

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: 9002**

B.E. / B.Tech. DEGREE END-SEMESTER EXAMINATIONS – MAY / JUNE 2024

Eighth Semester

Biotechnology

U19BTE20 – BIOETHICS & IPR

(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.	List the major ethical issues involved in genetic testing.	2	K2	CO1
2.	State any TWO examples for Traditional knowledge.	2	K2	CO1
3.	Expand WTO and mention its prime functions.	2	K2	CO2
4.	What are the benefits of PCT?	2	K2	CO2
5.	What are criteria that have to be satisfied for Patenting?	2	K2	CO3
6.	If the status of the filed Patent is 'reexamined', what does that mean?	2	K4	CO3
7.	Who can apply for the registration of a geographical indication?	2	K2	CO4
8.	Give any two examples of Trademarks.	2	K1	CO4
9.	Define Bioterrorism. Give an example.	2	K1	CO5
10.	Classify the different biological weapons.	2	K2	CO5

**PART – B**

(5 x 13 = 65 Marks)

Q.No.	Questions	Marks	KL	CO
11. a)	i. Compare and contrast Public funding vs Private funding.	6	K4	CO1
	ii. Is Monopoly harmful in biotech market? Justify your answer.	7	K4	

(OR)

	b)	Discuss the legal & socio economic impact of the biotechnological product & techniques in human acceptance.	13	K2	CO1
12.	a)	i. Explain the guidelines offered by Budapest Treaty for the deposit of Microorganism.	7	K2	CO2
		ii. Demonstrate how Madrid agreement acts as efficient tool in obtaining international registration for Trademarks.	6	K2	
		(OR)			
	b)	Discuss the prominent attributes of the Indian patent Act 1970 and its recent amendments.	13	K2	CO2
13.	a)	Classify the different types of Patent application and its importance.	13	K2	CO3
		(OR)			
	b)	i. Deduce the purpose of non-disclosure agreement in Patent.	4	K2	CO3
		ii. Brief on the different Patent databases.	9	K2	
14.	a)	i. Comment on the role of Copyrights and its related rights in Biotechnology.	9	K2	CO4
		ii. Discover the importance of protecting intellectual properties.	4	K2	
		(OR)			
	b)	Depict the significance of Plant breeder's rights in India in protecting the plant varieties and Farmers.	13	K2	CO4
15.	a)	Explain the salient features of Cartagena protocol on Biosafety.	13	K2	CO5
		(OR)			
	b)	Discuss in detail about the Biosafety regulatory framework for GMOs at international level.	13	K2	CO5

### PART – C

(1 x 15 = 15 Marks)

Q.No.	Questions	Marks	KL	CO
16.	a) Narrate in detail how India won the legal battle against biopiracy regarding basmati hybrid rice variety patented by the USPTO.	15	K4	CO4
	(OR)			
	b) As a biotechnologist, you have invented a new drug for Lung cancer. Dramatize the steps involved in patenting your drug with a neat flow sheet.	15	K6	CO3