## PSG COLLEGE OF ARTS & SCIENCE (AUTONOMOUS)

#### **MSc DEGREE EXAMINATION MAY 2025**

(Fourth Semester)

#### Branch - APPLIED MICROBIOLOGY

### MAJOR ELECTIVE COURSE – II: ENTREPRENEURSHIP IN BIOSCIENCES

Time: Three Hours

Maximum: 75 Marks

#### SECTION-A (10 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

 $(10 \times 1 = 10)$ 

Module No.	Question No.	Question	K Level	CO
. 101	-,344	Which of these is not a type of entrepreneurship?	- :	
٠. ٠٠	1	a. Small business entrepreneurship		.,
		b. Scalable entrepreneurship	Kľ	CO1
		c. Large scale entrepreneurship		
		d. Intrapreneurship		
1	2	Which of these is not a challenge for the entrepreneur?		
•		a. Managing the cash flow of their business	K2	CO1
		b. Recruiting new employees		
		c. Choosing the product or service to sell in the market		
		d. Formulating rules and regulations relating to conducting		
<u>.                                    </u>		entrepreneurship in their country		
		Which one of the following is not a characteristic feature		
		of plantation agriculture?		
	. 3	a. Large capital investment	<b>K</b> 1	CO2
		b. Managerial and technical support		
_		c. Scientific methods of cultivation		
2		d. Multiple crop specialization		
	4	Method of growing crops in a controlled environment	K2	CO2
		using plastic or metal frames with transparent roofs and		
		walls.		
r		a. Green-house culture  b. White-house culture		
		c. Mono-house culture  d. Poly-house culture		
	5	Which of these pollutants is a major contributor to	1	
		pollution resulting from industrial activities?  a. Carbon monoxide  b. Sulfur dioxide	K1	CO3
		c. Nitrogen oxides d. Methane		
3		The compound required by Rhizobium to fix atmospheric		<del>                                       </del>
	6 ·	nitrogen is called		
		a. Leghaemoglobin b. Heterocyst	K2	CO3
		c. Acetosyringon d. Lectin		
		Foods that nourish beneficial gut bacteria are called as	+	+
	7	a. Probiotics b. Probiotic supplements	K1	CO4
		c. Prebiotic d. Synbiotics		
4		Which of the following earthworm species is most stable	K2	CO4
	8	in Indian conditions?		
		a. Epifilis b. Perionyx c. Endogens d. Aneciques		
<del></del>	<del> </del>	SIDO strands for		
	9	a. Small Industries Developing Organization		
5		b. Small Industries Development Organization	K1	CO:
		c. Short Industries Development Organization		-
		d. Semi Industries Development Organization		
	10	The global event Bio-India 2024 organized by		
		a. DBT b. DST	K2	CO
		c. DBT & BIRAC d. DBT & DST	1	

#### SECTION - B (35 Marks)

#### Answer ALL questions

ALL questions carry EQUAL Marks

 $(5\times7=35)$ 

Module No.	Question No.	Question	K Level	co	
1	11.a.	Explain the Scope of bio-entrepreneurship.	К3		
	(OR)			CO1	
	11.b.	Describe about the characteristics of small scale industries.	_K3		
2	12.a.	Write short notes on polyhouse culture.	K4		
		(OR)			
	12.b.	Illustrate biosensor development in agri management.	K4	CO2	
3	13.a.	State about scope and challenges in integrated compost production.	K3		
		(OR)		CO3	
	13.b.	Mention business opportunity on pollution monitoring.	K4		
4	14.a.	Compare and contrast probiotic and prebiotics.	K3		
	(OR)			CO4	
	14.b.	How can you utilize agro wastes for biogas production.	K5_		
5	15.a.	Give a note on biotech business challenges in Indian context.	K3		
	(OR)			CO5	
	15.b.	Brief a story of successful start-up on bio-entrepreneur from your case study.	K5		

# SECTION -C (30 Marks) Answer ANY THREE questions

ALL questions carry EQUAL Marks

 $(3 \times 10 = 30)$ 

Module No.	Question No.	Question	K Level	СО
1	16	Briefly explain about stages in entrepreneurial process.	K4	CO1
2	17	Discuss various value added herbal products.	K4	CO2
3	18	Describe the key steps that lead in marketing strategies in bio-control.	K4	CO3
4	19	Explain the process of drinking water treatments.	K5	CO4
5°	20	Enlighten the Indian Company act for bio-business.	K5	CO5