

PSG COLLEGE OF ARTS & SCIENCE  
(AUTONOMOUS)  
BSc DEGREE EXAMINATION MAY 2022  
(Second Semester)

Branch – BOTANY

**REPRODUCTIVE PLANT BIOLOGY**

Time: Three Hours

Maximum: 50 Marks

**SECTION-A (5 Marks)**

Answer ALL questions

ALL questions carry EQUAL marks

(5 x 1 = 5)

1. The flower can be cut into two equal halves in any vertical plane is known as \_\_\_\_\_.  
(i) Zygomorphic (ii) Asymmetrical  
(iii) Actinomorphic (iv) Irregular
2. The phenomenon of photoperiodism was first discovered by \_\_\_\_\_.  
(i) Julius von Sachs (ii) Stephen Hales  
(iii) Lehrbuch der Botanik (iv) Garner and Allard
3. After fertilization ovule develops into \_\_\_\_\_.  
(i) Integument (ii) Seed  
(iii) Embryo (iv) Endosperm
4. When pollen tube enters through the integument is called \_\_\_\_\_.  
(i) Mesogamy (ii) Porogamy  
(iii) Chalazogamy (iv) Isogamy
5. \_\_\_\_\_ is a simple fleshy fruit which develops from a syncarpous, inferior ovary.  
(i) Legume (ii) Pome  
(iii) Achene (iv) Sorosis

**SECTION - B (15 Marks)**

Answer ALL Questions

ALL Questions Carry EQUAL Marks

(5 x 3 = 15)

- 6 a Explain any three cohesion of stamens.  
OR  
b Describe verticillaster inflorescence.
- 7 a Write the difference between Pr and Pfr forms.  
OR  
b Summarize the biochemical composition of phytochromes.
- 8 a Narrate the importance of Nemece phenomenon.  
OR  
b Comment on pollen morphology.
- 9 a Explain ruminant type of endosperm.  
OR  
b Discuss the development of embryo in monocot plant.
- 10 a Draw and explain simple dry fruits.  
OR  
b Describe types of seed germination.

Cont...

**SECTION -C (30 Marks)**

Answer ALL questions

ALL questions carry EQUAL Marks

(5 x 6 = 30)

- 11 a Enumerate the racemose inflorescence.  
OR  
b Discuss cross pollination.
- 12 a Highlight the importance of biological clock.  
OR  
b Point out the photoinduction of flowering.
- 13 a Summarize the abnormalities in pollen germination.  
OR  
b Discuss the structure of ovules.
- 14 a Write a note on fertilization.  
OR  
b Explain the development of endosperm haustoria.
- 15 a Comment on dry indehiscent fruits.  
OR  
b Elucidate the methods of breaking seed dormancy.

Z-Z-Z

END