

Note: Time allowed for section B and C is 2 hours and 40 minutes.

SECTION "B"

Marks: 32

II. Attempt any EIGHT Parts out of the following. Each Part carries equal marks.

- i. Briefly describe the linkage of Biology with Biochemistry & Biogeography.
- ii. Differentiate between quantitative and qualitative observations.
- iii. Define species, extinct species, endangered species, and threatened species.
- iv. What is cell? Briefly describe the main postulates of cell theory.
- v. How meiosis help to create genetic variations among the offspring.
- vi. Briefly describe the effect of PH On Enzyme activity.
- vii. Why is ATP regarded as the currency of living cell.
- viii. What is malnutrition? Why it is considered to be a health Hazard?
- ix. Write a note on Caecum.
- x. Differentiate between systole and diastole.
- xi. Transpiration is considered as a necessary evil, Why?

SECTION "C"

Marks: 21

Note: Attempt any THREE questions of the following. Each question carries equal Marks.

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| III. | (a) Describe career of Biology in the field of Agriculture & Animal science. | 4 |
| | (b) Describe the Major reasons for Deforestation. | 3 |
| IV. | (a) Describe the structure of cell membrane with the help of fluid mosaic model. | 4 |
| | (b) Describe the Significance of Meiosis. | 3 |
| V. | (a) Describe the induced fit model of enzyme action. | 3 |
| | (b) Describe Aerobic Respiration. | 4 |
| VI. | (a) Explain the role of oral cavity and pharynx in the human digestive system. | 4 |
| | (b) What is transpiration pull. Describe the importance of transpiration in the life of plants. | 3 |