

Biology	9 th , Lahore Board 2016	Group - I
Time: 15 Min.	Objective Type	Marks : 12

Note: Four possible answers A, B, C and D to each question are given. The choice which you think is correct, fill that circle in front of that question with Marker or Pen ink in the answer-book. Cutting or filling two or more circles will result in zero mark in that question.

1. 1. Chemically enzymes are :
 (A) Protein (B) Carbohydrates
 (C) Lipids (D) Fats
2. Scurvy is caused due to deficiency of — in body:
 (A) Protein (B) Vitamin C
 (C) Vitamin D (D) Lipids
3. It is the site for protein synthesis :
 (A) Ribosomes (B) Vacuoles
 (C) Mitochondria (D) Nucleus
4. This blood group is known as universal donor:
 (A) A (B) B
 (C) AB (D) O
5. Scientific study of living organisms is called :
 (A) Biotechnology (B) Chemistry
 (C) Biology (D) Geology
6. A.T. P is an example of:
 (A) Amino acid (B) Fatty acid
 (C) Nucleic acid (D) Nucleotide
7. Jaber bin Hayan was born in :
 (A) Iraq (B) Iran
 (C) Kuwait (D) China
8. At which stage cell doubles its chromosomes:
 (A) G-1 phase (B) S-phase

- (C) G-2 phase (D) G-0 phase
- 9** National animal of Pakistan is :
 (A) Chakor (B) Ibex
 (C) Urial (D) Markhor
- 10** Malaria is spread in sparrows by mosquito :
 (A) Culex (B) Anopheles
 (C) Dengue (D) Aphids
- 11** A normal mature human heart has weight about:
 (A) 200-250 gram (B) 250-350 gram
 (C) 150-200 gram (D) 100-200 gram
- 12** Which of these is acellular:
 (A) Human (B) Bacteria
 (C) Fungi (D) Virus

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PART-I

- 2** Write short answers to any Five (5) questions: 10
- i** Differentiate between function of mitochondria and ribosomes.
 - ii** Write down names of bio-molecules groups.
 - iii** Write two characteristics of good hypothesis.
 - iv** Write definition of bio-informatics.
 - v** Write down two benefits of bio-diversity.
 - vi** Write two effects of deforestation.
 - vii** Define blebs. What is another name of these?
 - viii** Differentiate between chromatin and chromosomes.
- 3** Write short answers to any Five (5)

questions:

10

- i** State the cell theory.
- ii** What is meant by hypertonic and hypotonic solutions?
- iii** Define diffusion.
- iv** Write down the two characteristics of enzymes.
- v** Differentiate between anabolism and catabolism.
- vi** What is meant by optimum temperature?
- vii** Define cellular respiration.
- viii** Differentiate between aerobic and anaerobic respiration.

4. Write short answers to any Five (5) questions: 10

- i** Differentiate between nutrient and nutrition.
- ii** What are vitamins? Which are the two main groups of vitamins?
- iii** Define balanced diet.
- iv** What are the food sources of proteins?
- v** Describe the preventive measures about dengue fever.
- vi** What is systemic circulation?
- vii** How the sound of lubb dubb is produced during heart beat?
- viii** Write any two differences between arteries and veins.

PART-II

Note : Attempt any TWO questions.

- 5.(a)** Describe role of Muslim Scientists. 4
- (b)** Differentiate between prokaryotes and eukaryotes. 5
- 6.(a)** Write a detailed note on apoptosis. 4
- (b)** Describe the summary of the events of light

- reaction. 5
- 7.(a) What is the role of calcium and iron in human growth? 4
- (b) Write a detailed note on structure and function of human heart. 5

Biology	9 th , Lahore Board 2016	Group – II
Time:15 Min.	Objective Type	Marks : 12

Note: Four possible answers A, B, C and D to each question are given. The choice which you think is correct, fill that circle in front of that question with Marker or Pen ink in the answer-book. Cutting or filling two or more circles will result in zero mark in that question.

- 1 The term metabolism is derived from which language :
- (A) Latin (B) Greek
(C) German (D) Arabic
- 2 Deficiency of iodine causes :
- (A) Goiter (B) Anaemia
(C) Scurvy (D) Obesity
- 3 Cell wall is absent in:
- (A) Plants (B) Fungi
(C) Bacteria (D) Animals
- 4 Normal pH of blood is :
- (A) 7.1 (B) 7.4
(C) 7.7 (D) 7.9
- 5 The microscopic study of tissues is called :
- (A) Zoology (B) Morphology
(C) Physiology (D) Histology
- 6 The main photosynthetic pigment is:

- (A) Carotenoids (B) Chlorophyll-b
(C) Chlorophyll-a (D) Chlorophyll-ab
- 7** The founder of medicine is :
(A) Jabir bin Hayan (B) Abdul Malik
(C) Bu Ali Sina (D) Al-Beruni
- 8** Change in genes is called :
(A) Regeneration (B) Mutation
(C) Growth (D) Budding
- 9** Pakistan's national bird is :
(A) Chakor partridge (B) Parrot
(C) Sparrow (D) Pigeon
- 10** Dengue fever is spread by :
(A) Culex mosquito (B) Aedes mosquito
(C) Anopheles mosquito
(D) Female anopheles mosquito
- 11** The largest and strongest chamber in heart is :
(A) Right atrium (B) Left atrium
(C) Left ventricle (D) Right ventricle
- 12** The resolution of human eye is :
(A) 0.1 mm (B) 0.2 mm
(C) 0.3 mm (D) 0.4 mm

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PART-I

- 2.** Write short answers to any Five (5) questions: 10
its
- i** What is Biotechnology? Elaborate usefulness.
- ii** What is role of Bu Ali Sena in Biology?
- iii** Differentiate between theory and law.

- iv How hypothesis is framed?
- v What are effects of human being on Biodiversity?
- vi Why virus are not included in five kingdom system?
- vii What is basic difference in cell division of plants and animals?
- viii Plants do not make their gametes by meiosis. Why?

3. Write short answers to any Five (5) questions: 10

- i Differentiate between Endocytosis and Exocytosis.
- ii What is meant by hypertonic and hypotonic solution?
- iii Write note on Centrioles.
- iv What is meant by denaturing of enzymes?
- v Write down uses of enzymes.
- vi What is optimum temperature?
- vii What is meant by photolysis?
- viii What is lactic acid fermentation?

4. Write short answers to any Five (5) questions: 10

- i What is the function of vitamin C in body?
- ii Write down the name of two diseases caused by minerals deficiency.
- iii Write components of human food.
- iv Write the weight and size of liver in an adult human.
- v Define systole and diastole.
- vi How much white blood cells are present in the body and what are their functions?
- vii Write down names of two systems of transport of materials in human.

viii Write the causes of dengue fever.

PART-II

Note : Attempt any TWO questions.

- 5.(a)** Biology is divided into different branches. Explain any four. 4
- (b)** Differentiate between prokaryotic and eukaryotic cells. 5
- 6.(a)** Describe the importance of mitosis. 4
- (b)** Describe the mechanism of respiration. 5
- 7.(a)** Describe the importance of fertilizers. 4
- (b)** Explain the opening and closing of stomata. 5