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22MBP314N

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

MSc DEGREE EXAMINATION DECEMBER 2025
(Third Semester)

Branch – **APPLIED MICROBIOLOGY**

MEDICAL BACTERIOLOGY AND MYCOLOGY

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 interaction between pathogenic microbes and host is called a) Commensals b) Symbiosis c) Parasitism d) Toxigenicity	K1	CO1
	2	Who developed antibiotic assay using disc diffusion technique? a) Kirby and Bauer b) Maxam and Gilbert c) Sanger d) Alexander	K2	CO2
2	3	Which type of medium is growing on the *Clostridium* sp. within 6-8 hours? a) L-J medium b) Loeffler's serum slope c) Tellurite blood agar d) Neomycin blood agar	K1	CO1
	4	*Mycobacterium tuberculosis* is a) only acid fast b) both acid and alcohol fast c) only alcohol fast d) Neither acid nor lcohol fast	K2	CO2
3	5	*Vibrio cholerae* is produces a) dihydrolyses arginine b) decarboxylates ornithine c) decarboxylates lysine d) decarboylates lysine and ornithine	K1	CO1
	6	*Camphylobacter jejuni* is _____ bacteria a) anaerobic b) microaerophilic c) capnophilic d) psychrophilic	K2	CO2
4	7	*Epidermophyton floccosum* affects a) skin and nails b) skin and hair only c) skin only d) skin, hair and nails	K1	CO1
	8	The culture of *Coccidiodes immitis* on SDA shows a) thick-walled arthroconidia b) fusiform macroconidia c) blastoconidia d) microconidia	K2	CO2
5	9	Name the causal organism of wound infection a) *Bacillus* sp b) *Staphylococcus* sp c) *Rhizobium* sp d) *Nitrobacteria* sp	K1	CO1
	10	Which of the following is the most common cause of Urinary tract infection? a) *Klebsiella* sp b) *Proteus* sp c) *E.coli* d) *Streptococcus* sp	K2	CO2

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.	Build the host-microbial interactions.	K3	CO3
		(OR)		
	11.b.	How do you examine antibiotic sensitivity pattern of organism? Explain.		
2	12.a.	Identify the morphology and pathogenesis of *Clostridium* sp.	K3	CO3
		(OR)		
	12.b.	Organize the general characteristic features and significance of Actinomycetes.		
3	13.a.	Categorize the epidemiology, laboratory diagnosis and treatment of *Neisseria* sp.	K4	CO4
		(OR)		
	13.b.	Survey the morphology and pathogenesis of *Mycoplasma* sp.		
4	14.a.	Inference the life cycle and prophylaxis of *Epidermophyton sp.*	K4	CO4
		(OR)		
	14.b.	Examine the pathogenesis and treatment of *Histoplasma sp.*		
5	15.a.	Criticize the infections of central nervous system.	K5	CO5
		(OR)		
	15.b.	Appraise the infections of urinary tract region.		

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	Distinguish the ground rules for collection and dispatch of clinical specimens microbiological diagnosis.	K4	CO4
2	17	Analyze the morphology, epidemiology, pathogenesis, laboratory diagnosis and prevention of *Bacillus* sp.	K4	CO4
3	18	Assess the epidemiology, pathogenesis, laboratory diagnosis and prophylaxis of *Salmonella* sp.	K5	CO5
4	19	Conclude the pathogenesis, epidemiology, diagnosis and treatment of *Tinea nigra.*	K5	CO5
5	20	Elaborate account on infections of lower and upper respiratory tracts.	K6	CO6

Z-Z-Z END