## U. G. 4th Semester Examination 2022 **BOTANY (Honours)**

## Paper Code : DC-10

[CBCS]

Full Marks: 25

The figures in the margin indicate full marks. Candidates are required to give their answers in their own words as far as practicable.

- Answer any five of the following: 1.
  - (i) What is pollen kit?
  - (ii) Define GSI.
  - (iii) Who is the father of Indian plant embryology?
  - (iv) What is pollinia?
  - (v) What is meant by porogamy?
  - (vi) Mention the components of MGU.
  - (vii) Differentiate between protandry and protogyne.
  - (viii) What is ornithochory?
- 2. Answer any *four* of the following:
  - (i) Describe the structure of orthotropous ovule.
  - (ii) Give an account of the contrivances for self-pollination.
  - (iii) Write a short note on microsporogenesis.
  - (iv) Write a short note on polarity in pollen structure.
  - (v) Write few advantages and application of apomixis.
  - (vi) How mixed pollination technique is implemented to overcome self-incompatibility.

## 3. Answer any one of the following: $8 \times 1 = 8$

- (i) Briefly describe the ABC model of flower development. 8
- (ii) What is double fertilization? Describe, with diagram, tetrasporic development of embryo sac with suitable example. 2+6

 $1 \times 5 = 5$ 

Time : Two Hours

 $3 \times 4 = 12$