

SECTION - A

Q. Nos. 1-8 are of very short answer type carrying 1 mark each. Of these the first five questions are of multiple choice type which have to be answered simply as A, B, C or D. The remaining questions have to be answered in approximately 1-20 words each.

Q. 1. A digestive juice with a pH of approximately 2 is found inside the

- (a) Mouth
- (b) Stomach
- (c) pancreatic duct
- (d) small intestine **1**

Ans. (b)

Q. 2. What was the most significant conclusion that Mendel drew from his experiments?

1

- (a) There is considerable genetic variation in garden pea
- (b) Traits are inherited in discrete units, one from each parent
- (c) Genes are composed of DNA
- (d) Recessive genes occur as frequently as dominant ones

Ans. (d)

Q. 3. Which of the following is not a useful function of the light reactions in photosynthesis? **1**

- (a) Splitting water
- (b) Synthesis of NADPU
- (c) Converting light energy into chemical energy
- (d) Releasing oxygen for photorespiration

Ans. (c)

Q. 4. In the inflammatory response, the absence of which one of the following would prevent all the others from happening? **1**

- (a) Release of histamine
- (b) Dilation of arterioles
- (c) Increased population of phagocytes in the area
- (d) Increased permeability of blood vessels

Ans. (a)

Q. 5. A biogeographical evidence in favour of organic evolution is provided by

- (a) Archeopteryx
- (b) Modern horse
- (c) Darwin's finches
- (d) Python **1**

Ans. (c)

Q. 6. Which type of immunity is provided by vaccinations? **1**

Q. 7. Name the tissue involved in linear and lateral growth in plants. **1**

Q. 8. Why are proteases generally released an inactive form? **1**

SECTION - B

Q. Nos. 9-18 are of short answer type carrying 2 marks each. Answer them in 20-30 words each.

Q. 9. What is SA node? Where it located and what is its function? **2**

Q. 10. What is reproductive isolation? What is its significance? **2**

Q. 11. Give the scientific name of the pathogen causing Diphtheria. How is it transmitted? **2**

Q. 13. Name the hormone responsible for the descent of testes into the scrotum. Why does the failure of the process result in sterility? **2**

Q. 15. What is ELISA test? Give its full form. Give-two examples of its application **2**

Q. 17. Explain inhibitory effect of auxins with the help of one example. **2**

SECTION - C

Q. Nos. 19-27 are of short answer type carrying 3 marks each. Only one of these questions (Q. 27) based on drawing skill has internal choice. Answer the rest in 30-50 words each.

Q. 19. What is metastasis? List any four danger signals of cancer. **3**

Q. 27. Draw a diagram of the human duodenum and the associated digestive glands. Label the glands and their respective ducts pouring into the duodenum. **3**

Or

Draw a diagram to show the structure of a neuron with myelinated axon and label any six parts in it.

SECTION - D

Q. Nos. 28-30 are long answer type carrying 5 marks each. Of these two questions Q. Nos. 29 and 30 have internal choice. Answer the question in approximately in 80- 120 words each.

Q. 29. Describe the hormonal control of menstrual cycle in humans.

Or

Where does oogenesis take place? Describe the stages of the process.

