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# PSG COLLEGE OF ARTS & SCIENCE (AUTONOMOUS)

## **BSc DEGREE EXAMINATION MAY 2025**

(Sixth Semester)

## Branch-MICROBIOLOGY

### **APPLIED BIOTECHNOLOGY**

Ti	me	: Three Hours		Maximum: 50 Marks
		Answe	ON-A (5 Marks) or ALL questions ons carry EQUAL marks	$(5 \times 1 = 5)$
1		Which of the following is not a v a) Yellow fever c) Viral fever	ector-borne disease? b) Dengue fever d) Malaria	
2		Biodegradation will be more for a) More molecular weights and h b) Low molecular weights and hi c) More molecular weights and led d) Low molecular weights and led	gh crystallinity ess crystallinity	
3		The bioreactor is not capable of _a) Producing aseptic conditions c) Controlling pH	b) Meeting containment of d) Produce electricity	regulations
4		Transgenic animals have a) foreign protein c) foreign lipid	b) foreign gene d) foreign amino acid	
5		concerning the biological world.  a) Bio-piracy c) Bioethics	that may be used to regula b) Biosafety d) Bio-patents N - B (15 Marks)	ite our activities
		Answer	ALL Questions Carry EQUAL Marks	$(5 \times 3 = 15)$
6	a	What is Interferon? write its function. OR		
	b	What are viral vector-based vac	ccines?	
7	a b	Explain PHA.  OR  What are the Steps during the Silage Fermentation Process?		
8	a	What are the advantages of plant bioreactor?  OR		
	b	Write short notes on Stress tolerant plants.		
)	a	List out the application of DNA microarray.  OR		
	b	Clarify methods for creating tra	nsgenic animals.	
10	a	What is Bioethics? OR		
	h	Explain Regulations of GM foo	ds in India.	

#### SECTION -C (30 Marks)

Answer ALL questions
ALL questions carry EQUAL Marks

 $(5 \times 6 = 30)$ 

11 a Write notes on Genetic immunization.

OR

- b Explain FMD.
- 12 a What are Biopolymers? Write its types.

OR

- b Discuss the microbial degradation of xenobiotics.
- 13 a Explain insect resistance in plants.

OR

- b Discuss senescence tolerant plants.
- 14 a Explain human Gene Therapy.

OR

- b Describe restriction fragment length polymorphism.
- 15 a Brief notes on intellectual property rights.

OR

b Brief notes on patenting of biotechnological inventions.

Z-Z-Z

**END**