

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION DECEMBER 2025
(Third Semester)

Branch - BOTANY

REPRODUCTIVE PLANT BIOLOGY

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

(10 × 1 = 10)

Module No.	Question No.	Question	K Level	CO
1	1	Pollination by insects is called as ----- a. Wind Pollination b. Water Pollination c. Self Pollination d. Entomophily	K1	CO1
	2	Onion is an example of ----- inflorescence a. special b. cymose c. racemose. d. umbel	K2	CO1
2	3	The reversal of etiolation effected by light is called ----- a. Photomorphogenesis b. Richmond Lang effect c. Anisotropic wall expansion d. Red-far red light interaction	K1	CO2
	4	Name the factor that influences the process of flowering in plants. a. Photoperiod b. Water in the soil c. The acidity of the soil d. Amount of green pigment	K2	CO2
3	5	What is the name of the Embryo sac of the angiosperms having eight nuclei. a. only tetrasporic b. only bisporic c. only monosporic d. any of the following.	K1	CO4
	6	The female reproductive parts of a flower, the stamens, are collectively known as a. Androecium b. Filament c. Anther d. Gynoecium	K2	CO4
4	7	What is the mass of nutritive material outside the embryo sac ? a. Protoplasm b. Pericarp c. Ectoderm along with fertilization d. Perisperm	K1	CO5
	8	The two nuclei at the end of the pollen tube are called ----- a. Tube nucleus and a generative nucleus b. Sperm and ovum c. Generative nucleus and stigma d. Tube nucleus and sperm	K2	CO5
5	9	Orange is an example of ----- a. pepo b. hesperidium c. drupe d. pome	K1	CO6
	10	During the germination of seeds, the seed coat ruptures due to a. massive imbibition of water b. differentiation of cotyledons c. a sudden increase in cell division d. massive glycolysis in cotyledons and endosperm	K2	CO6

Cont...

SECTION - B (35 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks

 $(5 \times 7 = 35)$

Module No.	Question No.	Question	K Level	CO
1	11.a.	Analyse the contrivances of a flower for effective pollination. (OR)	K4	CO1
	11.b.	Discover the parts of the flower with a neat diagram.		
2	12.a.	Interpret biological clock in plants. (OR)	K2	CO2
	12.b.	Summarize the biochemical composition of phytochromes.		
3	13.a.	Experiment with nemec phenomenon in plants. (OR)	K3	CO4
	13.b.	Describe the structure of anther.		
4	14.a.	Categorize the post fertilization changes. (OR)	K4	CO5
	14.b.	Analyze about endospore haustoria.		
5	15.a.	Explain the types of fleshy fruits. (OR)	K5	CO6
	15.b.	Discuss the types of seed germination.		

SECTION - C (30 Marks)

Answer ANY THREE questions

ALL questions carry EQUAL Marks

 $(3 \times 10 = 30)$

Module No.	Question No.	Question	K Level	CO
1	16	Classify the types of inflorescence.	K4	CO1
2	17	Explain the role of circadian rhythm in plants.	K5	CO2
3	18	Discuss the Abnormalities in Pollen germination.	K5	CO3
4	19	Assess the development of monocot embryo.	K5	CO4
5	20	List out the methods to break dormancy.	K4	CO5