PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

PG DEGREE EXAMINATION DECEMBER 2025
(Third Semester)

TRANS DISCIPLINARY COURSE
(Common to PG Programmes)

FOOD CHEMISTRY AND QUALITY CONTROL

Time: Three Hours Maximum: 75 Marks

SECTION-A (10 Marks)
Answer **ALL** questions
ALL questions carry **EQUAL** marks (10 x 1 = 10)

Module No.	Question No.	Question	K Level	CO
1	1	Which type of polysaccharide has linear chain of glucose molecules? a) Starch b) Cellulose c) Glycogen d) Sucrose	K1	CO1
	2	Which type of water has low density in foods? a) Bound Water b) Free Water c) Covalent Bond d) Hydrogen Bond	K2	CO1
2	3	Which of the following fatty acid do not have any double bonds? a) Polyunsaturated fatty acid b) Monounsaturated fatty acid c)Saturated fatty acid d) Unsaturated fatty acid	K1	CO2
	4	Which of the following pigment is fat soluble? a)Anthocyanin b)Anthoxanthin c)Carotenoid d) Tannin	K2	CO2
3	5	Which dye is extracted from the insect and named as Natural Red 4? a) Annatto b) Chlorophyll c) Tartrazine d) Cochineal	K1	CO3
	6	Which chemical gives the umami flavor in taste? a) Glutamate b) Kainic acid c) Inosinic acid d) Aspartate	K2	CO3
4	7	Identify the numbers of panels is used to find the acceptability of final experimental products prior to large scale consumer trials. a)5-10 b) 10-15 c)20-25 d) 25-30	K1	CO4
	8	Which of the following test is used to measure pleasurable and unpleasurable experience of the panel members a) Single sample test b) Hedonic rating test c)Numerical scoring test d) Composite scoring test	K2	CO4
5	9	Which regulatory body is issuing Foreign Manufacturers certification scheme (FMCS)? a) BIS b) AGMARK c) FSSAI d) ISO	K1	CO5
	10	How much uric acid is allowed in the pulses to meet the FSSAI standard? a) 100mg / Kg b) 10mg / Kg c) 100mg / 10 Kg d) 1mg/ Kg	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.	Classify the dietary fibre sources and its types.	K4	CO1
		(OR)		
	11.b.	Explain the pectic substance, its occurence and properties.		
2	12.a.	Explain oxidative rancidity and microbial rancidity.	K5	CO2
		(OR)		
	12.b.	Predict the prevention methods of enzymatic browning.		
3	13.a.	Categorize the type of food colours and explain.	K4	CO3
		(OR)		
	13.b.	Differentiate and explain the flavouring extracts and flavour intensifiers		
4	14.a.	Construct any three rating test methods.	K3	CO4
		(OR)		
	14.b.	Ascertain the suitable objective method for volume measurement.		
5	15.a.	Explain about the roles and responsibilities of FSSAI.	K5	CO5
		(OR)		
	15.b.	Compile the standards of Milk and Milk products.		

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	Summarize the Starch properties, gelatinization, retrogradation and dextrinization of starch.	K4	CO1
2	17	Explain the effect of cooking of chlorophyll, carotenoid and tannin.	K5	CO2
3	18	Pointout the enzymes classes according to catalyzed reactions and their subclasses found in food.	K4	CO3
4	19	Outline about difference test and rating tests with score card.	K4	CO4
5	20	Examine 15 common adulterants contaminating foods and figure out the tests to detect them.	K5	CO5

Z-Z-Z END