	☐	☐	☒	☐	9	☐	☒	☐	☐	12	☐	☐	☒	☐

نوٹ: معروضی سوال نامے کو توجہ سے پڑھیں اور ہر MCQ کی درست آپشن A, B, C, D کو پین کی سیاہی یا مارکر سے اس طرح پُر کریں کہ سیاہی دائرے سے باہر نہ نکلے۔ ایک سے زیادہ دائروں کو پُر کرنے یا کاکٹ کر پُر کرنے کی صورت میں مذکورہ جواب غلط تصور ہوگا۔

Test No.1
CH -1
BIOLOGY

Time Allowed: 1:45 hours

CLASS 9TH – 019

Maximum Marks: 48

(PART – I)

2. Write short answers to any FIVE (5) questions:

10

- (i) What are bio elements?
- (ii) Define anatomy.
- (iii) Define biogeography.
- (iv) Define Biology.
- (v) What is Biophysics?
- (vi) What is cell?
- (vii) What do you mean by colony? Give example.
- (viii) What is community? Give example.

3. Write short answers to any FIVE (5) questions:

10

- (i) What do you mean by environmental biology?
- (ii) What are fossils?
- (iii) Define Genetics.
- (iv) What is Inheritance?
- (v) Define Macromolecules. Give examples.
- (vi) What is morphology?
- (vii) Define organ. Give examples.
- (viii) Define Paleontology.

4. Write short answers to any FIVE (5) questions:

10

- (i) What is Parasitology?
- (ii) What are Prokaryotes and eukaryotes. Give examples.
- (iii) Define population. Give examples.
- (iv) Define Organelle and Cell level.
- (v) Define tissue. Give examples.
- (vi) What do you know about Volvox?
- (vii) What is colonial organization.
- (viii) What are parasites?

(PART – II)

Note: - Attempt any TWO questions.

5- a) How biology is related to other science? Describe any four

5

b) Describe the contributions of different Muslims scientists in the field of Biology.

4

a) Abdul Malik Asmai

b) Bu ali Sina.

6- a) Describe Division of biology.

5

b) Define biology and write notes three branches

4

7- a) Define community and explain a with an example..

5

b) Differentiate between prokaryotic and eukaryotic cells

4

PART I

2 Write short answers to any five questions.

Q:- What are bio elements?

A Element that make the body of living organisms.

Define anatomy?

A: The study of the structure of internal organs.

Q: Define biogeography?

A The study of the occurrence and distribution of species in different geographical regions of the world.

Q: Define biology

A Biology is the scientific study of life. The word biology has been derived from two Greek words **bios** meaning life **logos** meaning thought or reasoning.

(2)

Q: What is biophysics?

A: The interdisciplinary science that deals with the study of the principles of physics which are applicable to biological phenomena.

Q: What is cell?

A The cell is the basic structural functional and biological unit of all known living organism.

A cell is the smallest unit of life.

Q: what do you mean by Colony? Give Example

A reproducing organisms which are genetically identical to one another.

Q: What is Community? Give example?

A: A Community is an assembled of different population interacting with one another within the same environment. Communities are collection of organisms in which one population may increase and other may decrease.

3: Write short answer. ---

Q: What do you mean by environmental biology?

A: It deals with the study of the interactions between the organisms and their environment.

Q: What are fossils?

A: Remains or impression of an organism that existed in the geological past.

(4)
Q: Define Genetics?

A: The study of inheritance inheritance mean the transmission of characters from one generation to the other.

Q: What is inheritance?

A: Inheritance mean the transmission of characters from one generation to the other.

Q: Define Macromolecules?

A: Micromolecules are with low molecular weight e.g. glucose water etc. and macromolecules are with high molecular weight e.g. starch proteins lipids etc.

Q: What is morphology?

A: This branch deal with the study of form and structure of living organism.

5
Q: Define Organ, Give Example

A: Group of tissues doing a particular job e.g. The heart.

Q: Define Paleontology?

Ans It is the study of fossils which are the remain of extinct organisms.

4. Write short ans to any Five Question

Q: What is parasitology?

A: This branch deals with the study of parasites.

Parasites are the organisms that take food and shelter from living hosts and in return, harm them.

Q: What are prokaryotes and eukaryotes? Give example?

A: The organisms in first group are made of cells of prokaryotes while all other groups have eukaryotic cells.

Eukaryotic cells have prominent nucleus while prokaryotic cells do not have prominent nucleus.

Q: Define population? Give example?

A: A population is defined as a group of organisms of the same species located at some place, in the same time. Example

Human population in Pakistan in 2010 comprises of 173.5 million individuals. Ministry of Population Welfare Government of Pakistan.

Q: Define organelle and cell level

A: Microscopic structure which does a particular job in a cell.

Cell level:

Cells are formed each type of organelle is specialized.

to perform a specific function.

Q: Define Tissue: Give Example

A: (In mul) Group of cells of the same type doing a particular job. the glandular tissue. muscular tissue. nervous tissue etc.

Q: what do you know about volvox?

A: volvox is a green alga found in water that shows colonial organization. Hundreds of volvox cells make a colony.

Q: what is colonial organization

A:- producing organisms which are genetically identical to one another.

Q: What are parasite?

A: An organism that live in or on another organism and causes harm to it.

Note:- Attempt any Two Question
 5: a) How biology is related -

----- four

Ans:- The interrelationship among different branches of science can not be denied. Biology include information on various aspects of living things but these information relate to the other branch of science as well.

Biochemistry:-

It deal with the study of chemistry of different compounds and processes occurring in living organism.

For example:-

The study of basic metabolism of photosynthesis and respiration involves the knowledge of chemistry.

Biostatistics:-

It deal with the study

the study of biological processes using mathematical techniques and tools.

For example:-

to analyze the data gathered after experimental work biologists have to apply the rules of mathematics.

bio geography:-

It deal with the study of the occurrence and distribution of different species of living organisms in different geographical of the world. It applied the knowledge of the characteristics of particular geographical region to determine the characteristics of living organisms found there.

bioeconomics:-

It deal with the study

of organisms from economic point of view
For example:-

The most value and profit value of the yield of wheat can be calculate through bioeconomics and benefits or losses can be determined.

b) Describe the contribution.

Abdul Malik Asmai:-

Abdul Malik Asmai (740 — 828AD)

He is considered the first muslim scientist who studied animals in detail

His famous writing include

Al-Abil (carnel) Al-Khali

(horse) Al-wahash (animal)

and Khalaj- al-Insan.

Bu-Ali-Sina

(980 — 1037AD)

He is honoured as the founder of medicine and called as Avicenna in the west. He was a physician, philosopher, astronomer and poet. One of his book - Al-Qanun fi-al-Tib is known as the canon of medicine in west.

6) a) Describe division of -

Ans: -

There are three major division of biology which study the different aspects of the lives of the major group of organisms.

Zoology:-

This division of biology deals with the study of animals.

Botany:-

This division of biology with the study of plants.

Microbiology:-

This division of biology deals with the study of microorganisms such as bacteria etc.

In order to study all the aspects of life these division are further divided into different branches defined below.

Morphology:-

This branch deal with the study of form and structure of living organisms.

Anatomy:-

The study of internal structures is called anatomy.

Histology

The microscopic study of tissue is called Histology.

Q. write

b: Define biology and write three branches?

Ans:- Biology is the scientific study of life. The word biology has been derived from two greek words.

bios meaning life and Logos meaning thought or reasoning

In the course of biology we will study how man study has thought about living things. To understand and appreciate nature. It is essential to study the structure functions and relate aspects of living organisms.

Branches of biology:-

Cell biology:-

The study of the structure and function of cells and cell organelle is

cell biology.

physiology:-

This branch deal with the study of the function of different parts of living things.

Genetics:-

The study of genes and their role in inheritance is called genetics. Inheritance mean the transmission of character from one generation to the other.

Embryology:-

It is the study of development of an embryo to new individual.

Taxonomy:-

It is the study of the naming and classification of organisms into group sub group.

Palaeontology:-

It is the study of fossils which are the remains of extinct organisms.

Environmental - biology:-

It deals with the study of interaction between the organisms and their environment.

Socio - biology:-

The branch deal with the social behaviour of the animal that make societies.

Parasitology:-

This branch deal with the study of parasite.

Ectomology:-

It is the study of insect.

Biotechnology:-

It deal with the practical application of living organisms substance of

(16)
welfare of mankind.
*) a) Define Community.....?

Ans: Community:-

A community is an assemblage of different population interacting with one another within the same environment. A forest may be considered as a community. It includes different plants, microorganisms, fungi and animal species.

Communities are collection of organisms in which one population may increase and other may decrease. Some communities are complex, forest community, a pond community etc. Other communities may be simple, fallen log with various populations under it. In a simple

Community number and size of population is limited. So any change in biotic and abiotic factors may have drastic and long lasting effects.

b) Difference b/w prokaryotic

_____?

Ans prokaryotes possess prokaryotic cell which are much simpler than the eukaryotic cell.

The main difference between prokaryotic and eukaryotic cells are as follows.

Nucleus:-

Eukaryotic cells have prominent nucleus while prokaryotic do not have prominent nucleus. Their chromosome consist of DNA only and it float in cytoplasm near centre. This region is called nucleus.

Eukaryotic cells have membrane bounded organelles like mitochondria, Golgi apparatus, endoplasmic reticulum etc while such membrane bounded organelles are not present in prokaryotic cells.

The ribosomes of eukaryotic cell are larger in size as compared to the ribosomes of prokaryotic cells.

Eukaryotic cells are on average ten times larger than prokaryotic cells.

The cell wall of eukaryotic cell is made of cellulose or chitin. All prokaryotic cells have cell wall which is made of peptidoglycan.