

Gujranwala Board

9th – 2019

Biology Group 1

i) ____ are the sites of protein synthesis.

(Mark 1)

- A. Ribosomes
- B. Vacuoles
- C. Mitochondria
- D. Nucleus

Answer:

A. Ribosomes

ii) Myocardium means:

(Mark 1)

- A. Tissue death
- B. Embolus
- C. Heart muscle
- D. Thrombus

Answer:

C. Heart muscle

iii) Percentage of lipid present in milk is:

(Mark 1)

- A. 3
- B. 4
- C. 2
- D. 5

Answer:

C. 2

iv) The microscopic study of tissues is called:

(Mark 1)

A. Zoology

B. Morphology

C. Histology

D. Physiology

Answer:

C. Histology

v) The tumours that remain in their original location are called:

(Mark 1)

A. Malignant

B. Benign

C. Design

D. Metastasis

Answer:

B. Benign

vi) In one heartbeat, atrial systole remains about ____ seconds.

(Mark 1)

A. 0.4

B. 0.3

C. 0.2

D. 0.1

Answer:

D. 0.1

vii) A tentative explanation of observation is called:

(Mark 1)

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

Answer:

- A. Hypothesis

viii) Microfilaments are composed of _____ protein. (Mark 1)

- A. Tubulin
- B. Fibrinogen
- C. Actin
- D. Myosin

Answer:

- A. Tubulin

ix) ATP is an example of: (Mark 1)

- A. Nucleotide
- B. Amino acid
- C. Fatty acid
- D. Nucleic acid

Answer:

- A. Nucleotide

x) Pakistan's national bird is: (Mark 1)

- A. Parrot
- B. Sparrow
- C. Pigeon

D. Chakor partridge

Answer:

D. Chakor partridge

xi) Medium in which trypsin enzyme works is called: (Mark 1)

A. Acidic

B. Neutral

C. Strong acidic

D. Alkaline

Answer:

D. Alkaline

xii) _____ is an infertile animal. (Mark 1)

A. Donkey

B. Mule

C. Horse

D. Zebra

Answer:

B. Mule

Q.2 i) Differentiate between micro molecule and macromolecule.

(Marks 2)

Q.2 ii) What do you know about Jabir-Bin-Hayan? Write the names of his two books. (Marks 2)

Q.2 iii) In which organisms Culex and Anopheles spread malaria?

(Marks 2)

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Q.2 iv) Write down any four characteristics of a good hypothesis.

(Marks 2)

(Marks

- Q.2 v) Define biodiversity. (Marks 2)
- Q.2 vi) Write down the main aims of classification. (Marks 2)
- Q.2 vii) Differentiate between cristae and cisternae. (Marks 2)
- Q.2 viii) Define facilitated diffusion. (Marks 2)
- Q.3 i) What is meant by crossing over? (Marks 2)
- Q.3 ii) Differentiate between disjunction and non-disjunction. (Marks 2)
- Q.3 iii) What is meant by apoptosis? (Marks 2)
- Q.3 iv) What are enzymes? (Marks 2)
- Q.3 v) Define metabolism and describe its importance. (Marks 2)
- Q.3 vi) Describe the effect of the concentration of carbon dioxide at photosynthesis. (Marks 2)
- Q.3 vii) What is lactic acid fermentation? (Marks 2)
- Q.3 viii) Describe the importance of anaerobic respiration (fermentation). (Marks 2)
- Q.4 i) What is appendix? (Marks 2)
- Q.4 ii) Describe the reason of goiter and its effect on body. (Marks 2)
- Q.4 iii) Differentiate between major minerals and trace minerals. (Marks 2)
- Q.4 iv) Define balance diet. (Marks 2)
- Q.4 v) What is meant by cardiac cycle? (Marks 2)

Q.4 vi) Differentiate between bicuspid and tricuspid valve. (Marks 2)

Q.4 vii) Define pressure flow mechanism. (Marks 2)

Q.4 viii) Write down the physical appearance or characteristics of "Dengue fever mosquito". (Marks 2)

Q.5 a) Describe cellular organizations of organisms. Also, write its types. (Marks 4)

Q.5 b) Write a comprehensive note on the nucleus. (Marks 5)

Q.6 a) Write the uses of enzymes in different industries. (Marks 4)

Q.6 b) Describe the steps of light reaction of photosynthesis. Why it is called as Z-scheme? (Marks 5)

Q.7 a) Describe the structure of the stomach with a labelled diagram. (Marks 4)

Q.7 b) Write down a note myocardial infarction. (Marks 5)

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Biology Group 2

i) *Allium cepa* is the scientific name of: (Mark 1)

A. Carrot

B. Onion

C. Turnip

D. Potato

Answer:

B. Onion

ii) The process of glycolysis takes place in: (Mark 1)

A. Mitochondria

B. Nucleus

C. Ribosomes

D. Cytoplasm

Answer:

D. Cytoplasm

iii) The individuals having _____ blood group are called universal donors.
(Mark 1)

A. A

B. AB

C. B

D. O

Answer:

D. O

iv) The division of nucleus is called as:

(Mark 1)

- A. Endocytosis
- B. Exocytosis
- C. Cytokinesis
- D. Karyokinesis

Answer:

- D. Karyokinesis

v) The logical consequences of the hypothesis are called:

(Mark 1)

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

Answer:

- A. Deductions

vi) The biochemical reactions in which large molecules are synthesized are called:

(Mark 1)

- A. Commensalism
- B. Anabolism
- C. Catabolism
- D. Mutualism

Answer:

- B. Anabolism

vii) Jabir-Bin-Hayan wrote a _____ book.

(Mark 1)

- A. Al-Abil
- B. Al-Khail
- C. Al-Nabatat
- D. Al-Wahoosh

Answer:

- C. Al-Nabatat

viii) _____ regulates the opening and closing of stomata. (Mark 1)

- A. Potassium
- B. Calcium
- C. Sodium
- D. Magnesium

Answer:

- A. Potassium

ix) Human body is made up of ____ type of cells. (Mark 1)

- A. 100
- B. 200
- C. 300
- D. 400

Answer:

- B. 200

x) Transportation of food in plants body takes place through: (Mark 1)

- A. Xylem
- B. Phloem
- C. Collenchyma
- D. Parenchyma

Answer:

B. Phloem

xi) Prions are composed of:

(Mark 1)

A. RNA

B. DNA

C. Protein

D. DNA and protein

Answer:

C. Protein

xii) The most common chemical in the primary wall of plants is: (Mark 1)

A. Chitin

B. Lignin

C. Lipid

D. Cellulose

Answer:

D. Cellulose

Q.2 i) Describe two scientific contribution of Bu-Ali-Sina. (Marks 2)

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

Q.2 iii) What is the difference between theory and law? (Marks 2)

Q.2 iv) Differentiate between quantitative and qualitative observations. (Marks 2)

Q.2 v) What is meant by species? (Marks 2)

Q.2 vi) Differentiate between class and order. (Marks 2)

Q.2 vii) What is the difference between the primary cell wall and secondary cell wall? (Marks 2)

Q.2 viii) Define turgor pressure. (Marks 2)

- Q.3 i) Differentiate between germ line cells and somatic cells. (Marks 2)
- Q.3 ii) What is meant by regeneration? (Marks 2)
- Q.3 iii) Define meiosis. (Marks 2)
- Q.3 iv) Differentiate between catabolism and anabolism. (Marks 2)
- Q.3 v) What is meant by saturation of active sites? (Marks 2)
- Q.3 vi) What is alcoholic fermentation? (Marks 2)
- Q.3 vii) Define photosynthesis. Also, write its balanced equation. (Marks 2)
- Q.3 viii) Why light reactions are named as Z-scheme? (Marks 2)
- Q.4 i) Define bolus and chyme. (Marks 2)
- Q.4 ii) Write the difference between assimilation and defecation. (Marks 2)
- Q.4 iii) Why pepsin does not digest stomach wall? (Marks 2)
- Q.4 iv) Write the defects caused by the deficiency of vitamin D.
- Q.4 v) You see the pus at the site of infection. How it is formed? (Marks 2)
- Q.4 vi) When and who discovered ABO blood group system? (Marks 2)
- Q.4 vii) Write two differences between artery and vein. (Marks 2)
- Q.4 viii) Name the mosquito which spreads dengue and what happens to blood platelets during dengue fever. (Marks 2)
- Q.5 a) Write a note on population and community levels. (Marks 4)
- Q.5 b) Describe endocytosis and exocytosis with the help of the labelled diagram. (Marks 5)
- Q.6 a) Describe the Lock and key model and induced fit model in detail. (Marks 4)
- Q.6 b) Write importance of anaerobic respiration. (Marks 5)
- Q.7 a) Describe the functions of human liver besides digestion. (Marks 4)

Q.7 b) Define white blood cells. Also describe its type in detail.

(Marks 5)