

LAHORE BOARD

GRADE 9

BIOLOGY

2018 GROUP 1

MCQ's

i) Branch of biology that deals with the study of insects is called:

(Mark 1)

- A. Physiology
- B. Histology
- C. Entomology
- D. Genetics

Answer:

C. Entomology

ii) Which organism has colonial organization:

(Mark

1)

- A. Mustard plant
- B. Frog
- C. Amoeba
- D. Volvox

Answer:

D. Volvox

iii) Tentative explanation of observations is called:

(Mark

1)

- A. Hypothesis
- B. Deduction
- C. Theory
- D. Scientific Law

Answer:

A. Hypothesis

iv) Scientific name of human being is:

(Mark

1)

- A. Pisum sativum
- B. Homo sapiens
- C. Rosa indica
- D. Allium cepa

Answer:

B. Homo sapiens

v) Major component of plant cell wall is:

(Mark

1)

- A. Chitin
- B. Peptidoglycan

- C. Cellulose
- D. Cholesterol

Answer:

- C. Cellulose

vi) Photograph taken through a microscope:

(Mark

1)

- A. Microscope
- B. Magnification
- C. Micrograph
- D. Resolution

Answer:

- C. Micrograph

vii) Which stage of cell division is different in animals and plants cells:

(Mark 1)

- A. Metaphase
- B. Anaphase
- C. Telophase
- D. Cytokinesis

Answer:

- D. Cytokinesis

viii) Induced Fit Model proposed by

(Mark

1)

- A. Emil Fischer
- B. Daniel Koshland
- C. Robert Hook
- D. Schwann

Answer:

- B. Daniel Koshland

ix) Which of these can enter into Krebs cycle:

(Mark

1)

- A. Glucose
- B. Pyruvic acid
- C. Citric acid
- D. Acetyl Co-A

Answer:

- D. Acetyl Co-A

x) Process of break down of large droplets of lipids in the small droplets:

(Mark 1)

- A. Emulsification
- B. Absorption
- C. Peristalsis
- D. Digestion

Answer:

- A. Emulsification

xi) Which blood vessels carry de-oxygenated blood:

(Mark 1)

- A. Renal artery
- B. Aorta
- C. Pulmonary vein
- D. Pulmonary artery

Answer:

- C. Pulmonary vein

xii) In a tissue, capillaries join to form small veins:

(Mark

1)

- A. Lumen
- B. Venules
- C. Capillaries
- D. Arterioles

Answer:

- B. Venules

Q.2 i) Differentiate between micromolecules and macromolecules with examples.

(Marks

2)

Q. 2 ii) Define biotechnology.

(Marks

2)

Q. 2 iii) Differentiate between theory and law.

(Marks

2)

Q. 2 iv) Describe deduction.

(Marks

2)

Q. 2 v) Write a simple classification of human.

(Marks

2)

Q. 2 vi) Write the importance of Biodiversity.

(Marks

2)

Q. 2 vii) What is endocytosis? Describe its types.

(Marks

2)

Q. 2 viii) Differentiate between magnification and resolution. (Marks 2)

Q. 3 i) What is the alternation of a generation?

(Marks 2)

Q. 3 ii) Differentiate between chromatin and chromosomes.

(Marks 2)

Q. 3 iii) Define cytokinesis. (Marks 2)

Q. 3 iv) Write down the name of two enzymes. (Marks 2)

Q. 3 v) What is activation energy? (Marks 2)

Q. 3 vi) Define cellular respiration. (Marks 2)

Q. 3 vii) When and what discovered by Karl Lohmann? (Marks 2)

Q. 3 viii) Write down the name of two compounds produced during the respiration process. (Marks 2)

Q. 4 i) Write the function of HCl and pepsin in digestion. (Marks 2)

Q. 4 ii) What are the effects of deficiency of iodine on thyroid gland? (Marks 2)

Q. 4 iii) What is night blindness? (Marks 2)

Q. 4 iv) Differentiate between assimilation and absorption. (Marks 2)

Q. 4 v) Transpiration may be a harmful process. How? (Marks 2)

Q. 4 vi) How is plasma separated from blood? (Marks 2)

Q. 4 vii) Briefly describe the function of pericardial fluid. (Marks 2)

Q. 4 viii) How does Aedes mosquito spread dengue fever? (Marks 2)

Q.5 a) Which professions can be adopted after biological studies? Explain any five. (Marks 5)

Q.5 b) Explain three types of plastids. (Marks 4)

Q.6 a) Describe characteristics of enzymes (any five). (Marks 5)

Q.6 b) Describe the different steps of light reactions. Also, draw Z-scheme. (Marks 4)

Q.7 a) Explain the importance of water and dietary fibers in food. (Marks 5)

LAHORE BOARD

GRADE 9

BIOLOGY

2018 GROUP 2

MCQ's

i) Medium in which enzyme trypsin works: (Mark 1)

- A. Alkaline
- B. Acidic
- C. Neutral
- D. Strong acidic

Answer:

- A. Alkaline

ii) Which one is not fat-soluble vitamin: (Mark

1)

- A. E
- B. D
- C. K
- D. C

Answer:

- D. C

iii) Which of these do not have a cell wall: (Mark

1)

- A. Fungi
- B. Algae
- C. Prokaryotes
- D. Protozoans

Answer:

- D. Protozoans

iv) Valves to prevent the backward flow of blood are found in: (Mark 1)

- A. Arteries
- B. Veins
- C. Capillaries
- D. All of these

Answer:

- B. Veins

v) Human population in Pakistan in 2010 comprised: (Mark

1)

- A. 175.3 million
- B. 170.5 million
- C. 174.5 million
- D. 173.5 million

Answer:

D. 173.5 million

vi) Each ATP molecule has the number of subunits:

(Mark

1)

A. 3

B. 4

C. 1

D. 2

Answer:

A. 3

vii) Frog has two eyes, each of which has_____:

(Mark

1)

A. Two eyelids

B. One eyelid

C. Three eyelids

D. No eyelids

Answer:

C. Three eyelids

viii) Seastar gains its lost arms by:

(Mark

1)

A. Meiosis

B. Budding

C. Mitosis

D. Binary fission

Answer:

C. Mitosis

ix) Viruses are assigned to the kingdom:

(Mark

1)

A. Monera

B. Protista

C. Fungi

D. None

Answer:

D. None

x) Mosquito that transmits dengue fever:

(Mark

1)

A. Anopheles mosquito

B. Aedes mosquito

C. Female culex mosquito

D. Male culex mosquito

Answer:

B. Aedes mosquito

xi) Guard cells belong

to:

(Mark 1)

A. Pericycle

B. Stomata

C. Cortex

D. Endodermis

Answer:

B. Stomata

xii) Ribosomes are sites for synthesizing of:

(Mark

1)

A. Proteins

B. RNA

C. DNA

D. Glucose

Answer:

A. Proteins

Q.2 i) What is meant by biosphere and zone of life?

(Marks

2)

Q.2 ii) Compare cell level and tissue level.

(Marks

2)

Q.2 iii) What are quantitative observations? Give example.

(Marks 2)

Q.2 iv) What is meant by deduction?

(Marks 2)

Q.2 v) What is the difference between extinct and endangered species?

(Marks 2)

Q.2 vi) Differentiate between flora and fauna.

(Marks

2)

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

(Marks

2)

Q.2 viii) What is discovered by Scheiden and Schwann?

(Marks 2)

Q.3 i) Describe non-disjunction.

(Marks

2)

Q.3 ii) How cytokinesis takes place in plant cell?

(Marks

2)

Q.3 iii) What is metastasis?

(Marks

2)

Q.3 iv) What is the effect of pH on the rate of enzyme action? (Marks 2)

Q.3 v) Describe induced fit model. (Marks 2)

Q.3 vi) What is cellular respiration? (Marks 2)

Q.3 vii) What is photosynthesis? Write its chemical equation. (Marks 2)

Q.3 viii) Describe alcoholic fermentation. (Marks 2)

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

Q.4 ii) Write the benefit of mastication. (Marks 2)

Q.4 iii) Differentiate between ingestion and digestion. (Marks 2)

Q.4 iv) What is WFP? (Marks 2)

Q.4 v) Write down two functions of root in plants. (Marks 2)

Q.4 vi) Write the difference between source and sink. (Marks 2)

Q.4 vii) Why is dengue fever dangerous for human? (Marks 2)

Q.4 viii) How many types of cells are found in blood? Write down the names of these. (Marks 2)

Q.5 a) Describe unicellular organization, multi-cellular organization and colonial organization. (Marks 5)

Q.5 b) Write the structure and functions of xylem and phloem tissues. (Marks 4)

Q.6 a) Explain the effects of temperature and substrates concentration on the rate of enzyme action. (Marks 5)

Q.6 b) Write a note on the energy budget of respiration. (Marks 4)

Q.7 a) Describe importance of fertilizers. (Marks 4)

Q.7 b) Write a note on ABO blood group system. (Marks 5)

