

**PSG COLLEGE OF ARTS & SCIENCE  
(AUTONOMOUS)**

**BSc DEGREE EXAMINATION DECEMBER 2017  
(Second Semester)**

Branch - **BOTANY**

**REPRODUCTIVE PLANT BIOLOGY**

Time : Three Hours

Maximum : 75 Marks

**SECTION-A (20 Marks)**

Answer **ALL** questions

**ALL questions carry EQUAL marks (10 x 2 = 20)**

- 1 Define Gynoecium.
- 2 What is head inflorescence?
- 3 Define Photoperiodism.
- 4 What is the chemical composition of Phytochrome?
- 5 What is the requirement for spore germination?
- 6 What is egg apparatus?
- 7 What are the post fertilization changes during fertilization?
- 8 Write about cellular endosperm.
- 9 Write the difference between simple and compound fruit.
- 10 What are the types of seeds?

**SECTION - B (25 Marks!)**

Answer **ALL** Questions

**ALL Questions Carry EQUAL Marks (5 x 5 = 25)**

- 11 a Write about the vegetative and floral characters of a flower.  
OR  
b What are the types of inflorescence?
- 12 a Explain biological clock in plants.  
OR  
b Write short notes on the physiology of phytochromes.
- 13 a Explain the structure of Ovule with diagram.  
OR  
b Write short notes on Nemece Phenomenon in pollen germination.
- 14 a Explain the development of Monocot embryo.  
OR  
b Explain the development of Endosperm.
- 15 a Briefly explain the physiology of seed germination.  
OR  
b List out the type of fruits and its importance.

**SECTION - C (30 Marks)**

Answer any **THREE** Questions

**ALL Questions Carry EQUAL Marks (3 x 10 = 30)**

- 16 List out the types of Pollination and contrivances in flowers.
- 17 Write about the topics given and its importance.  
a. Photoperiodism b. Circadian rhythm
- 18 Explain megasporogenesis with suitable diagrams.
- 19 Draw diagrams and explain the types of Endosperms.
- 20 Elaborately explain the types of seeds and germination.