PSG COLLEGE OF ARTS & SCIENCE

(AUTONOMOUS)

BSc DEGREE EXAMINATION DECEMBER 2019

(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 $(10 \times 2 = 20)$

- 1 Define padicellate.
- 2 Define bisexual flower.
- What is tidal rhythms?
- 4 Who discovered the phenomenon of photoperiodism?
- 5 What is obturator?
- 6 What is aril?
- 7 Define hypophysis.
- 8 Define mosaic endosperm.
- 9 What is epicarp?
- What is climacteric?

SECTION - B (25 Marks)

Answer ALL Questions

ALL Questions Carry **EQUAL** Marks $(5 \times 5 = 25)$

11 a Explain the contrivances for cross pollination with suitable examples.

OR

- b Define placentation. Explain the different types of placentation with diagram.
- 12 a Give an account on biological clock.

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- b Write short notes on photoperiodic induction.
- 13 a Write about tapetum.

OR

- b Describe the Nemec phenomenon.
- 14 a Define endosperm. Describe the process of cellular endosperm formation.

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- b Explain the development of dicot embryo.
- 15 a Explain different methods to break seed dormancy.

OR

b Give an account of the physiology of seed germination.

SECTION - C (30 Marks)

Answer any **THREE** Questions

ALL Questions Carry **EQUAL** Marks $(3 \times 10 = 30)$

- Discuss in detail about cymose inflorescence.
- Give an account of the structure, function and mode of action of phytochromes.
- Draw and explain the structure of ovule.
- 19 Describe elaborately post fertilization changes in the ovary.