

PART - I**Q.2** Write short answers to any Five (5) questions: 10

- i Define Biology.
- ii What is zone of life?
- iii Write scientific name of mustard plant and frog.
- iv What is biological problem?
- v Define observations and write their types.
- vi Write the two observations of AFA King.
- vii Define magnification and resolution power.
- viii What is hypertonic solution and hypotonic solution?

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

- i Differentiate between taxonomy and systematics.
- ii Define species.
- iii Differentiate between chiasmata and crossing over.

iv What is difference between malignant and benign tumors?**v** Define cell cycle.**vi** Define chromosomes.**vii** What do you mean by photosystem.**viii** Define ATP.**Q.4** Write short answers to any Five (5) questions: 10**i** Define inhibitors and activators.**ii** Define biocatalysts and write two benefits of biocatalysts.**iii** Define the specificity of enzyme. Give an example.**iv** What is meant by Villi? Write down its function.**v** Give two symptoms of constipation.**vi** Differentiate between source and sink.**vii** Define angioplasty and bypass surgery.**viii** Differentiate between atherosclerosis and arteriosclerosis.PART-II**Note:** Attempt any TWO questions.**Q.5(a)** Explain relationship of biology with five other branches of science. 5**(b)** Write a note on endocytosis. Explain your answer with labelled diagram. 4**Q.6(a)** Define the term "Extinct" and explain about endangered species of Pakistan. 5**(b)** Write a detailed note on electron transport chain. 4**Q.7(a)** Describe the digestion of food in small intestine. 5**(b)** Explain the composition and functions of white blood cells. 4