

LAHORE BOARD

GRADE 9

BIOLOGY

2017 GROUP 1

MCQ's

i) The largest and the strongest chamber in the heart is: (Mark 1)

- A. Left atrium
- B. Right atrium
- C. Left ventricle
- D. Right ventricle

Answer:

- C. Left ventricle

ii) Myocardium

means:

(Mark 1)

- A. Tissue death
- B. The heart muscle
- C. Embolus
- D. Thrombus

Answer:

- B. The heart muscle

iii) Dark reaction takes place in: (Mark 1)

- A. Stroma
- B. Thylakoids
- C. Cytoplasm
- D. Mitochondria

Answer:

- A. Stroma

iv) An example of micro-molecule is: (Mark 1)

- A. Starch
- B. Proteins
- C. Lipids
- D. Water

Answer:

- D. Water

v) The basic unit of classification is: (Mark 1)

- A. Phylum
- B. Class

C. Species

D. Order

Answer:

C. Species

vi) The cell wall of prokaryotic cells is made up of:

(Mark

1)

A. Cellulose

B. Lignin

C. Chitin

D. Peptidoglycan

Answer:

D. Peptidoglycan

vii) Pepsin enzyme works

in:

(Mark 1)

A. Mouth

B. Intestine

C. Oesophagus

D. Stomach

Answer:

D. Stomach

viii) An example of insoluble dietary fibers in human food is:

(Mark 1)

A. Oats

B. Barley

C. Beans

D. Wheat Bran

Answer:

D. Wheat Bran

ix) The elements occurring in nature are:

(Mark

1)

A. 180

B. 65

C. 92

D. 45

Answer:

C. 92

x) The tumors that remain in their original location is called:

(Mark 1)

A. Malignant

B. Benign

C. Metastasis

D. Denign

Answer:

B. Benign

xi) The functions of mitochondria is:

(Mark

1)

A. Lipid storage

B. Protein synthesis

C. Aerobic respiration

D. Photosynthesis

Answer:

C. Aerobic respiration

xii) The logical consequences of the hypothesis is called: (Mark 1)

A. Theory

B. Law

C. Deductions

D. Principle

Answer:

C. Deductions

Q.2 i) Describe vegetative organs of plants with two examples.

(Marks 2)

Q.2 ii) Write the definition of Bio-Chemistry.

2)

(Marks

Q.2 iii) What is meant by Bio-informatics?

2)

(Marks

Q.2 iv) Differentiate between deduction and theory.

(Marks 2)

Q.2 v) Define species with an example.

(Marks 2)

Q.2 vi) What is meant by endangered species? Write an example.

(Marks 2)

Q.2 vii) What is the difference between primary and secondary walls of the cell walls of plants?

2)

(Marks

Q.2 viii) Draw labeled diagram of a mitochondrion.

2)

(Marks

Q.3 i) Explain G₀ phase.

2)

(Marks

Q.3 ii) Define mitosis.

(Marks 2)

**Q.3 iii) What is crossing over?
2)**

(Marks

**Q.3 iv) Give uses of enzymes in paper industry.
2)**

(Marks

**Q.3 v) Describe the induced fit model.
2)**

(Marks

**Q.3 vi) What is the Krebs cycle?
2)**

(Marks

**Q.3 vii) Explain alcoholic fermentation.
2)**

(Marks

**Q.3 viii) Define Bioenergetics.
2)**

(Marks

Q.4 i) Differentiate between fat soluble and water soluble vitamins.

(Marks 2)

Q.4 ii) Write the names of two diseases caused by mineral deficiency.

(Marks 2)

Q.4 iii) What is peristalsis?

(Marks 2)

Q.4 iv) What is protein-energy malnutrition? (Marks 2)

Q.4 v) Write preventive measures for dengue fever. (Marks 2)

Q.4 vi) What is transpiration pull? (Marks 2)

Q.4 vii) Write the names of any two plasma proteins. (Marks 2)

Q.4 viii) What is blood group systems? (Marks 2)

Q.5 a) Write down the detail of two professions related to biology. (Marks 4)

Q.5 b) Write five differences between prokaryotes and eukaryotes. (Marks 5)

Q.6 a) Write a note on the specificity of enzymes. (Marks 4)

Q.6 b) Describe the mechanisms of respiration. (Marks 5)

Q.7 a) Describe the role of the liver in the human body. (Marks 4)

Q.7 b) Describe the term transpiration and describe the factors affecting the rate of transpiration. (Marks 5)

LAHORE BOARD

GRADE 9

BIOLOGY

2017 GROUP 2

MCQ's

i) ABO blood group was introduced by:

(Mark 1)

- A. Robert Koch
- B. Karl Landsteiner
- C. Robert Brown
- D. Schwann

Answer:

- B. Karl Landsteiner

ii) Guard cells belong

to:

(Mark 1)

- A. Pericycle
- B. Stomata
- C. Cortex
- D. Endodermis

Answer:

- B. Stomata

iii) Calvin got a Nobel prize in:

(Mark

1)

- A. 1961
- B. 1971
- C. 1985
- D. 1991

Answer:

- A. 1961

iv) Breeding of cow belongs to:

(Mark

1)

- A. Farming
- B. Animal husbandry
- C. Morphology
- D. Genetics

Answer:

- B. Animal husbandry

v) The founder of five kingdom system of classification is:

(Mark 1)

- A. Aristotle
- B. Carolus Linnaeus
- C. Robert Brown
- D. Robert Whittaker

Answer:

D. Robert Whittaker

vi) The fluidity of the cell membrane is due to: (Mark 1)

- A. Protein
- B. Vitamin
- C. Lipid
- D. Glycerin

Answer:

C. Lipid

vii) Structurally enzymes are made of: (Mark 1)

- A. Minerals
- B. Amino acids
- C. Vitamins
- D. Fats

Answer:

B. Amino acids

viii) Gastric ulcer is found

in: (Mark 1)

- A. Lungs
- B. Liver
- C. Stomach
- D. Kidneys

Answer:

C. Stomach

ix) Bio-element

is: (Mark 1)

- A. Aluminum
- B. Cobalt
- C. Bromine
- D. Carbon

Answer:

D. Carbon

x) Budding process is found in: (Mark 1)

- A. Fern
- B. Onion
- C. Cockroach
- D. Hydra

Answer:

D. Hydra

xi) Process of glycolysis is found in: (Mark 1)

- A. Cytoplasm
- B. Golgi complex
- C. Ribosomes
- D. Mitochondria

Answer:

A. Cytoplasm

xii) Number of sense organs are:

(Mark

1)

A. 5

B. 7

C. 2

D. 9

Answer:

A. 5

Q.2 i) Write down the definition of Biology.

(Marks 2)

Q.2 ii) Differentiate between Botany and Zoology.

(Marks 2)

Q.2 iii) Write down the definition of the biological method.

(Marks 2)

Q.2 iv) Differentiate between quantitative and qualitative observations giving one example.

(Marks

2)

Q.2 v) What is meant by Biodiversity?

(Marks 2)

Q.2 vi) Write down the importance of biodiversity.

(Marks 2)

Q.2 vii) Differentiate between magnification and resolution.

(Marks 2)

Q.2 viii) What is meant by micrograph?

(Marks

2)

Q.3 i) How cytokinesis occur in a plant cell?

(Marks

2)

Q.3 ii) What changes occur in a cell during S-phase?

(Marks 2)

Q.3 iii) What is metastasis? (Marks 2)

Q.3 iv) Differentiate between extracellular and intracellular enzymes. (Marks 2)

Q.3 v) Describe the uses of enzymes in the food industry. (Marks 2)

Q. 3 vi) How much energy is released from one mole of ATP? (Marks 2)

Q. 3 vii) What is Lactic acid fermentation? (Marks 2)

Q. 3 viii) What is photolysis of water? (Marks 2)

Q. 4 i) Define malnutrition. (Marks 2)

Q. 4 ii) What is meant by bolus? (Marks 2)

Q. 4 iii) Define organic fertilizer with an example. (Marks 2)

Q. 4 iv) Write two functions of the large intestine. (Marks 2)

Q. 4 v) Write the function of neutrophils and basophils. (Marks 2)

Q. 4 vi) How pus is formed? (Marks 2)

Q. 4 vii) Why AB blood group individuals are called universal recipients?

(Marks 2)

Q. 4 viii) Write the symptoms of dengue fever. (Marks 2)

Q. 5 a) Explain the population level and community level. (Marks 4)

Q. 5 b) Describe in detail the difference between prokaryotic and eukaryotic cells. (Marks

5)

Q.6 a) Describe models regarding the mechanism of enzyme action.

(Marks 4)

Q.6 b) Give events of light reactions in photosynthesis. (Marks 5)

Q.7 a) Write the role of pharynx and oesophagus in the digestion of human food. (Marks 4)

Q.7 b) What is meant by transpiration? Explain factors affecting the rate of transpiration. (Marks 5)