

Course Outcome (CO):

1. Outline the basics of Intellectual Property Rights, its history, evolution of IPR like patent, design and copyright, WIPO, WTO and property right.
2. Summarize patents and understand the process of applying, requirement, and classification.
3. Identify the need of biosafety and other regulatory framework for the safety of living organisms.
4. Discuss the relationship between IPR and biosafety Benefits of transgenics to human health, society, and the environment.
5. List ethical issues related to healthcare & medicine, food & agriculture, genetic engineering, and testing.

| S.No. | Content | Contact Hours |
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| 1 | General Overview of Intellectual Property Rights: History and evolution of IPR like patent, design and copyright, WIPO, WTO, Trade related Intellectual Property Right International background of intellectual property | 9 |
| 2 | Patents: Requirement of patentable novelty, inventive step, prior art Classifying products as patentable and non-patentable Procedure for applying for patent Patent Infringement and related case studies Biological Patentability | 8 |
| 3 | Biosafety and risk assessment issues; Regulatory framework; National biosafety policies and law, The Cartagena protocol on biosafety, WTO and other international agreements related to biosafety, Cross border movement of germplasm; Risk management issues - containment. | 9 |
| 4 | IPR and Biotechnology: Biopiracy and Bioprospecting Farmers Rights and Plant breeders rights Biodiversity, Ecological aspects of GMOs and impact on biodiversity; Monitoring strategies and methods for detecting transgenics; Radiation safety and non-radio isotopic procedure; Benefits of transgenics to human health, society and the environment. | 8 |
| 5 | Bioethics: Bioethical issues related to Healthcare & medicine Food & agriculture Genetic engineering The Human Genome Project and Genetic Testing, Environmental problems | 8 |
| Total | | 42 |

Books: -

| S.No. | Name of Books/ Author/Publisher |
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