

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)
BSc DEGREE EXAMINATION MAY 2024
(First Semester)

Branch – **BOTANY**

MICROBIOLOGY

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	Who is father of Microbiology? (i) Edwin John Butler (ii) Ferdinand Cohn (iii) Robert Koch (iv) Antoni van Leeuwenhoek	K1	CO1
	2	The found in "Spirochetes"? (i) <i>Streptomyces sp.</i> (ii) <i>Treponema pallidum</i> (iii) <i>Spirillum volutans</i> (iv) <i>Corynebacterium diphtheriae</i>	K2	CO1
2	3	This group of viruses generally attack to plants? (i) Enteroviruses (ii) Retroviruses (iii) Rheoviruses (iv) Riboviruses	K1	CO2
	4	It is not a method by which viral infection spreads in plants? (i) Exuding sap of infected plants (ii) Infected seeds (iii) Through meristem (iv) Infected pollen	K2	CO2
3	5	Bacteria having clusters of flagella at both poles of cells called? (i) Amphitrichous (ii) Monotrichous (iii) Peritrichous (iv) Lophotrichous	K1	CO3
	6	Which is the respiratory chain of bacteria is associated with (i) cytoplasmic membrane (ii) cell wall (iii) cytoplasm (iv) mitochondrial membrane	K2	CO3
4	7	Acellular slime moulds is (i) Acrasiomycetes (ii) Myxomycetes (iii) Oomycetes (iv) Ascomycetes	K1	CO4
	8	<i>Schizosaccharomyces</i> by asexual reproduction methods is (i) binary fission (ii) budding (iii) fragmentation (iv) spore formation	K2	CO4
5	9	The components are algae and fungi is called (i) Mychorrhizha (ii) Lichen (iii) VAM (iv) Bryophytes	K1	CO5
	10	Helotism is a (i) a kind of symbiotic association (ii) a kind of mutualism (iii) master-slave relationship (iv) master-master relationship	K2	CO5

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.	State the contribution of Robert Koch	K1	CO1
	(OR)			
	11.b.	Bring out the general characteristics of microorganism.		
2	12.a.	List out the symptoms of viral diseases.	K1	CO2
	(OR)			
	12.b.	Bring out the classification of viruses.		
3	13.a.	How will you classify the bacterial flagella.	K1	CO3
	(OR)			
	13.b.	Describe the plasma membrane		
4	14.a.	Outline the classification of fungi by Alexopoulos.	K2	CO4
	(OR)			
	14.b.	Explain the asexual reproduction in Yeast.		
5	15.a.	Illustrate the reproduction of <i>Ustilago</i> .	K2	CO5
	(OR)			
	15.b.	Discuss the thallus structure of lichens.		

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	Discuss the microorganism distribution in various environments	K6	CO1
2	17	Describe the T ₄ bacteriophage	K5	CO2
3	18	Explain in detail the ultrastructure of bacterial cell.	K5	CO3
4	19	Describe the asexual and sexual reproduction of <i>Mucor</i> .	K5	CO4
5	20	Elaborate the reproduction in lichens and mention their importance.	K6	CO5