

# LAHORE BOARD

## GRADE 9

## BIOLOGY

## 2016 GROUP 1

### MCQ's

**i) This blood group is known as universal donor.**

**(Mark 1)**

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

**Answer:**

D. O

**ii) A normal mature human heart has weight about.**

**(Mark 1)**

- A. 200-250 gram
- B. 250-350 gram
- C. 150-200 gram
- D. 100-200 gram

**Answer:**

B. 250-350 gram

**iii) ATP is an example of.**

**(Mark 1)**

**1)**

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

**Answer:**

D. Nucleotide

**iv) Jabir Bin Hayan was born in.**

**(Mark 1)**

**1)**

- A. Iraq
- B. Iran
- C. Kuwait
- D. China

**Answer:**

B. Iran

**v) National animal of Pakistan is.**

**(Mark 1)**

**1)**

- A. Chakor
- B. Ibex
- C. Urial
- D. Markhor

**Answer:**

D. Markhor

**vi) It is the site of protein synthesis.**

**(Mark**

**1)**

A. Ribosomes

B. Carbohydrates

C. Lipids

D. Fats

**Answer:**

A. Ribosomes

**vii) Chemically enzymes are:**

**(Mark**

**1)**

A. Proteins

B. Carbohydrates

C. Lipids

D. Fats

**Answer:**

A. Proteins

**viii) Scurvy is caused due to deficiency of \_\_\_ in body.**

**(Mark 1)**

A. Protein

B. Vitamin C

C. Vitamin D

D. Lipids

**Answer:**

B. Vitamin C

**ix) Scientific study of living organisms is called.**

**(Mark**

**1)**

A. Biotechnology

B. Chemistry

C. Biology

D. Geology

**Answer:**

C. Biology

**x) At which stage cell doubles its chromosomes.**

**(Mark 1)**

A. G-1 phase

B. S-phase

C. G-2 Phase

D. G-0 phase

**Answer:**

B. S-phase

**xi) Which of these is acellular?**

**(Mark**

**1)**

A. Human

B. Bacteria

C. Fungi

D. Virus

**Answer:**

D. Virus

**xii) Malaria is spread in sparrows by mosquito. (Mark**

**1)**

- A. Culex
- B. Anopheles
- C. Dengue
- D. Aphids

**Answer:**

- A. Culex

**Q.2 i) Differentiate between the functions of mitochondria and ribosomes. (Marks**

**2)**

**Q.2 ii) Write down the names of bio-molecules groups. (Marks 2)**

**Q.2 iii) Write two characteristics of good hypothesis. (Marks 2)**

**Q.2 iv) Write definition of bio-informatics. (Marks 2)**

**Q.2 v) Write down two benefits of biodiversity. (Marks 2)**

**Q.2 vi) Write two effects of deforestation. (Marks 2)**

**Q.2 vii) Define blebs. What is another names of these? (Marks 2)**

**Q.2 vii) Define blebs. What is another names of these? (Marks 2)**

**Q.3 i) State cell theory. (Marks 2)**

**Q.3 ii) What is meant by hypertonic and hypotonic solutions? (Marks 2)**

**Q.3 iii) Define diffusion. (Marks 2)**

**Q.3 iv) Write down two characteristics of enzymes. (Marks 2)**

**Q.3 v) Differentiate between anabolism and catabolism. (Marks 2)**

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

**Q.3 vii) Define cellular respiration. (Marks 2)**

**Q.3 viii) Differentiate between aerobic and anaerobic respiration. (Marks 2)**

**Q.4 i) Differentiate between nutrient and nutrition. (Marks 2)**

**Q.4 ii) What are vitamins? Which are two main groups of vitamins? (Marks 2)**

**Q.4 iii) Define balanced diet. (Marks 2)**

**Q.4 iv) What are the food source of proteins? (Marks 2)**

**Q.4 v) Describe the preventive measures about dengue fever. (Marks 2)**

**Q.4 vi) What is systemic circulation. (Marks 2)**

**Q.4 vii) How the sound of lubb-dub is produced during heart beat? (Marks 2)**

**Q.4 viii) Write any two differences between arteries and veins. (Marks 2)**

**Q.5 a) Describe role of Muslim scientists. (Marks 4)**

**Q.5 b) Differentiate between prokaryotes and eukaryotes. (Marks 5)**

**Q.6 a) Write detailed note on apoptosis. (Marks 4)**

**Q.6 b) Describe the summary of events of light reactions. (Marks 5)**

**Q.7 a) What is the role of calcium and iron in human growth? Marks 4)**

**Q.7 b) Write detailed note on structure and function of human heart.**

**(Marks 5)**

# LAHORE BOARD

## GRADE 9

## BIOLOGY

## 2016 GROUP 2

### MCQ's

**i) Pakistan's National bird is.**

**(Mark**

**1)**

- A. Chakor patridge
- B. Parrot
- C. Sparrow
- D. Pigeons

**Answer:**

A. Chakor patridge

**ii) Cell wall is absent**

**in.**

**(Mark 1)**

- A. Plants
- B. Fungi
- C. Bacteria
- D. Animals

**Answer:**

D. Animals

**iii) The resolution of human eye is.**

**(Mark**

**1)**

- A. 0.1 mm
- B. 0.2 mm
- C. 0.3 mm
- D. 0.4 mm

**Answer:**

A. 0.1 mm

**iv) Change in genes is called.**

**(Mark**

**1)**

- A. Regeneration
- B. Mutation
- C. Growth
- D. Budding

**Answer:**

B. Mutation

**v) Dengue fever is spread by.**

**(Mark**

**1)**

- A. Culix mosquito
- B. Aedes mosquito
- C. Anopheles mosquito
- D. Female Anopheles mosquito

**Answer:**

B. Aedes mosquito

**vi) The term metabolism is derived from which language? (Mark 1)**

- A. Latin
- B. Greek
- C. German
- D. Arabic

**Answer:**

B. Greek

**vii) The microscopic study of tissues is called. (Mark 1)**

- A. Zoology
- B. Morphology
- C. Physiology
- D. Histology

**Answer:**

D. Histology

**viii) The largest and strongest chamber in human heart is. (Mark 1)**

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

**Answer:**

C. Left ventricle

**ix) The founder of medicine is. (Mark 1)**

- A. Jabir Bin Hayan
- B. Abdul Malik
- C. Bu Ali Sina
- D. Al-Biruni

**Answer:**

C. Bu Ali Sina

**x) Normal pH of blood is. (Mark 1)**

- A. 7.1
- B. 7.4
- C. 7.7
- D. 7.9

**Answer:**

B. 7.4

**xi) The main photosynthetic pigment is. (Mark 1)**

- A. Carotenoids
- B. Chlorophyll-b
- C. Chlorophyll-a
- D. Chlorophyll-ab

**Answer:**

C. Chlorophyll-a

**xii) Deficiency of iodine causes.**

**(Mark**

**1)**

- A. Goiter
- B. Anemia
- C. Scurvy
- D. Obesity

**Answer:**

A. Goiter

**Q.2 i) What is biotechnology? Elaborate its usefulness. (Marks 2)**

**Q.2 ii) What is the role of Bu Ali Sina in biology? (Marks 2)**

**Q.2 iii) Differentiate between theory and law. (Marks 2)**

**Q.2 iv) How hypothesis is formed? (Marks 2)**

**Q.2 v) What are the effects of human beings on biodiversity? (Marks 2)**

**Q.2 vi) Why viruses are not included in five kingdom system of classification? (Marks 2)**

**Q.2 vii) What is the basic difference in cell division of plants and animals?**

**(Marks 2)**

**Q.2 viii) Plants don't make gamete by meiosis, why? (Marks 2)**

**Q.3 i) Differentiate between endocytosis and exocytosis. (Marks 2)**

**Q.3 ii) What is meant by hypertonic and hypotonic solution? (Marks 2)**

**Q.3 iii) Write note on centrioles. (Marks 2)**

**Q.3 iv) What is meant by denaturing of enzyme? (Marks 2)**

**Q.3 v) Write down uses of enzymes. (Marks 2)**

**Q.3 vi) What is optimum temperature? (Marks 2)**

**Q.3 vii) What is meant by physiology? (Marks 2)**

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

**Q.4 i) What is the function of vitamin C in body? (Marks 2)**

**Q.4 ii) Write down the names of two diseases caused by minerals deficiency. (Marks 2)**

**Q.4 iii) Write components of human food. (Marks 2)**

**Q.4 iv) Write the weight and size of liver in an adult human. (Marks 2)**

**Q.4 v) Define systole and diastole. (Marks 2)**

**Q.4 vi) How much white blood cells are present in the body and what are their functions? (Marks 2)**

**Q.4 vii) Write down the names of two systems of transport of materials in human. (Marks 2)**

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

**Q.5 a) Biology is divided into different branches. Explain any four.**

**(Marks 4)**

**Q.5 b) Differentiate between prokaryotic and eukaryotic cell. (Marks 5)**

**Q.6 a) Describe the importance of mitosis. (Marks 4)**

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

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

**Q.7 b) Explain opening and closing of stomata. (Marks 5)**

