



**SREENIVASA INSTITUTE OF TECHNOLOGY AND MANAGEMENT STUDIES
(AUTONOMOUS)**

QUESTION BANK

Year / Semester: III B.Tech VI Semester

Regulation: R23

Subject and Code: Technical Paper Writing & IPR 23MAC351

Subject Code	Subject Name	L	T	P	C
23MAC351U	Technical Paper Writing & IPR	3	0	0	3

Course Educational Objectives:

CEO 1: To enable the students to practice the basic skills of research paper writing

CEO 2: To make the students understand the importance of IP and to educate the basic concepts of Intellectual Property Rights.

CEO 3: To practice the basic skills of performing quality literature review

CEO 4: To help them in knowing the significance of real-life practice and procedure of Patents.

CEO 5: To enable them learn the procedure of obtaining Patents, Copyrights, & Trade Marks

UNIT-1: Principles of Technical Writing: Principles of Technical Writing: styles in technical writing; clarity, precision, coherence and logical sequence in writing-avoiding ambiguity-repetition, and vague language – highlighting your findings- discussing your limitations - hedging and criticizing -plagiarism and paraphrasing.

UNIT-2: Technical Research Paper Writing: Technical Research Paper Writing: Abstract-Objectives-Limitations-Review of Literature- Problems and Framing Research Questions- Synopsis

UNIT-3: Process of research: Process of research: publication mechanism: types of journals-indexing-seminars conferences- proof reading – plagiarism style; seminar & conference paper writing; Methodology-discussion-results- citation rules

UNIT-4: Introduction to Intellectual property: Introduction, types of intellectual property, international organizations, agencies and ties, importance of intellectual property rights. **Trade Marks:** Purpose and function of trade marks, acquisition of trade mark rights, Protectable matter, selecting and rating trade mark, trade mark registration processes.

UNIT-5: Law of copy rights & patents: Law of copy rights: Fundamentals of copy right law, originality of material, rights of reproduction, rights to perform the work publicly, copy right ownership issues, copy right registration, notice of copy right, international copy right law. **Law of patents:** Foundation of patent law, patent searching process, ownership rights and transfer. Patent law, intellectual property audits.



**SREENIVASA INSTITUTE OF TECHNOLOGY AND MANAGEMENT STUDIES
(AUTONOMOUS)**

QUESTION BANK

Year / Semester: III B.Tech VI Semester

Regulation: R23

Subject and Code: Technical Paper Writing & IPR 23MAC351

Text Books:

1. Deborah. E. Bouchoux, Intellectual Property Rights, Cengage Learning India, 2013
2. Meenakshi Raman, Sangeeta Sharma. Technical Communication: Principles and practices. Oxford.

Reference Books:

1. Myneni, Law of Intellectual Property, 9th Ed, Asia law House, 2019.
2. Prabuddha Ganguli, Intellectual Property Rights Tata McGraw Hill, 2001
3. P. Naryan, Intellectual Property Law, 3rdEd, Eastern Law House, 2007.
4. Adrian Wall work. English for Writing Research Papers Second Edition. Springer Cham Heidelberg New York, 2016
5. Dan Jones, Sam Dragga, Technical Writing Style

Max Marks: 10



**SREENIVASA INSTITUTE OF TECHNOLOGY AND MANAGEMENT STUDIES
(AUTONOMOUS)**

QUESTION BANK

Year / Semester: III B.Tech VI Semester

Regulation: R23

Subject and Code: Technical Paper Writing & IPR 23MAC351

S. No.	CO	Questions	BT
Unit I: PRINCIPLES OF TECHNICAL WRITING			
1	1	Explain the principles of technical writing (clarity, conciseness, precision, objectivity) with examples drawn from a real engineering report scenario.	L2
2	1	Discuss clarity, precision, and logical order in technical writing. Illustrate each with a before-and-after rewrite of a poorly written instruction.	L3
3	1	a. Illustrate plagiarism and paraphrasing with examples. Show how to correctly paraphrase a given technical paragraph without plagiarizing. b. Evaluate the importance of avoiding ambiguity in technical writing. Analyse five ambiguous sentences from device manuals and rewrite them.	L3
4	1	Analyze the importance of audience analysis in technical writing. Develop two versions of the same instruction — one for experts and one for beginners.	L4
5	1	a. Write an essay on coherence and consistency in writing, using a case study of a flawed project report and how it can be improved. b. Compare technical writing with creative writing using at least five parameters. Provide workplace examples for each.	L6
6	1	Evaluate the role of objectivity in technical writing. Discuss how bias or subjectivity can affect a technical report's credibility with examples.	L5
7	1	Critically discuss redundancy and repetition in writing with five examples from student/professional reports and suggest corrections.	L5
8	1	a. Develop a short technical note on any modern technology (e.g., Generative AI, IOT, or Block chain) using all principles of technical writing. b. Apply the rules of effective technical writing to draft an instruction manual for a common lab equipment (e.g., digital multimeter or oscilloscope).	L6
9	1	Explain the challenges in technical communication in a multicultural or remote-working environment and propose practical solutions.	L4
10	1	Construct a checklist of 15 items for effective technical writing that can be used by engineering students before submitting their project reports.	L6
11	1	List five key principles of technical writing and state one example for each.	L1



**SREENIVASA INSTITUTE OF TECHNOLOGY AND MANAGEMENT STUDIES
(AUTONOMOUS)**

QUESTION BANK

Year / Semester: III B.Tech VI Semester

Regulation: R23

Subject and Code: Technical Paper Writing & IPR 23MAC351

S. No.	CO	Questions	BT
Unit II: TECHNICAL RESEARCH PAPER WRITING			
1	2	Explain the structure of a research paper in detail using a sample paper on 'IoT-based smart irrigation'. Map each section to its purpose.	L2
2	2	Discuss the importance of framing research problems. Demonstrate by converting three broad topics into precise, researchable problem statements.	L3
3	2	a. Illustrate the role of literature review with examples. Write a literature review of 300 words on any current technology topic using at least five references. b. Evaluate the importance of objectives in research. Rewrite these weak objectives to make them SMART: 'To study AI' and 'To understand pollution'.	L3
4	2	Write a detailed note on synopsis writing. Develop a synopsis for a mini-project on 'Facial Recognition Attendance System'.	L6
5	2	Analyse the features of a good abstract. Write two versions — one flawed and one ideal — for the same research topic.	L4
6	2	Apply the rules of research paper writing to draft a complete sample outline for a paper titled 'Blockchain for Secure Medical Records'.	L3
7	2	Critically analyse the methodology section of a research paper. Develop a sample methodology for a study on 'student mental health post-pandemic'.	L4
8	2	a. Compare the introduction and conclusion of research papers with examples. Explain why they must mirror each other in purpose but not in content. b. Develop a well-structured abstract (150–200 words) on 'Solar Energy Adoption in Rural India' following standard IMRaD format guidelines.	L4
9	2	Evaluate the importance of originality in research writing. Discuss strategies to maintain originality and avoid self-plagiarism with real examples.	L5
10	2	Construct a sample problem statement for a research topic in AI or environmental science, following the standard problem statement format.	L6
11	2	List the major sections of a research paper and briefly state the purpose of each section.	L1



**SREENIVASA INSTITUTE OF TECHNOLOGY AND MANAGEMENT STUDIES
(AUTONOMOUS)**

QUESTION BANK

Year / Semester: III B.Tech VI Semester

Regulation: R23

Subject and Code: Technical Paper Writing & IPR 23MAC351

S. No.	CO	Questions	BT
Unit III: PROCESS OF RESEARCH			
1	3	Explain the process of writing a seminar paper step by step. Develop a seminar paper outline for the topic 'Challenges and Opportunities in AI'.	L3
2	3	Discuss the importance of methodology and discussion sections in a research paper. Show how to write these sections for a study on 'air quality monitoring using IoT'.	L3
3	3	Illustrate plagiarism detection methods. Compare Turnitin and iThenticate and propose a plagiarism prevention policy for an academic institution.	L4
4	3	Evaluate the role of peer review in academic publications. Discuss its strengths, weaknesses, and recent reforms with examples.	L5
5	3	a. Write a detailed note on indexing and abstracting services. Compare Scopus, Web of Science, and Google Scholar in terms of coverage and usability. b. Analyse the publication mechanism of journals from manuscript submission to final publication. Create a flowchart illustrating the editorial workflow.	L4
6	3	Compare conference papers with journal articles on five parameters: length, review rigor, accessibility, citation impact, and revision process.	L4
7	3	Discuss the role of impact factor in determining research quality. Critically examine whether a high impact factor guarantees research excellence.	L5
8	3	a. Apply APA and MLA citation styles to five different source types: journal article, book chapter, website, conference paper, and thesis. b. Develop a sample bibliography of 10 references for a paper on 'deep learning in medical imaging' using IEEE citation format.	L3
9	3	Critically evaluate the importance of proofreading in research publication. Demonstrate by correcting a paragraph containing 10 deliberate errors.	L5
10	3	Construct a complete research outline for a conference submission on 'Cybersecurity challenges in cloud computing' following IEEE conference paper format.	L6
11	3	List any four major indexing databases and state one key feature of each.	L1



**SREENIVASA INSTITUTE OF TECHNOLOGY AND MANAGEMENT STUDIES
(AUTONOMOUS)**

QUESTION BANK

Year / Semester: III B.Tech VI Semester

Regulation: R23

Subject and Code: Technical Paper Writing & IPR 23MAC351

S. No.	CO	Questions	BT
Unit IV: INTRODUCTION TO INTELLECTUAL PROPERTY			
1	4	Explain the importance of IPR in the digital economy. Discuss how IPR laws protect software products, mobile apps, and digital content.	L2
2	4	Discuss the role of international organizations (WIPO, WTO) in framing and enforcing IPR globally. Evaluate how developing countries are affected.	L5
3	4	a. Illustrate trademark acquisition with real-world examples. Walk through the step-by-step process of registering a trademark in India. b. Evaluate copyright infringement cases in the digital era. Analyse two real cases involving music or software piracy and their legal outcomes.	L3
4	4	Apply IPR rules to a hypothetical case: a start-up develops an app that uses code copied from GitHub without licence. Identify violations and suggest remedies.	L3
5	4	a. Write a detailed note on patents — types, patentability criteria, advantages, and limitations. Include a case study of a landmark patent dispute. b. Compare copyright, trademark, and patent under five parameters: duration, subject matter, registration requirement, scope of protection, and renewal.	L2
6	4	Analyse the role of licensing and franchising in IP commercialization. Explain how technology transfer works with a real industry example.	L4
7	4	Evaluate the challenges of enforcing IPR in digital media — piracy, deep fakes, AI-generated content. Propose practical enforcement strategies.	L5
8	4	a. Explain geographical indications with five Indian examples. Discuss how GI tags protect artisans and farmers economically. b. Illustrate industrial designs with case studies — discuss the Apple vs Samsung design patent dispute and its global implications.	L3
9	4	Critically analyse WIPO's role in global IP protection. Evaluate its effectiveness in balancing IP rights with public access to knowledge.	L5
10	4	Discuss the civil and criminal remedies available for IPR infringement in India under the Patents Act, Copyright Act, and Trade Marks Act.	L2



**SREENIVASA INSTITUTE OF TECHNOLOGY AND MANAGEMENT STUDIES
(AUTONOMOUS)**

QUESTION BANK

Year / Semester: III B.Tech VI Semester

Regulation: R23

Subject and Code: Technical Paper Writing & IPR 23MAC351

11	4	List the six major types of Intellectual Property Rights and give one example of each.	L1
----	---	--	----

S. No.	CO	Questions	BT
Unit V: LAW OF COPYRIGHTS & PATENTS			
1	5	Explain the fundamentals of copyright law in India. Discuss what types of works are protected, duration of protection, and conditions for protection.	L2
2	5	Discuss copyright ownership and registration process in India. Who owns copyright in a jointly authored book? How is it registered with the Copyright Office?	L3
3	5	a. Evaluate the foundation of patent law in India (Patents Act 1970 as amended). Discuss how it balances inventor rights with public interest. b. Illustrate patent searching with examples. Conduct a mock patent search on Google Patents for a technology of your choice and document the findings.	L5
4	5	Write a detailed note on fair use and infringement. Analyse five scenarios and determine whether each qualifies as fair use or constitutes infringement.	L4
5	5	Compare copyright and patent laws across five dimensions: registration, protection term, subject matter, rights granted, and international framework.	L4
6	5	Apply copyright law to software protection. How is open-source software licensed? Compare GPL, MIT, and Apache licences and their obligations.	L3
7	5	Discuss the international framework of copyright protection — Berne Convention, WIPO Copyright Treaty, and TRIPS. How do these affect Indian copyright law?	L2
8	5	a. Analyse originality as a requirement in copyright law. How does Indian copyright law define originality? Discuss with reference to case law. b. Develop a case study on patent disputes — analyse the Novartis Glivec case in India and its implications for pharmaceutical patents and public health.	L4
9	5	Evaluate compulsory licensing with examples from the pharmaceutical industry. Discuss the TRIPS flexibilities and how India has used compulsory licensing.	L5
10	5	Explain moral rights in copyright. Discuss how moral rights (right of paternity, right of integrity) apply even after an author sells copyright in their work.	L2



QUESTION BANK

Year / Semester: **III B.Tech VI Semester**

Regulation: **R23**

Subject and Code: **Technical Paper Writing & IPR 23MAC351**

11	5	List five types of works protected under Indian Copyright Act and state the duration of protection for each.	L1
----	---	--	----

Note: L1-Remembering, L2-Understanding, L3-Applying, L4-Analyzing, L5-Evaluating, and L6-Creating

The Six Levels of Bloom's Taxonomy:

1. **Remembering:** Retrieving, recognizing, and recalling relevant knowledge from long-term memory (e.g., list, define, name, locate).
2. **Understanding:** Constructing meaning, explaining ideas, or concepts (e.g., summarize, interpret, classify, compare).
3. **Applying:** Using information in new situations or implementing procedures to solve problems (e.g., solve, use, demonstrate, implement).
4. **Analyzing:** Breaking material into constituent parts, determining how the parts relate to one another and to an overall structure (e.g., contrast, categorize, distinguish, diagram).
5. **Evaluating:** Making judgments based on criteria and standards through checking and critiquing (e.g., judge, critique, justify, defend, argue).
6. **Creating:** Putting elements together to form a coherent or functional whole; reorganizing elements into a new pattern or structure (e.g., design, construct, develop, formulate).