Reg.No.:												

VIVEKANANDHA COLLEGE OF ENGINEERING FOR WOMEN
[AUTONOMOUS INSTITUTION AFFILIATED TO ANNA UNIVERSITY, CHENNAI]
Elayampalayam – 637 205, Tiruchengode, Namakkal Dt., Tamil Nadu.

Question Paper Code: 120025

B.E. / B.Tech. DEGREE END-SEMESTER EXAMINATIONS – JAN. 2025
Fourth Semester
Biomedical Engineering
U19BM407 – PATHOLOGY AND MICROBIOLOGY
(Regulation 2019)

Time: Three Hours | Maximum: 100 Marks

Answer ALL the questions

Knowledge Levels (KL)	K1 – Remembering	K3 – Applying	K5 - Evaluating
	K2 – Understanding	K4 – Analyzing	K6 - Creating

PART – A

(10 x 2 = 20 Marks)

Q.No.	Questions	Marks	KL	CO
1.	What is meant by carcinogenesis?	2	K1	CO1
2.	Define the term biopsy.	2	K1	CO1
3.	What is meant by coagulation?	2	K1	CO2
4.	Define the term thrombosis.	2	K1	CO2
5.	What is a helminthe? List any 2 diseases caused by helminth.	2	K2	CO3
6.	Define the term spreading of diseases.	2	K1	CO3
7.	Mention the purpose of simple staining.	2	K1	CO4
8.	Define the term AFB staining.	2	K3	CO4
9.	What is meant by electrophoresis?	2	K1	CO5
10.	Define the term secondary immunodeficiency.	2	K1	CO5

PART – B

(5 x 13 = 65 Marks)

Q.No.		Questions	Marks	KL	CO
11.	a)	Write short notes on types of pathological calcification.	13	K1	CO1
		(OR)			
	b)	Explain Autopsy and biopsy with its types.	13	K1	CO1
12.	a)	Explain thrombosis mechanisms.	13	K1	CO2
		(OR)			
	b)	Explain in detail about Chronic venous congestion.	13	K1	CO2
13.	a)	Explain in detail about on culture media and its types.	13	K2	CO3
		(OR)			
	b)	Define Morphological features and structural organization of virus.	13	K1	CO3
14.	a)	Explain the Electron microscope – SEM.	13	K1	CO4
		(OR)			
	b)	Elucidate in detail about TEM.	13	K3	CO4
15.	a)	Explain types of Hypersensitivity.	13	K2	CO5
		(OR)			
	b)	Describe in detail about Auto-immune disorders and its concepts.	13	K2	CO5

PART – C

(1 x 15 = 15Marks)

Q.No.		Questions	Marks	KL	CO
16.	a)	Describe in detail about the types of hypersensitivity.	15	K3	CO2
		(OR)			
	b)	Elaborate in detail about reversible and irreversible cell injury.	15	K2	CO1