

SAHIWAL BOARD

GRADE 9

BIOLOGY

2018 GROUP 1

MCQ'S

i) The scientific study of living things is called (Mark 1)

- A. Farming
- B. Biology
- C. Chemistry
- D. Physics

Answer:

B. Biology

ii) An example of kidney transplantation is (Mark 1)

- A. Lithotripsy
- B. Physiology
- C. Surgery
- D. Medicine

Answer:

C. Surgery

iii) The senses used by a biologist for observation are (Mark 1)

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

Answer:

A. 5

iv) *Allium Cepa* is the scientific name of (Mark 1)

- A. Pea
- B. Onion
- C. Carrot
- D. Potato

Answer:

B. Onion

v) Stroma is found in

(Mark 1)

- A. Chloroplast
- B. Golgi bodies
- C. Ribosome
- D. Mitochondria

Answer:

A. Chloroplast

vi) The solution with less solute is called

(Mark 1)

- A. Hydrophytes
- B. Hypotonic
- C. Isotonic
- D. Hypertonic

Answer:

B. Hypotonic

vii) In which stage of cell cycle, cells spend most part of their life?

(Mark 1)

- A. Telophase
- B. Metaphase
- C. Interphase
- D. Prophase

Answer:

C. Interphase

viii) An example of biological detergent is

(Mark 1)

- A. Trypsin
- B. Glycogen
- C. Protease
- D. Pepsin

Answer:

C. Protease

ix) One mole of ATP releases energy

(Mark 1)

- A. 7.6 K Cal
- B. 7.0 K Cal
- C. 7.4 K Cal
- D. 7.3 K Cal

Answer:

D. 7.3 K Cal

x) Citrus fruits are the source of vitamin.

(Mark 1)

- A. "C"
- B. "K"
- C. "D"
- D. "B"

Answer:

A. "C"

xi) Individuals having AB blood group are called (Mark 1)

- A. Universal donor
- B. Hypotonic
- C. Necrosis
- D. Universal recipient

Answer:

D. Universal recipient

xii) Which cells are shorten in dengue fever? (Mark 1)

- A. Chondrocytes
- B. Platelets
- C. WBC
- D. RBC

Answer:

B. Platelets

Section-A

Q.2 i) Why is Jabir Bin Hayan famous? (Marks 2)

Q.2 ii) Why are quantitative observations more accurate than qualitative ones? (Marks 2)

Q.2 iii) What is control in experiments? (Marks 2)

Q.2 iv) Define parasite. Give two examples. (Marks 2)

Q.2 v) What is meant by three kingdom classification? (Marks 2)

Q.2 vi) What are major causes of species extinction? (Marks 2)

Q.2 vii) Differentiate between centriole and centrosome. (Marks 2)

Q.2 viii) Briefly explain the location and function of ribosomes.

Marks 2)

Q.3 i) Describe G₀ phase. (Marks 2)

Q.3 ii) Define necrosis. (Marks 2)

Q.3 iii) How cytokinesis takes place in animal cells? (Marks 2)

- Q.3 iv) Describe the effect of temperature on enzyme activity. (Marks 2) (Ma
- Q.3 v) Differentiate between anabolism and catabolism. (Marks 2)
- Q.3 vi) What is photosynthesis? Write its chemical equation. (Marks 2)
- Q.3 vii) Differentiate between oxidation and reduction. (Marks 2)
- Q.3 viii) What is effect of light intensity and temperature in photosynthesis?
- Q.4 i) Why is digestion necessary for human cells? (Marks 2)
- Q.4 ii) Write down two functions of hydrochloric acid in the stomach. (Marks 2)
- Q.4 iii) Write two drawbacks of the use of caffeine. (Marks 2)
- Q.4 iv) What is appendix? (Marks 2)
- Q.4 v) Define pulmonary circulation. (Marks 2)
- Q.4 vi) What is bypass surgery? Write its benefit. (Marks 2)
- Q.4 vii) Why does it bleed from the nose of dengue fever patient? (Marks 2)
- Q.4 viii) Write down names of vessels found in the vascular system. (Marks 2)
- Q.5 a) Write a note on population and community level organization. (Marks 5)
- Q.5 b) What do you know about centrioles? (Marks 4)
- Q.6 a) How does the temperature and substrate concentration affect the rate of enzymes action? (Marks 5)
- Q.6 b) Who discovered the dark reactions? Write the summary of dark reactions of photosynthesis. (Marks 4)
- Q.7 a) Describe ABO blood group system with the help of diagram. (Marks 5)
- Q.7 b) Write down a note on blood cancer and thalassemia. (Marks 4)

SAHIWAL BOARD

GRADE 9

BIOLOGY

2018 GROUP 2

MCQ'S

Section-B (MCQs)

i) Number of bio-elements is

(Mark 1)

- A. 48
- B. 32
- C. 24
- D. 16

Answer:

D. 16

ii) Liver transplantation belongs to

(Mark 1)

- A. Animal husbandry
- B. Biotechnology
- C. Farming
- D. Surgery

Answer:

D. Surgery

iii) Meaning of air is

(Mark 1)

- A. Fresh air
- B. Odour
- C. Smoke
- D. Air

Answer:

D. Air

iv) Kingdom of fern is

(Mark 1)

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

Answer:

C. Plantae

v) Robert Brown discovered in plants

(Mark 1)

A. Nucleus

B. Mitochondrion

C. Cell

D. Ribosome

Answer:

A. Nucleus

vi) The fluidity of cell membrane is due to

(Mark 1)

A. Chitin

B. Vitamin

C. Protein

D. Lipid

Answer:

D. Lipid

vii) Formation process of new tumors is called

(Mark 1)

A. Regeneration

B. Crossing over

C. Metastasis

D. Synapsis

Answer:

C. Metastasis

viii) Term of metabolism is

(Mark 1)

A. Hindi

B. Greek

C. Chinese

D. Arabic

Answer:

B. Greek

ix) Number of phosphate groups in ATP molecules is

(Mark 1)

A. 8

B. 5

C. 3

D. 2

Answer:

C. 3

x) Villi are found in

(Mark 1)

- A. Heart
- B. Liver
- C. Large intestine
- D. Small intestine

Answer:

- D. Small intestine

xi) Universal blood donor group is

(Mark 1)

- A. B
- B. A
- C. O
- D. AB

Answer:

- C. O

xii) The responsibility of transportation of food throughout the body of plant is

(Mark 1)

- A. Phloem
- B. Xylem
- C. Cortex
- D. Stoma

Answer:

- A. Phloem

Section-B

Q.2 i) Write the name of six main bioelements.

(Marks 2)

Q.2 ii) What is meant by colonial type of organization?

(Marks 2)

Q.2 iii) Write down important observations of A.F.A King.

(Marks 2)

Q.2 iv) Define proportion.

(Marks 2)

Q.2 v) Viruses are called a-cellular. Why?

(Marks 2)

Q.2 vi) Define binomial nomenclature.

(Marks 2)

Q.2 vii) Differentiate between plasma membrane and cell membrane.

(Marks 2)

Q.2 viii) Define passive diffusion.

(Marks 2)

Q.3 i) Differentiate between karyokinesis and cytokinesis.

(Marks 2)

Q.3 ii) How the process of cytokinesis occurs in plants?

(Marks 2)

Q.3 iii) Describe the role of mitosis in regeneration.

(Marks 2)

Q.3 iv) Define metabolism.

(Marks 2)

- Q.3 v) What is meant by saturation of active sites? (Marks 2)
- Q.3 vi) Write the name of two accessory pigments. (Marks 2)
- Q.3 vii) Describe the effect of concentration of carbon dioxide on photosynthesis. (Marks 2)
- Q.3 viii) Differentiate between aerobic and anaerobic respiration. (Marks 2)
- Q.4 i) Which parts are there in human alimentary canal? Write their names. (Marks 2)
- Q.4 ii) Write the symptoms of ulcer. (Marks 2)
- Q.4 iii) Write down the causes of constipation. (Marks 2)
- Q.4 iv) What are vitamins? Write the name of fat-soluble vitamins. (Marks 2)
- Q.4 v) Write the functions of white blood cells and platelets. (Marks 2)
- Q.4 vi) Write down the names of two systems of materials transport in human. (Marks 2)
- Q.4 vii) What is pericardial fluid? Give its function. (Marks 2)
- Q.4 viii) Write the causes of dengue fever. (Marks 2)
- Q.5 a) Write a note on organ and organ system level. (Marks 5)
- Q.5 b) What are plastids? Describe their types. (Marks 4)
- Q.6 a) Define enzymes and explain their uses in different industries. (Marks 5)
- Q.6 b) What do you know about centrioles? (Marks 4)
- Q.7 a) Define protein-energy malnutrition and give detail of diseases caused by protein-energy malnutrition. (Marks 4)
- Q.7 b) Explain the factors affecting the rate of transpiration. (Marks 5)