PSG COLLEGE OF ARTS & SCIENCE

(AUTONOMOUS)

BSc DEGREE EXAMINATION DECEMBER 2018

(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 Write the parts of the flower.
- What do you mean by spike inflorescence?
- 3 Differentiate Pr from Pfr forms.
- 4 Define circadian rhythms.
- 5 Write the function of tapetum in anther.
- 6 What is pollen compatibility?

Write any two Difference between monocot embryo and dicot embryo.

- 8 Write about endosperm haustoria.
- 9 What is simple fruit? Give an example.
- Write about seed dormancy.

SECTION - B (25 Marks)

Answer **ALL** Questions

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

11 a With suitable sketch describe the morphology of flower.

OR

- b Describe the different types of pollination.
- 12 a Enumerate the biochemical composition of phytochromes.

OR

- b Explain biological clock in plants.
- 13 a Explain the process of development of male gametophyte.

OR

- b Describe the structure of ovule.
- 14 a Summarize the process of fertilization.

OR

- b Illustrate the development of dicot embryo.
- 15 a Draw and explain the structure of seed.

OR

b Discuss the physiology of seed germination.

SECTION - C (30 Marks!

Answer any THREE Questions

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

- Write an essay on the types inflorescence studied by you.
- Explain the role of phytochrome in flowering and other plant functions.
- With suitable sketch describe the structure of anther.
- Explain any three types of endosperm studied by you.
- 20 -Describe the types of fruits with suitable example.