

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)
MSc DEGREE EXAMINATION MAY 2025
(Fourth Semester)

Branch - APPLIED MICROBIOLOGY

MAJOR ELECTIVE COURSE – II : VOCATIONAL SKILLS IN 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	Medicine for Kakkuvan (Whooping Cough) (a) Manathakkali Nei (b) Poondur Nei (c) Vallarai Nei (d) Thoothuvalai Nei	K1	CO1
	2	Which family does Tobacco (<i>Nicotiana tabacum</i>) belongs to ? (a) Rutaceae (b) Solanaceae (c) Asteraceae (d) Rubiaceae	K2	CO1
2	3	Which of medicinal plant has high antibiotic and antimicrobial properties? ? (a) Neem (b) Money plant (c) Aloe vera (d) Lemon plant	K1	CO2
	4	Spirulina is a good source of: (a) Fiber (b) Protein (c) Carbohydrates (d) All of the above	K2	CO2
3	5	Find the incorrect statement (a) Agar-agar is produced from <i>Gracilaria</i> (b) <i>Chlorella</i> is used in space food (c) Mannitol is a food reserve of Rhodophyceae (d) Algin is produced by algae	K1	CO3
	6	How are weeds are controlling in organic farming? (a) Mulching (b) Pesticides (c) Herbicides (d) Chemical Pesticides	K2	CO3
4	7	Explanation for FDA (a) Food and Drug audit (b) Food and Drug Administration (c) Food and Diagnosis Administration (d) Food and Drug Authority	K1	CO4
	8	What are the documents mandatory to enroll in a clinical research study? (a) Protocol (b) Case report form (c) Consent form (d) all the above	K2	CO4
5	9	How many SDGs are there? (a) 15 (b) 17 (c) 18 (d) 21	K1	CO5
	10	Which of the following is a primary air pollutant? (a) Ozone (b) Sulfur dioxide (c) Peroxyacetyl nitrate (d) All of the above	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.	Give a brief account on different extraction methods.	K3	CO1
	(OR)			
	11.b.	Explain the applications of medicinal plants for cosmetics preparation.		
2	12.a.	Enumerate the cultivation practice of Dunaliella.	K2 & K4	CO2
	(OR)			
	12.b.	“Microalgae is the future for Biofuel Production”- Justify the statement.		
3	13.a.	Explain the need and scope for organic farming in India.	K3	CO3
	(OR)			
	13.b.	Write notes on the production of Vermi wash preparation		
4	14.a.	Enlist the function, roles and responsibilities of FDA.	K3	CO4
	(OR)			
	14.b.	Enlist the importance of Clinical trails.		
5	15.a.	Explain the outlines of biohydrogen production form Microbial sources.	K4	CO5
	(OR)			
	15.b.	Enumerate the role of enzymes in bioethanol production.		

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	Describe in detail about the screening process and importance of Antimicrobial compound isolation from medicinal plants.	K4	CO1
2	17	Write an account on production of value added products from micro algae.	K4	CO2
3	18	Illustrate the production technology of Vermi compost and add notes for its significance in agriculture.	K5	CO3
4	19	Describe in detail about the important committees involved in the approval of clinical in an organization.	K4	CO4
5	20	Exemplify the importance of sustainable development goals to achieve sustainable living with reference to microbial resources.	K5	CO5

Z-Z-Z

END