

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION DECEMBER 2025
(Third Semester)

Branch - ZOOLOGY
SERICULTURE

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	Which organism is primarily responsible for commercial silk production? a) <i>Bombyx mori</i> b) <i>Apis mellifera</i> c) <i>Drosophila melanogaster</i> d) <i>Antheraea assamensis</i>	K1	CO1
	2	The Central Silk Board was established in India in the year: a) 1948 b) 1952 c) 1962 d) 1971	K2	CO1
2	3	Which nutrient deficiency causes "chlorosis" in mulberry leaves? a) Nitrogen b) Potassium c) Iron d) Boron	K1	CO2
	4	"Tukra" disease of mulberry is caused by: a) Fungi b) Virus c) Mites d) Bacteria	K2	CO2
3	5	How many larval instars are found in <i>Bombyx mori</i> ? a) 3 b) 4 c) 5 d) 6	K1	CO3
	6	The silk gland in silkworm is a modified: a) Malpighian tubule b) Salivary gland c) Fat body d) Trachea	K2	CO3
4	7	Which appliance is used for maintaining humidity during rearing? a) Thermometer b) Hygrometer c) Humidifier d) Incubator	K1	CO4
	8	The process of shifting silkworm larvae for spinning cocoons is called: a) Brushing b) Mountage c) Harvesting d) Cocooning	K2	CO4
5	9	Which by-product of sericulture is used in cosmetics and pharmaceuticals? a) Silk waste b) Sericin c) Pupae powder d) Cocoon shell	K1	CO5
	10	Pebrine disease of silkworm is caused by: a) Bacteria b) Virus c) Protozoan d) Fungus	K2	CO5

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.	Explain the uses of silk in different industries. (OR)	K2	CO1
	11.b.	Describe the morphology of mulberry plant with neat sketch.		
2	12.a.	Explain how symptoms can be used to identify boron and iron deficiency in mulberry and suggest corrective measures. (OR)	K3	CO2
	12.b.	Explain how proper harvesting and storing methods help in maintaining mulberry leaf quality.		
3	13.a.	Illustrate the lifecycle of <i>Bombyx mori</i> with neat sketch and explain each stage. (OR)	K3	CO3
	13.b.	Apply your knowledge of anatomy to describe the structure and function of the silk gland in silkworm.		
4	14.a.	Differentiate between natural and artificial incubation techniques in silkworm rearing. (OR)	K4	CO4
	14.b.	Compare different mounting methods and distinguish their effects on cocoon quality and yield.		
5	15.a.	Analyze the economic impact of Uzi fly infestation on cocoon yield. (OR)	K4	CO5
	15.b.	Differentiate between cocoon shell ratio and renditta as economic parameters in sericulture.		

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	Describe the role of irrigation and pruning in improving mulberry leaf yield.	K4	CO1
2	17	List out the fungal diseases of mulberry and their control measures.	K4	CO2
3	18	Differentiate between diapause and non-diapause silkworm eggs with respect to their characteristics and significance in seed production.	K4	CO3
4	19	Discuss about the rearing appliances used in maintaining optimum conditions for silkworm rearing.	K4	CO4
5	20	Analyze the economic significance of sericulture by-products in enhancing the profitability of the silk industry.	K4	CO5