22TDCBCPTN / 22TDCBCPT

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

PG DEGREE EXAMINATION DECEMBER 2025
(Third Semester)

TRANS DISCIPLINARY COURSE
(Common to PG Programmes)

DIAGNOSTICS AND PLANT THERAPEUTICS

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	Which biosafety level is most clinical diagonistic laboratories required to follow ? a) BSL-1 b) BSL-2 c) BSL-3 d) BSL-4	K1	CO1
	2	Show the reference values that are important in laboratory testing from the following a) Provide standard limits for result interpretation b) Replace the need for quality control c) Eliminate the need for methodology d) Vary randomly between labs	K2	CO1
2	3	Relate the presence of Acetone bodies in urine from the following a) Hypertension b) Diabetes mellitus c) Jaundice d) Gout	K1	CO2
	4	Show the another name of the enzyme SGOT a) ALT b) AST c) ALP d) LDH	K2	CO2
3	5	Which of following is suitable for the identification of volatile compounds a) HPLC b) GC-MS c) HPTLC d) NMR	K1	CO3
	6	Infer the name of alkaloid biosynthesized in Rauwolfia root a) Resperine b) Morphine c) Quercetin d) Ephedrine	K2	CO3
4	7	Name the scientific name of plant which produce atropine alkaloid *a) Rauwolfia serpentina* b) *Atropa belladona* c) *Catharanthus roseus* d) *Gymnema sylsvestre*	K1	CO4
	8	Illustrate the major anti-inflammatory compound of *Curcuma longa* a) Saponin b) Digoxin c) Reserpine d) Curcumin	K2	CO4
5	9	Show the Ayurvedic term for "Lehyam" from the following a) Medicated oil b) Electuary c) Herbal infusion d) Herbal tablet	K1	CO5
	10	Extend the WHO guidelines emphasize the herbal formulations must be standardized for a) Taste and aroma b) Price regulation c) Shelf life d) Quality, Safety and Efficacy	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.	Outline the steps and precautions in specimen collection and preservation for laboratory analysis.	K2	CO1
		(OR)		
	11.b.	Summarize the role of reference values in interpreting laboratory results.		
2	12.a.	Build the short notes on the condition Ketonuria.	K3	CO2
		(OR)		
	12.b.	Develop the estimation procedure of urinary urea analysis.		
3	13.a.	Construct the importance of column chromatography in natural product isolation.	K3	CO3
		(OR)		
	13.b.	Identify the pharmacological uses of seeds in medicine.		
4	14.a.	Examine the CNS depressant plants with suitable examples.	K4	CO4
		(OR)		
	14.b.	Categorize the role of *Curcuma longa* as an anti-inflammatory plant.		
5	15.a.	Appraise the significance of herbal powders in traditional medicine.	K5	CO5
		(OR)		
	15.b.	Explain briefly the preparation of herbal decoction.		

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	Analyze the chemical, biological and radioactive hazards encountered in a clinical laboratory. How can these prevented and managed?	K4	CO1
2	17	Discover the principle, procedure, and clinical importance of urine sugar estimation.	K4	CO2
3	18	Evaluate the principle, methodology and applications of HPTLC in plant drug analysis.	K5	CO3
4	19	Recommend the pharmacological properties and examples of cardiovascular active plants.	K5	CO4
5	20	Propose the detailed notes of WHO guidelines for quality standardization of herbal formulations.	K6	CO5

Z-Z-Z END