

IPR AND ETHICS IN BIOTECHNOLOGY

Semester	Subject code	Category	Lecture		Theory		P	C
VI	21SBT6A	Skill based subject - IV	2 hrs per week	30	2 hrs per week	30	0	2

COURSE OBJECTIVE:

- To understand the concepts of IPR and learn the basics of bioethics.

COURSE OUTCOMES:

- On the successful completion of the course, students will be able to:

CO NUMBER	CO STATEMENT	KNOWLEDGE LEVEL (K1-K4)
CO1	Identify the characteristics and role of IPR.	K1
CO2	Describe the concepts of patent.	K2
CO3	Discuss the rights and licensing of copyright.	K2
CO4	Illustrate about trademark.	K3
CO5	Analyze Ethics and Ethical issues in GMO's	K4

Knowledge level: K1- Remember; K2- Understand; K3- Apply; K4- analyze

Mapping with Programme Outcomes

COS	PO1	PO2	PO3	PO4	PO5	PO6
CO1	S	S	S	M	M	S
CO2	S	S	S	S	S	S
CO3	M	M	S	M	S	M
CO4	S	S	S	S	S	M
CO5	M	S	S	S	S	S

S-strong; M- medium; L-low

UNIT I INTRODUCTION TO IPR**6 Hours**

Intellectual Property Rights: Introduction and scope of IPR, Major types of Intellectual property International Character of IPRs, Role of IPRs in Economic Development. Protection of biotechnological inventions, World Intellectual Property Rights organization (WIPO), GATT (General agreement of tariff and trade),

UNIT II PATENTS**6 Hours**

Introduction To Patents, Invention, Life and duration, Basic patent rights, Object of Patent Law, Obtaining Patents, Rights and Obligations of a Patentee. Patenting of genes, biological organisms, plants, animals, microbes and transgenic organisms, Consumer protection act, Patent holders in India.

UNIT III COPYRIGHTS**6 Hours**

Introduction to Copyrights, scope of copyright, Indian copyright act and its perspective, Assignment of copyright, Subject Matters of Copyright, Rights Conferred by Copyright, Assignment and Licensing of Copyrights, International Copyright.

UNIT IV TRADEMARKS**6 Hours**

Functions, Significance and Types of Trademarks, Distinctiveness and Deceptive Similarity, Registration Procedure, Trademark Registry, Grounds for Refusal of Registration of Trademarks.

UNIT V ETHICS**6 Hours**

Bioethics in plant and animal genetic engineering and transgenics- Ethics of genetically modified microbes, ethics in genetically modified food, ethical issues in human biotechnology and Nano biotechnology, ethics in stem cell research, gene therapy and bio warfare.

Distribution of Marks: Theory 80% and Problems 20%

TEACHING METHODOLOGY

- Class room teaching
- Assignments
- Discussions
- Home work
- PPT presentations
- Seminars
- Models/Charts

TEXTBOOKS:

S.NO	AUTHORS	TITLE	PUBLISHERS	YEAR OF PUBLICATION
1	Radhakrishnan R. and Balasubramanian.	Intellectual Property Rights.	S. Excel Books, I ed.,	2008

2	Sree Krishna, V	Bioethics and Biosafety in Biotechnology	NewAge International Publishers	2007
3.	DeepaGoel and ShominiParashar	IPR, Biosafety and Bioethics	Pearson Education India	2013
4.	PrabuddhaGanguli	Intellectual Property Rights	Tata McGraw-Hill publishing company	2001
5.	RajagopalanRadhakrishnana	Intellectual Property Rights	Excel books, India	2008

REFERENCE BOOKS:

S.NO	AUTHORS	TITLE	PUBLISHERS	YEAR OF PUBLICATION
1	Subbaram N. R,	Handbook of Indian Patent Law and Practice,	Viswanathan Printers and Publishers Pvt. Ltd.,	1998
2	Martin. M.W. andSchinzinger. R. III Edition,	Ethics in engineering	Tata McGraw- Hill, New Delhi.	2003
3	Goel Cohen	Technology Transfer	Sage Publications	2004
4	Ashok Kumar	Intellectual property rights	Allied publishers	1994
5	PrabuddhaGanguli	Intellectual property rights	Tata McGraw Hill Publishing company	2001

WEB SOURCES:

1. https://www.youtube.com/watch?v=Z_u2Z7F8-bg
2. https://www.youtube.com/watch?v=HsTi3vD_Usw
3. <https://www.youtube.com/watch?v=k1a2larfMIA>
4. <https://www.youtube.com/watch?v=GKqOWCK71K4>
5. https://books.google.com/books/about/Intellectual_Property_Rights

Syllabus Designer:

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