

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)
BSc DEGREE EXAMINATION DECEMBER 2024
(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	The transfer of pollen from the anther to stigma is called ----- a. Pollination b. Fertilization c. Adoption d. Diffusion	K1	CO1
	2	Jasmine is an example of ----- inflorescence a. special b. cymose c. racemose. d. umbel	K2	CO1
2	3	Which of the following pigment involved in red-far red light interconversion? a. Cytochrome b. Xanthophyll c. Phytochrome d. Lycopene	K1	CO2
	4	Phytochrome is a photosensitive pigment involved in ----- a. Geotropism b. Phototropism c. Photorespiration d. Photoperiodism	K2	CO2
3	5	Functional megaspore in an angiosperm develops into ----- a. Endosperm b. Embryo c. Embryo-sac d. Ovule	K1	CO4
	6	The male reproductive parts of a flower, the stamens, are collectively known as ____ a. Androecium b. Filament c. Anther d. Gynoecium	K2	CO4
4	7	In the angiosperms, the endosperm is formed ____ a. before fertilization b. after fertilization c. along with fertilization d. None of the above	K1	CO5
	8	The primary endosperm nucleus is ----- a. tetraploid b. triploid c. diploid d. haploid	K2	CO5
5	9	Apple is an example of ----- a. pepo b. hesperidium c. drupe d. pome	K1	CO6
	10	Seed dormancy allows the plants to a. develop healthy seeds b. reduce viability c. overcome unfavourable climatic conditions d. prevent deterioration of seeds	K2	CO6

Cont...

SECTION - B (35 Marks)Answer **ALL** questions**ALL** questions carry **EQUAL** Marks (5 × 7 = 35)

Module No.	Question No.	Question	K Level	CO
1	11.a.	What are the types of special inflorescence? Explain with illustrations.	K1	CO1
	(OR)			
	11.b.	Recall the parts of the flower with a neat diagram.		
2	12.a.	Interpret biological clock in plants.	K2	C02
	(OR)			
	12.b.	Summarize the differences between Pr and Pfr forms.		
3	13.a.	Experiment with pollen compatibility.	K3	CO4
	(OR)			
	13.b.	Construct anther culture.		
4	14.a.	Categorize any two types of endosperm.	K4	CO5
	(OR)			
	14.b.	Analyze the process of fertilization.		
5	15.a.	Examine the structure of seed.	K4	CO6
	(OR)			
	15.b.	Discover the methods to break dormancy.		

SECTION -C (30 Marks)Answer **ANY THREE** questions**ALL** questions carry **EQUAL** Marks (3 × 10 = 30)

Module No.	Question No.	Question	K Level	CO
1	16	Recall the types of pollination.	K1	CO1
2	17	Outline the role of phytochrome in flowering.	K2	CO2
3	18	Construct the structure of anther ?	K3	CO3
4	19	Analyze the development of endosperm ?	K4	CO4
5	20	Categorize the classification of fleshy fruits.	K4	CO5