PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

MSc DEGREE EXAMINATION MAY 2024
(Second Semester)

Branch – **FOODS AND NUTRITION**

MAJOR ELECTIVE COURSE - I: FOOD BIOTECHNOLOGY

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	Choose the function of DNA. a) Carrying gene information b) Repairing tissues c) Transform RNA d) Reconnect RNA strands	K1	CO1
	2	Extend CDNA. a) Convert DNA b) Complex DNA c) Carrier DNA d) Copy DNA	K2	CO2
2	3	Select the fundamental requirements of a PCRreaction. a) Two oligonucleotide primers b) DNA segment to be amplified c) A heat-stable DNA polymerase d) All of the above	K1	CO2
	4	Find a component that is present in plant cellbut not in animal cell. a) Cytoplasm b) Cell membrane c) Cell wall d) Nucleus	K2	CO2
3	5	Identify the component that helps for raising dough. a) Sulphur Dioxide b) Hydrogen c) Carbon Dioxide d) Oxygen	K1	CO3
	6	Which of the following organism is used inalcoholic fermentation? a) Pseudomonas b) Aspergillus c) Saccharomyces d) Penicillium	K2	CO3
4	7	Which of the following is not a step in blacktea manufacture? a) Drying b) Rolling c) Withering d) Lump Formation	K1	CO3
	8	Indicate the following is not a functional food. a) Dietary Fibre b) Probiotics c) Omega 3 d) Pills	K2	CO4
5	9	Name the branch of botanydeals with development of improved plant varieties. a) Plant Embryology b) Plant Breeding c) Plant Biochemistry d) Plant Anatomy	K1	CO5
	10	Who is known as the father of tissue culture? a) Bonner b) Laibach c) Haberlandt d) Gautheret	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.	Choose the functions of DNA.	K2	CO2
		(OR)		
	11.b.	Summarize the basic principles of transcription.		
2	12.a.	Analyze the basic of concepts of GMO's in food production.	K3	CO5
		(OR)		
	12.b.	Organize legal frameworks of production of food stuffs.		
3	13.a.	Illustrate the process of making alcoholic beverages with the use of yeast.	K3	CO4
		(OR)		
	13.b.	Sketch the process of making bread and related products with the use of yeast.		
4	14.a.	Show the coffee fermentation process.	K2	CO4
		(OR)		
	14.b.	Compare prebiotics and probiotics.		
5	15.a.	State the application of plant cell.	K3	CO5
		(OR)		
	15.b.	Discuss the role of engineering in organic farming.		

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	Construct the properties of protein expression vectors.	K2	CO2
2	17	Evaluate the ethical issue of food biotechnology.	K3	CO3
3	18	Create bacteria-based products and its process with reference to dairy Industry.	K4	CO4
4	19	Elucidate on application and commercial production of Bacteriocins.	K4	CO4
5	20	Construct modern applications of Nutrigenomics in Food biotechnology.	K4	CO5

Z-Z-Z END