PSG COLLEGE OF ARTS & SCIENCE (AUTONOMOUS)

BSc DEGREE EXAMINATION MAY 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

(10x2 = 20)

- 1 What is Androecium?
- 2 Write about Raceme inflorescence.
- 3 Define phytochrome.
- 4 What is circadian rhythm?
- 5 What is Tapetum?
- 6 Write about micropyle.
- 7 What is double fertilization?
- 8 Write about ruminate endosperm.
- 9 Define fleshy fruit.
- 10 What is breaking of dormancy?

SECTION - B (25 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks (5x5 = 25)

11 a Describe the parts of a flower in technical terms.

OR

b List out the types of pollination and explain them.

12 a Explain the differences between Pr and Pfr form of phytochromes.

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b Comment on Photo induction of flowering?

13 a Explain the structure and development of male gametophyte.

OR

b Write a short note on stigma-pollen compatibility.

14 a Explain the development of Dicot embryo.

OR

OR

- b Explain the development of Helobial endosperm.
- 15 a Write about the physiology of fruit ripening.

b Explain the types of seed germination.

<u>SECTION - C (30 Marks)</u> Answer any THREE Questions ALL Questions Carry EQUAL Marks (3 x 10 = 30)

- 16 With suitable diagrams, explain the types of inflorescence.
- 17 Explain the structure, biochemical composition and physiological functioning of phytochromes.
- 18 Explain in detail about microsporogenesis and write its significance with suitable diagrams.
- 19 Write an essay on the process of fertilization in Angiosperms. Add a note on Post-fertilization changes.
- 20 Give a detailed account on the classification and structure of fruits.