BS/2051 PLANT ANATOMY-VII

(Semester-IV)

Time: Three Hours] [Maximum Marks: 40

Note: Attempt *two* questions each from Section A and B Section C will be compulsory.

SECTION-A

Do any two:

- I. Discuss organization of root apical meristem in vascular plants.
- II. Describe in detail permanent tissues in plants.
- III. Explain development of trichomes in plants.
- IV. Differentiate monocot root from dicot root in structure and function. $(2\times6=12)$

SECTION-B

Do any two:

V. Discuss in details the development of anomalous growth in vascular plants.

- VI. What are leaf modifications? What is their importance in plant life? Discuss the ecological conditions which are responsible for such modifications in plants.
- VII. Explain types, structure and functions of cambium in plants.
- VIII. How monocot leaf is different from dicot leaf in structure and functions? $(2\times6=12)$

SECTION-C

- IX. All questions are compulsory:
 - (a) Write note on guard cells.
 - (b) Write short note on stomata.
 - (c) What are fusiform initials, how they are formed and where they are present?
 - (d) Discuss briefly anomalous structure in angiosperms.
 - (e) Write note on cortical vascular bundles.
 - (f) How monocot root is different from dicot root?
 - (g) Discuss briefly fasicular cambium in plants.
 - (h) What are trichomes and what is their function?

 $(8 \times 2 = 16)$