

B.Tech. Biotechnology: Semester-VI	
BBT 602: INTELLECTUAL PROPERTY RIGHTS, BIOETHICS & BIOSAFETY	
Teaching Scheme	Examination Scheme
Lectures: 3 hrs/Week	Class Test -12 Marks
Tutorials: 1 hr/Week	Teachers Assessment – 6 Marks
Credits: 4	Attendance – 12 Marks
	End Semester Exam – 70 marks

Course Objective

To explain the basic concept on the intellectual property rights, bioethics & biosafety to the students and describe the importance and roles it can play in area of biotechnology.

Course Learning Outcomes

After completing the course, the student shall be able to:

- CO1: Understand various laws and rights concerning to patent
- CO2: Analyze the role of WTO with reference to biotechnological affairs
- CO3: Identify role of TRIPs.
- CO4: Differentiate between Indian patents and foreign patents.
- CO5: Understand the plant variety protection act.

Unit 1: General Patent Information

US patent laws, patentable subject matter. Requirements for patentability: Utility, Novelty, Nonobviousness, Sufficiency of disclosure. Rights of a patent, infringement of a patent. Procedures for obtaining patent protection. Types of patent applications: Provisional & regular Parts of patent applications. Applying for international patent. WTO: As an international agency controlling trade among nations. WTO with reference to biotechnological affairs, TRIPs
Special issues in Biotechnology Patents Disclosure requirements, Collaborative research, Competitive research, Indian patents and foreign patents, Plant variety protection act, The strategy of protecting plants. Patent Litigation Sub-statritive aspects of patent litigation, Procedural aspects of patent litigation, different Doctrines.

Unit 2: Bioethics

Legality, morality and ethics, the principles of bioethics: autonomy, human rights, beneficence, privacy, justice, equity etc., The expanding scope of ethics from biomedical practice to biotechnology, ethical conflicts in biotechnology - interference with nature, fear of unknown, unequal distribution of risks and benefits of biotechnology, bioethics vs. business ethics, ethical dimensions of IPR, technology transfer and other global biotech issues.

Unit 3: Biosafety concepts and issues

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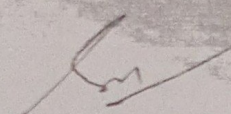
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Rational vs. subjective perceptions of risks and benefits, relationship between risk, hazard, exposure and safeguards, biotechnology and biosafety concerns at the level of individuals, institutions, society, region, country and the world. Role of patent in pharmaceutical industry, computer related Innovations, Case studies Rice, Haldi, neem, etc. and challenges ahead.

Suggested Readings

- The law and strategy of Biotechnological patents by Sibley. Butterworth publications.
- Intellectual property rights – Ganguli – Tata McGrawhill
- Intellectual property right – Wattal – Oxford Publishing House.


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