

**Exam. Code : 210003**

**Subject Code : 4803**

**M.Sc. Botany 3rd Semester**

**DEVELOPMENT BOTANY**

**Paper—BOT-C612**

Time Allowed—3 Hours] [Maximum Marks—50

**Note :—** Attempt **five** questions by selecting any **one** question from each Section. **Fifth** question can be attempted from any Section.

**SECTION—A**

1. How many types of self-incompatibilities are known morphologically? Discuss each one in detail.
2. (a) How pollen wall and stigmatic surface regulate pollen-pistil interaction?  
(b) What is the biological significance of incompatibility? How can the self-incompatibility be overcome?

1×10=10

**SECTION—B**

1. Describe in brief the events from the entry of pollen tube into ovule till fusion of gametes.

2. Define endosperm. Explain different types of angiosperm endosperm in detail. What is morphological nature of endosperm ?  $1 \times 10 = 10$

### SECTION—C

1. Illustrate the types of embryogeny in angiosperms.
2. Give detailed account of physiological and genetical control of embryogenesis.  $1 \times 10 = 10$

### SECTION—D

1. Explain in detail the embryological characters which have proved of special importance in taxonomic consideration giving special reference to specific families.
2. What role palynology played in taxonomy ? Explain giving appropriate examples.  $1 \times 10 = 10$