

Note: Section I is compulsory. Attempt any TWO (2) questions from Section II.

PART - I

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

- i Differentiate between micromolecules and macromolecules.
- ii What are parasites? Give an example.
- iii Write down scientific name of frog and mustard plant.
- iv How does a hypothesis differ from an observation?
- v Define bioinformatics.
- vi What is turgor pressure?
- vii Write down two roles of cytoplasm.
- viii Define magnification.
- ix What is magnification power of an electron microscope?

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

- i Why eucalyptus tree is harmful for other plants?
- ii Write down two effects of deforestation.
- iii Which animals inhabit in northern areas?
- iv What is metastasis?

v What are the advantages of meiosis?

vi Why meiosis does not occur in prokaryotes?

vii Mention four factors affecting photosynthesis.

viii Which is the end product of aerobic respiration?

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

i How the prosthetic group differ from co-enzyme?

ii Explain the lock and key model of enzyme action.

iii What is balanced diet?

iv Write the difference between Bolus and Chyme.

v What happened if excessive water reabsorbed from intestine?

vi Define the terms systole and diastole.

vii Define transpirational pull.

viii What do you mean by pulmonary circulation?

PART - II

Note: Attempt any TWO (2) questions.

Q.5(a) How would you define biology and relate it with its major divisions? 5

(b) How would you compare the structure and function of an artery, a vein and a capillary? 4

Q.6(a) Define endangered species. Explain the endangered species in Pakistan. 5

(b) Explain the limiting factors in photosynthesis. 4

Q.7(a) Write differences between prokaryotic and eukaryotic cells. 5

(b) Describe the role of large intestine in absorption of water and defecation. 4