

Biology	Ninth Lahore Board 2019	Paper - I
Time: 1.45 hrs	Essay type	Marks : 48

Group - I

PART-I

2. Write short answers to any FIVE (5) questions: 10

- i** Define physiology and anatomy.
- ii** Define population and community.
- iii** What is the difference between ratio and proportion?
- iv** Write down any two characteristics of hypothesis.
- v** Define deforestation and write its causes.
- vi** Write any two characteristics of organisms of kingdom monera.
- vii** Describe briefly sclerenchyma tissues.
- viii** Define hypotonic and hypertonic solutions.

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

- i** Differentiate between chromatin and chromosomes.
- ii** How cytokinesis takes place in plants' cells?
- iii** When and who discovered meiosis?
- iv** What is meant by metabolism? Who first of all gave the concept of metabolism?
- v** Describe metabolic pathways.
- vi** What is glycolysis?
- vii** What are anaerobes? Write two examples.
- viii** Sketch molecular structure of adenosine triphosphate.

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

- i** Define allergy. Write its two symptoms.
- ii** How does insulin function in our body?
- iii** What is the function of pepsin in stomach?
- iv** Write down four causes of ulcer.
- v** How transpiration rate affects when air movement changes?
- vi** Write down four name of human heart chambers.
- vii** How pus is produced?
- viii** Write down two symptoms of dengue fever.

PART - II

Note: Attempt any TWO questions.

5.(a) Explain the relationship of biology to any other four sciences. 4

(b) Describe five differences between prokaryotic and eukaryotic cells. 5

6.(a) Describe the Lock and Key Model of mechanism of enzyme action. 4

(b) What do you mean by photosynthesis? Write the difference between photosynthesis and chemosynthesis. 5

7.(a) Describe minerals deficiency diseases. 4

(b) What do you mean by blood groups? How do we classify blood groups in terms of ABO and Rh blood group? 5