Register Number:……..

KUMARAGURU
college of technology
character is life

M.TECH DEGREE EXAMINATIONS: NOV/ DEC 2024

(Regulation 2024)

First Semester

TEXTILE TECHNOLOGY

24TXT506: Research Methodology

COURSE OUTCOMES

CO1: Analyze research objectives and define research problems to formulate a clear research methodology.

CO2: Evaluate various research designs and experimental designs to recommend appropriate data collection methods.

CO3: Interpret data collection methods and measurement techniques to develop effective scaling and analysis procedures.

CO4: Analyze the processing and analysis of data to test hypotheses and draw meaningful conclusions.

CO5: Develop comprehensive research reports by applying appropriate interpretation techniques and presentation guidelines.

Time: Three Hours **Maximum Marks: 100**

PART A (4*20 = 80 Marks)

1	a)	What do you understand by the term "literature survey"?	4	CO1	[K_1]
	b)	List the steps involved in the problem identification process.	4	CO1	[K_2]
		Scenario: You have been assigned to investigate the effects of remote work on employee productivity. Outline the steps you would take to carry out this research, following the research process. Consider aspects such as defining the problem, reviewing literature, formulating a hypothesis, selecting a research design, and analyzing data.			
		Based on the above said scenario answer the following question 1.c)			
	c)	Explain the steps involved in the research process in detail. Illustrate your answer with examples to demonstrate how each step is applied in the scenario.	12	CO1	[K_3]
2.	a)	Enumerate the techniques used in defining a problem.	4	CO2	[K_1]
	b)	List out the key concepts associated with research design.	4	CO2	[K_2]
	c)	Explain about experimental designs and its types	12	CO2	[K_3]

3.	a)	What are the external sources of secondary data for doing research?	4	CO3	[K_2]
	b)	List out any 4 merits and demerits of interview method used for data collection.	4	CO3	[K_2]
	c)	Explain about measurement scale.	12	CO3	[K_3]
4.	a)	What do you mean by editing in processing operation.	4	CO4	[K_2]
	b)	Classify tabulation according to class intervals.	4	CO4	[K_1]
	c)	Explain the hypothesis testing with the flow diagram.	12	CO4	[K_3]

Answer any ONE Question
PART B (1*20 = 20 Marks)

5.	Explain in detail the mechanics of writing a research report.		CO5	[K_4]
	OR			
6.	Explain about typing instructions to prepare a manuscript.		CO5	[K_4]

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