

Section—B

- 5.** Answer the following in about 150 words each : 12×5=60

- (a) Draw diagrams to differentiate between ecological pyramids based on predator-prey relationship and energy flow in an ecological niche.
- (b) What are the merits of remote sensing in sustainable development? Give examples.
- (c) With suitable examples and diagrams, explain the concept of ecological succession.
- (d) How is the degree of freedom calculated in a chi-square analysis? Use a graph to convert χ^2 -values to p -values.
- (e) Compare the social organization of termites and honeybees.

- 6.** (a) Differentiate between conditioning and habituation with suitable examples from primates and rodents. 20
- (b) What is biological clock and how does it function? Discuss the role of intrinsic and extrinsic factors in its entrainment. 20
- (c) Delineate the principal steps in initiating sericulture. Add a note on various aspects of rearing techniques to get quality product in sericulture. 20