

Course Code	DEGEN530	Course Title	FUNDAMENTAL OF RESEARCH
			WEIGHTAGES
			CA ETE(Th.)
			30 70

Course Outcomes: Through this course student should be able to

C01: develop research aptitude and get in-depth understanding of various methods of research.

C02: identify the appropriate research problem and conduct research in an effective way.

C03: understand indexing systems of various journals.

C04: apply ethics of research in writing research paper and dissertation thesis.

C05: understand basics of intellectual property rights.

Unit No.	Content
Unit-1	Basics of research: meaning of research, objectives of research, motivations in research, types of Research
Unit-2	Research approaches, significance of research, research process, criteria of good research, concept of theory: deductive and inductive theory
Unit-3	Literature survey and research gap identification, problem identification as per industrial and societal needs, potential and thrust areas, difference between scientific literature and advocacy literature
Unit-4	Hypothesis: qualities of a good hypothesis, null hypothesis and alternative hypothesis, use of databases, search engines and research gateways, framing of timeline/Gantt chart
Unit-5	Types and classification of journals, journal indexing, role of indexing in defining the quality of journal
Unit-6	Journal citation indices, h-index, h5-index, h5-median, g index, i-10 index, almetrics, JIF, JIF percentile, cite score, SJR, SNIP and eigen factor
Unit-7	Research paper review process, citation, self-citation, funding agencies, Manupatra, academic social networks: google scholar, academia research gate etc
Unit-8	Objectivity and subjectivity in research, integrity, carefulness, openness, respect for intellectual property, confidentiality, social responsibility, competence, legality and informed consent
Unit-9	Definition of Plagiarism, use of turnitin/ithenticate software, role of referencing/bibliography in handling plagiarism, penalties and consequences, University Grants Commission's (UGC) policy for curbing plagiarism
Unit-10	Research writing including research paper, research proposal, review writing, thesis writing, Microsoft word (grammar checking, formatting of documents, incorporating references), reference styles
Unit-11	Poster preparation, coherence of the ideas, use of theory, Microsoft power point (creation of posters, slides for seminar/talk)
Unit-12	Introduction to intellectual property rights concept and theories kinds of intellectual property rights, introduction to patents, patent act 1970 – amendments of 1999, 2000, 2002 and 2005
Unit-13	Copyright and neighboring rights concept and principles, historical development of the concept of trademark and trademark law-National and International
Unit-14	International regime relating to IPR TRIPS and other Treaties (WIPO, WTO, GATTs)

READINGS:

1. RESEARCH DESIGN QUALITATIVE, QUANTITATIVE, AND MIXED METHODS APPROACHES by JOHN W. CRESWELL, SAGE PUBLICATIONS
INTELLECTUAL PROPERTY RIGHTS (IPRS) by E. T.

LOKGANATHAN, NEW CENTURY PUBLICATIONS

2. RESEARCH METHODOLOGY: METHODS AND TECHNIQUES by KOTHARI C R, GARG, GAURAV, NEW AGE INTERNATIONAL
3. AN INTRODUCTION TO INTELLECTUAL PROPERTY RIGHTS by J P MISHRA, CENTRAL LAW PUBLICATION
4. THE PRESENTATION BOOK, 2/E: HOW TO CREATE IT, SHAPE IT AND DELIVER IT! IMPROVE YOUR
5. PRESENTATION SKILLS NOW PAPERBACK by EMMA LEDDEN, PEARSON