

T.Y BSC. 12/4/2024

[Time: 3 Hours]

[Marks: 100]

Please check whether you have got the right question paper.

N.B: 1. All questions are compulsory and carry equal marks.

2. Figures to the right indicate full marks.

3. Draw neat and labelled diagrams wherever necessary.

4. Answer the questions in proper order.

- Q. 1 Describe Any Two of the following:** (20)
- Factors affecting enzyme activity.
 - Enzyme inhibition with reference to competitive inhibitor and its kinetics.
 - Classification of enzymes based on Enzyme Commission.
- Q. 2 Explain Any Two of the following:** (20)
- Acclimation and Acclimatization.
 - Osmotic and ionic regulation in hyperosmotic environment.
 - Aestivation and Hibernation.
- Q. 3 Give an account on Any Two of the following:** (20)
- Histological structure of Pancreas and its hormones.
 - Mechanisms of hormone action.
 - Histological structure and disorders of Adrenal gland.
- Q. 4 Describe Any Two of the following:** (20)
- Advantages and limitations of animal tissue culture
 - Media used for culture.
 - Basic principles of sterilization techniques.
- Q. 5 Write short notes on: (Any Four)** (20)
- Lactate dehydrogenase.
 - Circadian rhythm.
 - T.S. of Thyroid gland.
 - Importance of sterility in cell culture.
 - Role of kidney in ionic regulation.
 - Hormones of neurohypophysis.