

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

نوٹ: حصہ اول لازمی ہے۔ حصہ دوم میں سے کوئی سے دو (2) سوالات کے جوابات لکھئے۔

Section - I حصہ اول

2 - Write short answers to any FIVE (5) questions. (2 × 5 = 10) کوئی سے پانچ (5) سوالات کے مختصر جوابات تحریر کیجئے۔

- What are lenticels?
- Differentiate between bronchi and bronchioles.
- Define expiration.
- What is guttation?
- Write down the size of human kidney?
- Write down the names of types of co-ordination.
- Write down the functions of sensory neurons.
- Define nerve and write down the names of its types.

3 - Write short answers to any FIVE (5) questions. (2 × 5 = 10) کوئی سے پانچ (5) سوالات کے مختصر جوابات تحریر کیجئے۔

- What is lacuna?
- Write down two big functions of human skeletal system.
- Define self pollination.
- Differentiate between asexual reproduction and sexual reproduction.
- What is chemical composition of chromosome?
- Identify two traits of pea seed studied by Mendel.
- Write down scientific name of pea plant.
- Write down the names of nitrogen bases found in DNA.

4 - Write short answers to any FIVE (5) questions. (2 × 5 = 10) کوئی سے پانچ (5) سوالات کے مختصر جوابات تحریر کیجئے۔

- Differentiate between ectoparasite and endoparasite.
- Define symbiosis.
- What is difference between abiotic and biotic components of an ecosystem?
- Define food chain and give an example.
- Write down the functions of enzyme restriction endonucleases and ligase.
- What is meant by genetic engineering?
- What are narcotics? Give two examples.
- Differentiate between broad-spectrum and narrow-spectrum antibiotics.

Section - II حصہ دوم

- (a) Describe the structure of nephron. (4)
- (b) Explain the types of joints in detail. (5)
- (a) Write down a note on thyroid gland. (4)
- (b) Explain two mechanisms of fertilization in animals. (5)
- (a) Define antibiotics and explain its major groups. (4)
- (b) Explain various steps of genetic engineering. (5)