

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)
BSc DEGREE EXAMINATION DECEMBER 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 When the sepals fall off as soon as the flower has opened out is known as _____.
(i) Accrescent (ii) Deciduous
(iii) Caducous (iv) Persistent
- 2 Phytochrome is a photosensitive pigment involved in _____.
(i) Geotropism (ii) Phototropism
(iii) Photoperiodism (iv) Photorespiration
- 3 After fertilization, ovule develops into _____.
(i) Integument (ii) Seed
(iii) Embryo (iv) Endosperm
- 4 The early globular embryo is the _____.
(i) Proembryo (ii) Syngamy
(iii) Endosperm (iv) Nuclei
- 5 When a fruit is developed from a polycarpellary, apocarpous pistil of a single flower is known as _____.
(i) Simple dry fruits (ii) Simple fleshy fruits
(iii) Multiple fruits (iv) Aggregate fruits

SECTION - B (15 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks

(5 x 3 = 15)

- 6 a. Give a note on self pollination.
OR
b. Explain Mixed inflorescence.
- 7 a. Write the difference between Pr and Pfr forms.
OR
b. Describe Biological clock.
- 8 a. Discuss the abnormalities in pollen germination
OR
b. Narrate stigma pollen compatibility.

Cont...

- 9 a. Comment on endosperm haustoria.
OR
b. Explain the development of embryo in monocot plant.

- 10 a. Outline the classification of fruits.
OR
b. Discuss any two methods for breaking seed dormancy.

SECTION -C (30 Marks)
Answer ALL questions
ALL questions carry EQUAL Marks

(5 x 6 = 30)

- 11 a. Draw and explain cohesion of stamens.
OR
b. Discuss pistils with examples.

- 12 a. Point out the role of phytochromes in flowering.
OR
b. Explain the composition of phytochromes.

- 13 a. Explain nemac phenomenon.
OR
b. Draw and explain the structure of ovule.

- 14 a. Describe any two types of endosperm studied by you.
OR
b. Explain the post fertilization changes in embryo.

- 15 a. Elucidate the physiological basis for fruit ripening.
OR
b. Write an essay on the structure and types of seeds.

Z-Z-Z

END