

B.Tech.
2023
1st Sem.

Roll no: _____

B.Tech Food Technology
End Semester Examination 2023
Paper Code: BFTC-103
Paper Title: Introductory Biology

TIME: 3 hours

Max. Marks: 60

Section-A: Attempt all (18 marks)

Q 1: Multiple Choice Questions:

(CO4) (5)

- I. Following states the correct action of parathormone in human body:
 - a. Increases blood sodium level
 - b. Increases blood calcium level
 - c. Decreases blood sodium levels
 - d. Decreases blood calcium levels
- II. Hormones responsible for "flight-or-fight" response is:
 - a. Oestrogen and Progesterone
 - b. Insulin and Glucagon
 - c. Epinephrine and Norepinephrine
 - d. Thyroxine and Melatonin
- III. Neutrophils, basophils, eosinophils and monocytes are examples of _____.
 - a. Physical barriers
 - b. Cytokine barriers
 - c. Cellular barriers
 - d. Physiological barriers
- IV. The gaps in between adjacent schwann cells in a neuron are termed as:
 - a. The nodes of ranvier
 - b. Dendrites
 - c. Axons
 - d. Filaments
- V. In an ecosystem, the energy flow is always:
 - a. Always unidirectional
 - b. Always bidirectional
 - c. In any direction
 - d. Downwards

Q 2: Fill in the blanks:

(CO1, CO2, CO3) (5)

- I. The spindle fiber is derived from _____ protein
- II. _____ enzyme is responsible for unwinding of the two strands of DNA during replication.
- III. Translation in eukaryotes occurs in _____.
- IV. _____ is a polysachharide that cannot be digested by humans.
- V. Removal of introns from pre-mRNA is known as _____.

Q 3: State Hardy Weinberg's principle.

(CO3) (2)

Q 4: Differentiate between reducing and non-reducing sugars

(CO1) (2)

Q 5: Differentiate between mitosis and meiosis.

(CO3) (2)

Q 6: Define essential amino acids. Enlist.

(CO1) (2)