

2. Research Methodology, Ethics and IPR

L-T-P 3-0-0 Cr. – 3

Objective:

1. To understand the principles of Research Methodology.
2. To be familiar with the Research Methodology and their Implementation.
3. To understand the principles of Intellectual Property Rights.
4. To be familiar with the Intellectual Property Rights and their Implementation.

MODULE – I

Introduction to RM: Meaning and significance of research. Importance of scientific research in decision making. Types of research and research process. Identification of research problem and formulation of hypothesis. Research Designs. Measurement and Data Collection. Primary data, Secondary data, Design of questionnaire; Sampling fundamentals and sample designs. Measurement and Scaling Techniques, Data Processing.

Data Analysis – I: Hypothesis testing; Z-test, t-test, F-test, Chi-square test. Analysis of variance. Non-parametric Test – Sign Test, Run test, Krushall – Wallis test. Data Analysis – II: Factor analysis, Multiple Regressions Analysis. Discriminant Analysis, Use of SPS Package.

MODULE – II

Publication ethics: definition, introduction and importance. Best practices/ standards setting initiatives and guidelines: COPE, WAME, etc. Conflicts of interest. Publication misconduct: definition, concept, problems that lead to unethical behaviour and vice versa, types. Violation of publication ethics, authorship and contributorship. Identification of publication misconduct, complaints and appeals. Predatory publishers and journals.

MODULE – III

Intellectual property: meaning, nature and significance, need for intellectual property Right (IPR), IPR in India – Genesis and development, IPR in abroad. What is a patent, What can be protected by a patent, Why should I apply for a patent? Patent Law, Patentability requirements, Non-Patentable subject matters, Layout of the Patents. Procedure for domestic and international filing of applications, Restoration, Surrender and Revocations of Patents, Rights of Patentee and Working of Patent, Licensing and Enforcing Intellectual Property.

MODULE – IV

Copyright: meaning, scope; What is covered by copyright? How long does copyright last? Why protect copyright? Related rights, Rights covered by copyright. Ownership: Duration, Division, Transfer and Termination of Transfers. Literal and non-literal infringement, Role of claims, Doctrines on infringement: Equivalent doctrine, Pith and Marrow doctrine, Comparative test. Defenses: Gillette Defense, General grounds, Patents granted with conditions, Parallel import. Remedies: Civil, Administrative. STATE LAW: TRADE SECRET, CONTRACT, MISAPPROPRIATION, RIGHT OF PUBLICITY. Trademarks, Trade Secret - Overview, Requirements, Misappropriation of Trade Secret, Departing

Employees, Remedies, Criminal Liability, Misappropriation, Clickwrap Agreements, Idea Submissions; Right of Publicity, Federal Preemption, Review.

Outcome:

1. Technical knowhow of the Research Methodology for real time applications.
2. Technical knowhow of the Intellectual Property Rights for real time applications.

Books Recommended:

1. Research Methodology, Chawla and Sondhi, Vikas
2. Research Methodology, Paneersevam, PHI
3. W. R. Cornish and D. Llewellyn, Intellectual Property: Patents, Copyrights, Trade Marks and Allied Rights, Sweet & Maxwell.
4. Lionel Bently and Brad Sherman, Intellectual Property Law, Oxford University Press.
5. P. Narayanan, Intellectual Property Law, Eastern Law House
6. B. L. Wadehra, Law Relating to Intellectual Property, Universal Law Publishing Co.
7. V. K. Ahuja, Law Relating to Intellectual Property Rights, LexisNexis.
8. AjitParulekar and Sarita D'Souza, Indian Patents Law – Legal & Business Implications;Macmillan India ltd, 2006
9. P. Narayanan; Law of Copyright and Industrial Designs; Eastern law House, Delhi, 2010.
10. Academic Syllabus for M. Tech in Computer Science, 2016 – 2017