

- NOTE: 1. All questions are compulsory.
2. Figures to right indicate marks.
3. Draw labelled diagrams wherever necessary.

Q I Answer the following (Any Two)

(20)

- 1) Describe the types of stele.
- 2) Explain in detail the sexual reproduction of *Nephrolepis*.
- 3) Give the general characters of Pteridophyta.
- 4) Describe in brief T.S. of pinna and stolon of *Nephrolepis*.

Q II Answer the following (Any Two)

(20)

- 1) Give a brief account of T.S. of young stem of *Cycas*.
- 2) Explain T.S. of young root of *Cycas*.
- 3) Write a note on T.S. of *Cycas* leaf.
- 4) Write a note on external morphology of *Cycas*.

Q III Answer the following (Any Two)

(20)

- 1) Describe the different types of leaf venation.
- 2) What is inflorescence? Describe different types of inflorescence.
- 3) Explain different types of leaf apex.
- 4) Write a note on different types of leaves.

Q IV Write short notes on (Any Three)

(15)

- 1) Hydathode.
- 2) Ramenta.
- 3) Systematic position of *Cycas*.
- 4) Development of male gametophyte of *Cycas*.
- 5) Morphology of leaf.
- 6) Types of stipules.