

20CY206 IPR, TQM AND TECHNOLOGY MANAGEMENT

Hours Per Week :

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Course Description and Objectives:

The main objectives this course is to understand the basic knowledge about Industrial and Pharmaceutical legislation in India, patents in industries, Intellectual property rights (IPR) and Technology management. This basic knowledge is very much useful to students to get industrial jobs. Moreover, they can also gain knowledge about Quality management and Manufacturing practices.

Course Outcomes:

Upon completion of the course, the student will be able to achieve the following outcomes:

COs	Course Outcomes
1.	Understand the basic knowledge about industrial and pharmaceutical legislation in India, and intellectual property rights (IPR).
2.	Analyze various steps involved in intellectual property rights and management in industries.
3.	Evaluate ISO and various quality management processes in industries.
4.	Analyze various manufacturing practices employed all over world and familiarize with best industrial manufacturing practices.
5.	Apply basic concepts, role and importance to technology management such as, technology change, technology planning, Technology development and transfer etc.

UNIT - I :

Role of patent in industries: Industrial and Pharmaceutical legislation in India. Code of Professional Ethics, Pharmacy Act 1948. The drugs and cosmetics Act 1940. Drugs and Magic remedies Act 1954. Narcotic Drugs and Psychotropic substances Act 1985. Drug price control order 1995. Recent Changes in IPR law impacting industries.

UNIT - II :

Intellectual property rights (IPR) and Management: IPR, Management of IPR, various IPR, Viz. copyrights and traditional knowledge, patents, condition for patentability, steps to obtain a patent, source of patent information. Infringement analysis, recent changes in IPR and brief idea about various patent policies and practices.

UNIT - III :

Quality management: Concept of ISO, Total quality management (TQM), six sigma, kaizen, JIT, Total quality control (TQC), Total waste elimination (TWE) and Total productive maintenance (TPM).

UNIT - IV :

Manufacturing practices: Concepts and guidelines of USFDA, good manufacturing practices (GMP), GPC, ICH guidelines, research methodology used in CRO.

UNIT - V :

Technology management: Basic concepts, role and importance to technology management, technology change and Technology life cycle, diffusion and growth of Technology, Technology planning, Technology development and strategies. Technology forecasting, Technology generation and development and transfer. Organization for technology at enterprise level.

Text Books:

1. Universal's Guide to Patents Law (English) 4th Edition (Paperback, MANISH ARORA) -Publisher: Universal Law Publishing House ISBN: 9788175345836, 8175345837 Edition: 4thEdition, 2007
2. Indian Patent Law (English, Paperback, Kalyan C. Kankanala)Publisher: OXFORD UNIVERSITY PRESS-NEW DELHI ISBN: 9780198089605, 0198089600 Edition: 2012.
3. Patent IPR Licensing- Technology Commercialisation – Innovation Marketing: Guide Book for Researchers, Innovators 1st Edition.