

# BIOLOGY

# 2016

Time: 30 Minutes

Max. Marks: 15

## SECTION "A" (MULTIPLE CHOICE QUESTIONS)

1. Choose the correct answer for each from the given options: (15)

- (ii) Alkhalil, Al-Ibtil, Al-Wahid were written by:
- Jabir Bin Hayan • Abdul Malik Asmai
  - Ibn-Al-Haitham • Ziauddin Baitar
- (ii) The family of Mustard is:
- Brassicaceae • Poaceae • Rosaceae • Palmaceae
- (iii) Characteristic of viruses due to which they are considered as living:
- Non-cellular structure • Total Parasite
  - Undergo Crystallization • Undergo Reproduction
- (iv) Glycogen is a molecule that belongs to:
- Carbohydrate • Fats • Protein • Vitamins
- (v) Respiratory Organs of insects are:
- Flame cells • Malpighian Tubules • Trachea • Lungs
- (vi) R.B.G. are concerned with the transport of:
- Nutrients • Oxygen & Carbon dioxide
  - Hormones • Enzymes
- (vii) Blood is filtered in the Kidneys through the:
- Bowman's capsule • Glomerulus
  - Loop of Henle • Renal Tubule
- (viii) The part of brain associated with the intelligence, memory, etc is:
- Cerebrum • Cerebellum • Pons • Medulla Oblongata
- (ix) The number of chromosomes in each human cell is:
- 23 • 26 • 36 • 46
- (x) Cocci bacteria are of this shape:
- Rounded • Rod shaped • Spiral shaped • Curved
- (xi) Cuscuta plant is a: • Total Parasite
- Partial Parasite • Saprophyte • Symbiont
- (xii) The book "Kitab-ul-Manazir" is written by:
- Ibn-ul-Haitham • Bu-Ali-Seena
  - Al-Razi • Jabir-Bin Hayan
- (xiii) It has no teeth in the mouth of:
- Shark • Frog • Man • Eagle
- (xiv) The sensory layer of eye ball is:
- Sclerotic • Choroid • Retina • Cornea
- (xv) This disease is caused by Salmonella typhosa:
- Malaria • Dysentery • Cholera • Typhoid

# BIOLOGY

# 2016

Time: 2 ½ Hours

Max. Marks: 68

## SECTION "B" (SHORT-ANSWER QUESTIONS)

### ZOOLOGY

(MARKS 21)

**NOTE: Answer 7 questions from this section.**

- Draw a neat and labeled diagram of Dorsal view of heart of Frog.
- Write three functions of blood.
- Define Binary Fission and Multiple Fission.
- Write differences between any one of the following:  
(i) Arteries & Vein (ii) Anaemia and Haemophilia
- What is Biology? Define any two branches of Biology.
- Write the names of three Endocrine Glands and also write names of Hormones secreted by these glands.
- Define and give one example of each of the following:  
(i) Carnivores (ii) Herbivores (iii) Omnivores
- Draw a neat and labeled diagram of the structure of a human tooth.
- Write three differences between Prokaryotic cell and Eukaryotic cell.
- Write three main points of Darwin's theory of Evolution.

### BOTANY

(MARKS 21)

**NOTE: Answer 7 questions from this section.**

- Write differences between any one of the following:  
(i) Angiosperm and Gymnosperm  
(ii) Respiration and Combustion
- Define any two:  
(i) Tactic movement (ii) Species (iii) Decomposers
- Draw a neat and labeled diagram of Pitcher Plant (Insectivorous):
- What is pollination? Write names of two type of pollination.
- Write three points about importance of Transpiration for plants.
- Draw a neat and labeled diagram of Chlamydomonas.
- Write three points of importance of fungi.
- Write short note on Flora of Pakistan.
- Define the following:  
(i) Osmosis (ii) Biogenesis (iii) Mitosis
- Write the name of the four whorls of flower of Brassica and write one function of each.

## SECTION 'C' (DETAILED-ANSWER QUESTIONS)

### ZOOLOGY

(MARKS 14)

**NOTE: Attempt 2 questions from this section.**

- Describe disorders of Respiratory system in man.
- Draw a neat and labeled diagram of Internal Structure of eye of Frog.
- What is tissue? Describe any two types of animal tissues with the help of labeled diagram.

### (DETAILED-ANSWER QUESTIONS)

### BOTANY

(MARKS 14)

**NOTE: Attempt 2 questions from this section.**

- Draw a neat and labeled diagram of T.S. of Brassica Root.
- Describe an experiment to prove that Carbon dioxide is essential for photosynthesis. Also draw the diagram.
- What is meant by Dispersal of Seeds and Fruits? Describe any two methods of dispersal of seeds & fruits.