UG/5th Sem/Bot(H)/T/19

2019

B.Sc. (Honours)

5th Semester Examination

BOTANY

Paper - C11T

(Reproductive Biology of Angiosperms)

Full Marks: 40

Time: 2 Hours

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Group - A

Answer any five questions from the following.

 $2 \times 5 = 10$

- 1. (a) What are cybrids? Give example.
 - (b) Write the differences between GSI and SSI?
 - (c) What is pollinia? In which family does it found?
 - (d) What is coma? Mention its functions.

[Turn Over]

- (e) What are androphore and gynophore?
- (f) What is sporopollenin? Write the chemical nature of sporopollenin.
- (g) What is jaculator? How it helps in seed dispersal?
- (h) What is obturator? Give example.

Group - B

Answer any four questions from the following.

 $5 \times 4 = 20$

- (a) What is NPC system? Classify the pollen grains on the basis of number and position of aperture with diagram.
 - (b) What is perisperm? With suitable illustration and example describe any one type of development of endosperm in Angiosperms. 1+4
 - (c) Classify different types of polyembryony with example. Write the causes of polyembryony. What is perisperm? 2+2+1
 - (d) What is geitonogamy? Write any two contrivanses of self pollination and other two contrivanses of cross pollination. 1+2+2

- (e) Describe the *Polygonum* type of mega gametogenesis with proper diagram. 3+2
- (f) Describe different types of zoophily with examples.

Group - C

Answer any one question from the following.

 $10 \times 1 = 10$

- (a) Classify different types of embryo among the dicotyledons with proper illustrations and examples.
 - (b) Distinguish between pseudomonads and polyads. Briefly explain the genetic and molecular aspects of flower development. Explain the significance of apomixis. 2+4+4