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**Gandhi Institute of Engineering and Technology University, Odisha, Gunupur  
(GIET UNIVERSITY)**

M.Sc. (Third Semester – Regular) Examinations, December – 2025

**24MBIPC23004 – IPR, BIOSAFETY AND BIOETHICS**

Biotechnology



Time: 3 hrs

Maximum: 60 Marks

**Answer ALL questions  
(The figures in the right hand margin indicate marks)**

**PART – A**

**(2 x 5 = 10 Marks)**

Q.1. Answer **ALL** questions

	CO #	Blooms Level
a. Define Patent.	CO1	K2
b. Write few objectives of WTO.	CO2	K2
c. Define the term GATT	CO3	K2
d. List out the significance of Trademarks.	CO4	K2
e. Modes of Trades.	CO5	K2

**PART – B**

**(10 x 5 = 50 Marks)**

Answer ALL the questions

	Marks	CO #	Blooms Level
2. a. Define patent. What are the documents required for filling a patent application?	5	CO1	K3
b. Describe the role and significance of WIPO, WTO, and major international treaties.	5	CO1	K4
(OR)			
c. Briefly explain the non-patentable inventions?	5	CO1	K3
d. “IP plays a crucial role in Research and Development (R&D).” Elaborate on this statement.	5	CO1	K4
3.a. Analyze the requirements, procedures, and costs associated with international patenting.	5	CO2	K4
b. Discuss Farmer's Rights and Plant Breeder's Rights.	5	CO2	K3
(OR)			
c. Discuss the aim of PPV and FAR act regarding their innovation, benefits, fairness in the use of GMOs, new breeders and genetic resources.	5	CO2	K3
d. Describe Bioethical issues related to medicine and healthcare industry.	5	CO2	K3
4.a. Explain protection of plant varieties and farmers Right Act.	5	CO3	K3
b. Elaborate the concept of Patent infringement and its various types.	5	CO3	K4
(OR)			
c. Transgenic crops vs CIS genic plants.	5	CO3	K4
d. Compare India’s GM labeling regulations with those of other countries.	5	CO3	K3
5.a. Discuss EPA Act and Rules.	5	CO4	K4

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|--|---|-----|----|
| b. “Using GMOs for sustainable agriculture is ethical”. Comment”.      | 5 | CO4 | K4 |
| (OR)   |   |     |    |
| c. Describe about NBA (National Biodiversity Authority)                | 5 | CO4 | K4 |
| d. Point out few Indian regulations – EPA act and rules.               | 5 | CO4 | K3 |
| 6.a. Discuss about GM labelling - FSSAI                                | 5 | CO5 | K4 |
| b. Guide some tips about Bioethics in health care.                     | 5 | CO5 | K4 |
| (OR)   |   |     |    |
| c. Find out the major ethical conflicts in biological sciences.        | 5 | CO5 | K3 |
| d. Define GM food labeling and explain its significance for consumers. | 5 | CO5 | K2 |

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