

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

PG DEGREE EXAMINATION DECEMBER 2025
(Third Semester)

TRANS DISCIPLINARY COURSE
(Common to PG Programmes)

HEALTH CARE BIOTECHNOLOGY

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

(10 × 1 = 10)

Question No.	Question	K Level	CO
1	Which of the following is a rich source of antioxidants which fight disease? a) Tea b) Coffee c) Water d) None of the above	K1	CO1
2	Antioxidants fight against _____. a) Bacteria b) Viruses c) Free radicals d) None of the above	K2	CO1
3	Which of the following factors are used to Characterize Granulomatous inflammation? a) Presence of nodular lesions b) Presence of mononuclear cells c) Proliferation of mononuclear cells d) Proliferation of nodular lesions	K1	CO2
4	Which of the following risk factors is NOT associated with chronic inflammation? a) Age b) Sudden chills and fever c) Smoking d) Stress and sleep disorders	K2	CO2
5	Which of the following is NOT one of the key conditions associated with metabolic syndrome? a) cardiovascular disease b) insulin resistance c) obesity d) hypothyroidism	K1	CO3
6	The World Health Day is celebrated on _____. a) 1st March b) 7th April c) 6th October d) 10th December	K2	CO3
7	Which of the following diseases is also called as "Salmonella enterica serotype Typhi"? a) Typhoid b) Malaria c) Diarrhea d) Yellow fever	K1	CO4
8	Which of the following is the main cause for transmission of the Hepatitis virus? a) The bite of a mosquito b) Sharing drug needles c) Drinking contaminated water d) All of the above	K2	CO4
9	Which of the following diseases is not caused by bacteria? a) Typhoid b) Poliomyelitis c) Tuberculosis d) All of the above	K1	CO5
10	Which of the following principle(s) is/are part of a patient-centered style of health communication? a) exploring both disease and experience b) understanding the whole experience c) incorporating prevention and health promotion d) all of these	K2	CO5

Cont...

SECTION - B (35 Marks)

Answer **ALL** questions
ALL questions carry **EQUAL** Marks (5 × 7 = 35)

Question No.	Question	K Level	CO
11.a.	Write note on Mucosal tolerance.	K3	CO1
	(OR)		
11.b.	Illustrate Influence of genes on dietary preference.		
12.a.	Enlist the Health marker in inflammatory diseases.	K3	CO2
	(OR)		
12.b.	Give an account on Metabolic dysfunction.		
13.a.	Write note on Regulation of insulin gene.	K3	CO3
	(OR)		
13.b.	Describe the Genetic approach for diagnosis.		
14.a.	Explain Immunodiagnosis using dotblot method.	K4	CO4
	(OR)		
14.b.	Write note on Molecular diagnosis.		
15.a.	Interpret Stem cell as autologous cell therapy.	K4	CO5
	(OR)		
15.b.	Explain DNA and protein microarray based approach for treatment.		

SECTION -C (30 Marks)

Answer **ANY THREE** questions
ALL questions carry **EQUAL** Marks (3 × 10 = 30)

Question No.	Question	K Level	CO
16	Discuss on Antioxidants potential.	K4	CO1
17	Examine Genetic markers associated with chronic disease.	K4	CO2
18	Illustrate Genetics and control of lipid metabolism.	K4	CO3
19	Write an elaborate note on ELISA.	K4	CO4
20	Give an account on Genetic counselling.	K4	CO5

Z-Z-Z

END