

SARGODHA BOARD

GRADE 9

BIOLOGY

2019 GROUP 1

MCQ'S

**i) Blood group individuals are universal recipients:
(Mark 1)**

A. O

B. AB

C. B

D. A

Answer:

B. AB

**ii) The microscopic study of tissues is called:
(Mark 1)**

A. Microbiology

B. Histology

C. Biology

D. Zoology

Answer:

B. Histology

**iii) The tentative explanation of observations is called:
(Mark 1)**

- A. Hypothesis
- B. Theory
- C. Law
- D. Deductions

Answer:

- A. Hypothesis

**iv) Algae belong to kingdom:
(Mark 1)**

- A. Plantae
- B. Fungi
- C. Protista
- D. Monera

Answer:

- C. Protista

**v) The National bird of Pakistan is:
(Mark 1)**

- A. Chakor partridge
- B. Pigeon
- C. Parrot
- D. Crow

Answer:

- A. Chakor partridge

**vi) Chromosomes are composed of:
(Mark 1)**

- A. DNA
- B. RNA
- C. DNA and Protein
- D. RNA and Protein

Answer:

- C. DNA and Protein

**vii) Movement of molecules from an area of lower concentration to the area of higher concentration is called:
(Mark 1)**

- A. Osmosis
- B. Diffusion
- C. Facilitated diffusion
- D. Active transport

Answer:

- D. Active transport

**viii) Duplication of chromosomes takes place in phase:
(Mark 1)**

- A. G₁
- B. S
- C. G₂
- D. G₀

Answer:

B. S

ix) Starch is broken down by an enzyme.

(Mark 1)

A. Lipase

B. Amylase

C. Protease

D. Trypsin

Answer:

B. Amylase

x) Stomata cover the leaf surface:

(Mark 1)

A. 1-2%

B. 1-3%

C. 1-4%

D. 1-5%

Answer:

A. 1-2%

xi) The function of oral cavity is the grinding of food by teeth is called:

(Mark 1)

A. Ingestion

B. Mastication

C. Lubrication

D. Digestion

Answer:

B. Mastication

**xii) Most of the transpiration occurs through:
(Mark 1)**

A. Lenticels

B. Cuticle

C. Mesophyll

D. Stomata

Answer:

D. Stomata

SHORT QUESTIONS

**Q.2 i) What do you know about the profession Agriculture?
(Marks 2)**

**Q.2 ii) Write major biological issues of today.
(Marks 2)**

**Q.2 iii) Write two observations of A.F.A king.
(Marks 2)**

**Q.2 iv) In which formats data can be organised?
(Marks 2)**

**Q.2 v) Write two achievements of Carlous Linnaeus.
(Marks 2)**

**Q.2 vi) What do you know about Houbara bustard?
(Marks 2)**

**Q.2 vii) Write the difference between primary and secondary cell wall.
(Marks 2)**

**Q.2 viii) Write difference between hypertonic and hypotonic solution.
(Marks 2)**

**Q.3 i) Write any four causes of necrosis.
(Marks 2)**

**Q.3 ii) Differentiate between disjunction and non-disjunction.
(Marks 2)**

**Q.3 iii) Define crossing over.
(Marks 2)**

**Q.3 iv) What is meant by optimum temperature?
(Marks 2)**

**Q.3 v) How pH affects enzyme activity.
(Marks 2)**

**Q.3 vi) Why and when Calvin was awarded nobel prize?
(Marks 2)**

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

**Q.3 viii) What are FAD and NAD?
(Marks 2)**

**Q.4 i) Write any four sources of lipids.
(Marks 2)**

Q.4 ii) What is meant by Dietary Fiber.

(Marks 2)

Q.4 iii) Write any four symptoms of deficiency of vitamin C.

(Marks 2)

Q.4 iv) Differentiate between ingestion and digestion.

(Marks 2)

Q.4 v) What is the difference between source and sink?

(Marks 2)

Q.4 vi) Describe two functions of white blood cells in human body.

(Marks 2)

Q.4 vii) Describe function of xylem and phloem.

(Marks 2)

Q.4 viii) What are preventive measure to control Dengue fever.

(Marks 2)

LONG QUESTIONS

Q.5 a) Give points to advocate that Biology is linked with Physics, Chemistry, Mathematics and Economics.

(Marks 4)

Q.5 b) Differentiate between Prokaryotic and Eukaryotic cells.

(Marks 5)

Q.6 a) Write specificity of enzymes.

(Marks 4)

Q.6 b) What are light reactions and Dark reactions. Write the summary of events of Dark reactions in

Photosynthesis. (Marks 5)

Q.7 a) Describe importance of Fertilizers.

(Marks 4)

Q.7 b) Compare the structure and function of artery and vein. (Marks 5)

SARGODHA BOARD
GRADE 9
BIOLOGY
2019 GROUP 2

MCQ'S

i) Length of Oesophagus in adult human is:

(Mark 1)

A. 28 cm

B. 25 cm

C. 35cm

D. 30 cm

Answer:

B. 25 cm

ii) ABO blood group system was discovered by which of the scientist:

(Mark 1)

A. Louis Pasteur

B. Jabir Bin Hayan

C. Emil Fischer

D. Karl Landsteiner

Answer:

D. Karl Landsteiner

**iii) Force that is responsible for the conduction of water and salts from soil by the roots is called:
(Mark 1)**

A. Respiration

B. Transpiration pull

C. Diffusion

D. Osmosis

Answer:

B. Transpiration pull

**iv) Similar cells performing same function organize into group that is called:
(Mark 1)**

A. Organelle

B. Tissue

C. Organ

D. Organ-system

Answer:

B. Tissue

**v) The bark of which tree was used for curing malaria:
(Mark 1)**

A. Quina Quina

B. Orange

C. Mango

D. Amaltas

Answer:

A. Quina Quina

**vi) National bird of Pakistan is:
(Mark 1)**

A. Pigeon

B. Dove

C. Chakor Partridge

D. Eagle

Answer:

C. Chakor Partridge

**vii) Robert Whittakar introduced five-kingdom system of classification in the year:
(Mark 1)**

A. 1896

B. 1937

C. 1967

D. 1976

Answer:

C. 1967

**viii) The thin extensions of inner mitochondrial membrane are called:
(Mark 1)**

A. Cristae

B. Matrix

C. Thylakoids

D. Stroma

Answer:

A. Cristae

**ix) Fluid of chloroplast is called :
(Mark 1)**

A. Cytoplasm

B. Cytosol

C. Stroma

D. Nucleoplasm

Answer:

C. Stroma

**x) Complete set of spindle fibers is called:
(Mark 1)**

A. Chromatin

B. Mitotic spindle

C. Kinetochore

D. Phragmoplast

Answer:

B. Mitotic spindle

**xi) The term enzyme was first used by the Physiologist
named: (Mark 1)**

A. Ibn-e-Nafees

B. Emil Fischer

C. Winhelm Kuhne

D. Louis Pasteur

Answer:

C. Winhelm Kuhne

xii) Another name for the dark reaction of photosynthesis is: (Mark 1)

A. Calvin cycle

B. Carbon cycle

C. Nitrogen cycle

D. Water cycle

Answer:

A. Calvin cycle

SHORT QUESTIONS

Q.2 i) Define Biotechnology.

(Marks 2)

Q.2 ii) What is meant by community? Give example.

(Marks 2)

Q.2 iii) Write two characteristics of a good hypothesis.

(Marks 2)

Q.2 iv) Differentiate between theory and law.

(Marks 2)

Q.2 v) Write importance of biodiversity.

(Marks 2)

Q.2 vi) What is difference between extinct and endangered species.

(Marks 2)

Q.2 vii) Give two principles of cell theory.

(Marks 2)

Q.2 viii) What is endocytosis? Give its types.

(Marks 2)

Q.3 i) When and how does synapsis occur?

(Marks 2)

Q.3 ii) Define Malignant and Benign tumors.

(Marks 2)

Q.3 iii) Differentiate between Mitosis and Meiosis.

(Marks 2)

Q.3 iv) Define Co-enzyme. Give its two examples also.

(Marks 2)

Q.3 v) What is difference between substrate and active site?

(Marks 2)

Q.3 vi) Write down the composition of ATP.

(Marks 2)

Q.3 vii) Define Cellular respiration.

(Marks 2)

Q.3 viii) Define lactic acid fermentation.

(Marks 2)

Q.4 i) What are micro nutrients? Give two examples.

(Marks 2)

Q.4 ii) Describe the role of iron in human body.

(Marks 2)

Q.4 iii) Write two functions of large intestine.

(Marks 2)

Q.4 iv) Write two symptoms of ulcer.

(Marks 2)

Q.4 v) Describe two reasons for the creation of transpiration pull.

(Marks 2)

Q.4 vi) How is plasma separated from blood?

(Marks 2)

Q.4 vii) Differentiate between arteries and veins.

(Marks 2)

Q.4 viii) Write symptoms of dengue fever.

(Marks 2)

LONG QUESTIONS

Q.5 a) Define Biology. Write the contribution of Muslim scientists in Biology.

(Marks 4)

Q.5 b) Describe the relationship between cell function and structure.

(Marks 5)

Q.6 a) Write uses of Enzymes in industries.

(Marks 4)

Q.6 b) Write mechanism of respiration.

(Marks 5)

Q.7 a) Explain role of oral cavity in digestion of food.

(Marks 4)

Q.7 b) Define transpiration, explain the factors affecting the rate of transpiration.

(Marks 5)