

Biology	Lahore Board 2016	Inter Part-I Group - I
Time: 20 Min.	Objective Type	Marks = 17

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 The study of parasite is called :  
 (A) Paleontology (B) Histology  
 (C) Microbiology (D) Parasitology
2. In bacterial cells the water percentage is :  
 (A) 70% (B) 40%  
 (C) 60% (D) 50%
3. The optimum temperature for enzyme to work at maximum rate in human is :  
 (A) 35° (B) 37°  
 (C) 40° (D) 30°
4. Robert Brown reported the presence of:  
 (A) Lysosome (B) Ribosomes  
 (C) Mitochondria (D) Nucleus
5. The number of capsomeres present in herpes virus capsid is :  
 (A) 252 capsomeres (B) 162 capsomeres  
 (C) 250 capsomeres (D) 100 capsomeres
6. The bacteria with a tuft of flagella at one pole is called :  
 (A) Atrichous (B) Monotrichous  
 (C) Amphitrichous (D) Lophotrichous
7. Apicomplexans move by :  
 (A) Tube feet (B) Cilia  
 (C) Flexing (D) Pseudopodia
8. In fungi spores are produced inside the reproductive structures called :  
 (A) Conidia (B) Sporangia  
 (C) Basidia (D) Ascocarps
9. The bryophytes are non-vascular plants :  
 (A) Flowering plants (B) Flowerless plants  
 (C) Gametophytic plants (D) Sporophytic plants
10. Carbohydrate digesting enzymes are called :  
 (A) Ligase (B) Amylase  
 (C) Protease (D) Lipase
11. Respiratory activity which occurs in plants during day time is called :  
 (A) Respiration (B) Transpiration  
 (C) Photorespiration (D) Cutinious respiration
12. In birds the organ of voice is called :  
 (A) Larynx (B) Syrinx  
 (C) Vocal cord (D) Voice box
13. Which is the true sequence of bones in the mammalian ear :  
 (A) Malleus, incus and stapes  
 (B) Incus and stapes  
 (C) Stapes and malleus (D) Malleus and stapes
14. The electron transport chain system plays role in generation of ATP by :  
 (A) Photosynthesis (B) Chemiosmosis  
 (C) Photosystem (D) Dark reaction
15. The exchange of gases (CO<sub>2</sub> and O<sub>2</sub>) between the organism and its environment is called :  
 (A) Respiration (B) External respiration  
 (C) Cellular respiration (D) Anaerobic respiration
16. In the embryonic life the red blood cells are formed in :  
 (A) Red bone marrow (B) Liver and spleen  
 (C) In bone marrow of sternum and ribs  
 (D) Bone marrow of vertebrae
17. The heart is enclosed in a double membranous sac called :  
 (A) Epicardium (B) Myocardium  
 (C) Pericardium (D) Endocardium

<b>Biology</b>	<b>Lahore Board 2016</b>	<b>Inter Part-I Group – I</b>
<b>Time: 2.40 hrs</b>	<b>Essay Type</b>	<b>Marks = 68</b>

### SECTION – I

**2. Write short answers to any Eight (8) questions: 16**

- (i) Define parasitology.
- (ii) Differentiate between deductive and inductive reasoning.
- (iii) What is glycosidic bond?
- (iv) Define prosthetic group and give example.
- (v) What is induced fit model of an enzyme action?
- (vi) Define inhibitors and give an example.
- (vii) Name the body size and locomotory organs of zooflagellates.
- (viii) What is sleeping sickness?
- (ix) What are actinopods?
- (x) What are kelps?
- (xi) Differentiate between obligate and facultative parasites.
- (xii) Name the type of hypha and sexual spores in sac fungi.

**3. Write short notes on any EIGHT (8) questions: 16**

- (i) What is endocytosis?
- (ii) Write the role of glyoxysomes.
- (iii) Write basic characters of chordates, give an example.
- (iv) What are coral reefs?
- (v) What is regeneration, give an example?
- (vi) How sponges reproduce asexually?
- (vii) What is glycolysis, where it takes place in the cell?
- (viii) How action spectra can be obtained?
- (ix) What is cellular respiration?
- (x) What is emphysema?
- (xi) What is inspiration?
- (xii) What is respiratory distress syndrome?

**4. Write short answers to any SIX (6) questions: 12**

- (i) What are pox? (Note: The image contains a typo 'pocks')
- (ii) Write down misuses of antibiotics.
- (iii) Differentiate between microphylls and megaphylls.
- (iv) Define double fertilization.
- (v) Name three pairs of salivary glands.
- (vi) What is detritus feeding? Give example.
- (vii) Write down symptoms in plants caused by deficiency of phosphorus and potassium.
- (viii) What are blue babies?
- (ix) Differentiate between apoplast and symplast pathway.

### SECTION-II

**Note: Attempt any THREE questions.**

**5. (a) What is cloning? Describe process of cloning in detail. 4**

**(b) Describe the adaptation of bryophytes to land habitat. 4**

**6. (a) Give the importance of proteins. 4**

**(b) Describe any two common diseases related to nutrition. 4**

**7. (a) Explain structure and function of mitochondria. 4**

**(b) Discuss different methods of asexual reproduction in fungi. 4**

**8. (a) Write a note on any two viral diseases. 4**

**(b) Prove that water is the source of oxygen during photosynthesis. 4**

**9. (a) Write a note on nutrition of bacteria. 4**

**(b) What is myocardial infarction? Explain. 4**

Biology	Lahore Board 2016	Inter Part-I Group – II
Time: 20 Min.	Objective Type	Marks = 17

**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 Lovastatin is used to control blood:
  - (A) Pressure
  - (B) Cholesterol
  - (C) Glucose
  - (D) Uric acid
2. Shrinkage of protoplast due to exosmosis of water is called:
  - (A) Plasmolysis
  - (B) Guttation
  - (C) Imbibition
  - (D) Bleeding
3. Iron containing protein is:
  - (A) Cytochrome
  - (B) Ferredoxin
  - (C) Plastocyanin
  - (D) Plastoquinone
4. Keratin is an example of fibrous protein present in :
  - (A) Nails
  - (B) Blood
  - (C) Muscles
  - (D) Bones
5. Mosquito injects plasmodium to human in the form of :
  - (A) Sporozoites
  - (B) Merozoites
  - (C) Gametophytes
  - (D) Cysts
6. Number of legs in arachnids are :
  - (A) 2
  - (B) 4
  - (C) 6
  - (D) 8
7. The optimum pH of pepsin enzyme is:
  - (A) 2.00
  - (B) 4.5
  - (C) 5.5
  - (D) 6.8
8. Casparian strips are present in the cells of root :
  - (A) Epidermis
  - (B) Cortex
  - (C) Endodermis
  - (D) Pith
9. Number of air sacs in birds is :
  - (A) 6
  - (B) 7
  - (C) 8
  - (D) 9
10. The plasma membrane and everything present within it is called :
  - (A) Chloroplast
  - (B) Protoplast
  - (C) Cytoplasm
  - (D) Protoplasm
11. Pepsin is secreted by :
  - (A) Mucus cell
  - (B) Zymogen cell
  - (C) Parietal cell
  - (D) Oxyntic cell
12. The number of capsomeres present in the capsid of herpes virus are :
  - (A) 162
  - (B) 252
  - (C) 262
  - (D) 152
13. Common names of ancylostoma duodenale is :
  - (A) Ship-worm
  - (B) Hook-worm
  - (C) Pin-worm
  - (D) Tapeworm
14. A large regional community primarily determined by climate is :
  - (A) Population
  - (B) Biosphere
  - (C) Ecosystem
  - (D) Biome
15. Clitoria ternatea is used against :
  - (A) Cat bite
  - (B) Dog bite
  - (C) Snake bite
  - (D) Scorpion bite
16. The first step of Krebs cycle is union of acetyl CoA with oxaloacetate to form :
  - (A) Isocitrate
  - (B)  $\alpha$ -ketoglutarate
  - (C) Citrate
  - (D) Malate
17. The bacteria without any flagella are called :
  - (A) Atrichous
  - (B) Monotrichous
  - (C) Lophotrichous
  - (D) Peritrichous

<b>Biology</b>	<b>Lahore Board 2016</b>	<b>Inter Part-I Group – II</b>
<b>Time: 2.40 hrs</b>	<b>Essay Type</b>	<b>Marks = 68</b>

### SECTION – I

**2. Write short answers to any Eight (8) questions: 16**

- (i) Write the names of four eras of geological time chart.
- (ii) What is phyletic lineage?
- (iii) What is heat capacity of water, give its importance?
- (iv) What is cofactor, give its types?
- (v) Differentiate between apoenzyme and holoenzyme.
- (vi) Why enzymes are denatured at high temperature?
- (vii) What are protists, how they differ from plant and animal?
- (viii) What are trichonymphs?
- (ix) Why phytophthora infestans is infamous in human history?
- (x) What are kelps?
- (xi) What is nuclear mitosis?
- (xii) What are lichens, write ecological role they play?

**3. Write short notes on any EIGHT (8) questions: 16**

- (i) Give name of Robert Hooke's publication on cell discovery.
- (ii) What is endocytosis? Differentiate between phagocytosis and pinocytosis.
- (iii) Give two differences between protostomes and deuterostomes.
- (iv) What is polymorphism?
- (v) Name four harmful effects of insects.
- (vi) Give two basic characters of phylum chordata.
- (vii) What is pay off phase of glycolysis?
- (viii) How is carbon dioxide absorbed by the cell wall of the mesophyll cells?
- (ix) How in earthworm respiration takes place?
- (x) What are alveoli? Give their functions.
- (xi) Give composition of breathed air in man.
- (xii) Give two properties of respiratory surfaces in animal.

**4. Write short answers to any SIX (6) questions: 12**

- (i) Write names of four common human viral diseases.
- (ii) What are pili, give their functions?
- (iii) Write two advance characters of anthocerospida sporophyte.
- (iv) What are gymnosperms, give an example?
- (v) Differentiate between obligate and facultative parasites.
- (vi) What is food poisoning, write its symptoms?
- (vii) Give the composition of saliva.
- (viii) Differentiate between plasmolysis and deplasmolysis.
- (ix) What is single circuit heart, give an example?

### SECTION-II

**Note: Attempt any THREE questions.**

- 5. (a) Write a note on conservation and protection of environment. 4**
- (b) Describe the different adaptive characters for terrestrial environment in bryophyte. 4**
- 6. (a) Write note on polysaccharides. 4**
- (b) Describe digestion in planaria. 4**
- 7. (a) Write down the structure and function of chloroplast. 4**
- (b) What do you know about mutualistic mode of nutrition in fungi? 4**
- 8. (a) Describe some viral diseases, which are common in Pakistan. 4**
- (b) Give the outline of Kreb's cycle. (no need of description) 4**
- 9. (a) Differentiate between gram positive and gram negative bacteria. 4**
- (b) Describe the blood plasma in detail. 4**