Siddaganga Institute of Technology, Tumakuru-572 103

(An Autonomous Institution affiliated to VTU, Belagavi, Approved by AICTE, New Delhi)

Even Semester M.Tech. Examinations Oct.-Nov. 2024

Research Methodology and IPR

Time: 3 Hours   **Max. Marks: 100**

Note   :   *1. Revealing of Identity in any form in the answer book will be treated as malpractice.*
               2. Answer any five questions choosing one full question from each unit.

			M	BL	CO	PO	PSO
Unit - I							
1	a)	Explain the key research objective and its motivation for conducting research.	10	2	1	1,2	
	b)	What are the research types?	10	2	1	1,2	
		OR					
2	a)	What are ethical practices in research?	10	2	1	1,2	
	b)	Explain informed consent and research misconduct.	10	2	1	1,2	
Unit - II							
3	a)	How we carryout literature survey. List key sources for it.	10	2	1	1,2	
	b)	What are the problem solving steps? Explain each of them.	10	2	1	1,2	
		OR					
4	a)	Draw fishbone diagram, why five breakout in computer lab? (Root cause analysis)	10	2	1	1,2	
	b)	What is 5W2H problem solving method?	10	2	1	1,2	
Unit - III							
5	a)	What is meaning of research design and why we need it?	10	2	1	1,2	
	b)	Draw research design steps.	10	2	1	1,2	
		OR					
6	a)	What are the research design questions?	10	2	1	1,2	
	b)	Explain sample design process.	10	2	1	1,2	
Unit - IV							
7	a)	Classify measurement scale used in research.	10	2	1	1,2	
	b)	What are the sources of error in experiment?	10	2	1	1,2	
		OR					
8	a)	What are the report writing steps? Explain difference between abstract and conclusion.	10	2	1	1,2	
	b)	What are the contents of a research journal article? Explain null and alternative hypothesis.	10	2	1	1,2	
Unit - V							
9	a)	What is IPR? Why we need to protect IP?	10	2	1	1,2	
	b)	Explain the term patent and copyright. Explain briefly about Indian copyright act.	10	2	1	1,2	
		OR					
10	a)	Describe important feature of Indian patent act.	10	2	1	1,2	
	b)	What is Industrial design? Explain complete IPR application process.	10	2	1	1,2	

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