



**MAHATMA GANDHI INSTITUTE OF TECHNOLOGY**  
(Autonomous)  
**M.Tech. I Semester End Examinations**  
(Model Question Paper)

**MR-22**

Course Title: Research Methodology & IPR  
Time: 3 hours

Course Code: EE101MC  
Max. Marks : 60

*Note: Answer ALL Questions*  
*Part-A (10 x 1 = 10 Marks)*

Q. No.	Stem of the Question	M	L	CO	PO
<b>Unit-I</b>					
1. a)	What are the objectives of a Research Problem	1	1	1	1
1. b)	List the characteristics of a good research problem	1	1	1	1
<b>Unit-II</b>					
1. c)	Differentiate between Qualitative and Quantitative Research	1	1	2	1
1. d)	What are the various methods for detecting plagiarism	1	1	2	1
<b>Unit-III</b>					
1. e)	What are the items in a research report	1	1	3	2
1. f)	List the main items of a typical thesis	1	1	3	2
<b>Unit-IV</b>					
1. g)	What are the criteria of patentability	1	1	4	2
1. h)	What is a copyright	1	1	4	2
<b>Unit-V</b>					
1. i)	What types of inventions are not patentable in India	1	1	5	1
1. j)	Why copy right is preferred over patent for a software	1	1	5	1

*Part-B (5 x 10=50 Marks)*

Q. No.	Stem of the Question	M	L	CO	PO
<b>Unit-I</b>					
2. a)	Explain different sources of research problem by giving suitable examples under source	5	2	1	1
2. b)	How to do you go about formulating research problem? How do you organize your research work?	5	2	1	1
<b>OR</b>					
2. c)	What is Hypothesis? What is the significance of formulating the hypothesis in research work?	5	2	1	1
2. d)	What are the data presentation tools? Explain them in brief.	5	3	1	1
<b>Unit-II</b>					
3. a)	What are the various means of conducting literature survey in modern times?	5	2	2	1
3. b)	Discuss the importance of critical literature review and its uses in planning innovation research.	5	3	2	1
<b>OR</b>					
3. c)	What is ethics in research? Why it is important?	5	2	2	1
3. d)	Explain five principles of research ethics.	5	3	2	1
<b>Unit-III</b>					
4. a)	Explain essential features of report writing highlighting the importance and implication of research outcomes	6	2	3	2
4. b)	Discuss the guidelines for preparing bibliography	4	2	3	2
<b>OR</b>					
4. c)	What is oral presentation? What are merits and demerits of oral	5	2	3	2

	presentation?				
4. d)	Discuss the guidelines of oral presentation of a research report.	5	3	3	2
<b>Unit-IV</b>					
5. a)	What is innovation? Elucidate various type of innovation.	5	2	4	2
5. b)	Write short notes on Copyrights and Trade Marks	5	2	4	2
<b>OR</b>					
5. c)	Describe briefly how the online patent data is organized	5	3	4	2
5. d)	Describe the structure and content of a patent document in general.	5	3	4	2
<b>Unit-V</b>					
6. a)	What are the limitations of IP based protection for Traditional Knowledge?	6	2	5	1
6. b)	List significance of Novelty Search in research.	4	4	5	1
<b>OR</b>					
6. c)	Why do geographical indications need protection? How are geographical indications protected?	7	3	5	1
6. d)	List at least 10 geographical indications tagged products in India.	3	2	5	1

M: Marks; L: Bloom's Taxonomy Level; CO: Course Outcome; PO: Programme Outcome