

U.S.N.

B.M.S. College of Engineering, Bengaluru-560019

Autonomous Institute Affiliated to VTU

April 2025 Semester End Make-Up Examinations

Programme: B.E.

Branch: Mechanical Engineering

Course Code: 23ME5AEREM

Course: Research Methodology

Semester : V

Duration: 3 hrs.

Max Marks: 100

Instructions: 1. Answer any FIVE full questions, choosing one full question from each unit.
2. Missing data, if any, may be suitably assumed.

Important Note: Completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages. Revealing of identification, appeal to evaluator will be treated as malpractice.			UNIT - I	<i>CO</i>	<i>PO</i>	Marks
	1		Discuss the various stages of Research with a flow diagram	<i>CO2</i>	<i>PO4</i>	20
			OR			
	2	a)	Discuss the characteristics of good research	<i>CO2</i>	<i>PO4</i>	08
		b)	Compare the following (i) Descriptive vs. Analytical Research (ii) Applied vs. Fundamental Research (iii) Quantitative vs. Qualitative Research (iv) Conceptual vs. Empirical Research	<i>CO2</i>	<i>PO4</i>	12
			UNIT - II			
	3	a)	Discuss the criteria involved in selecting a problem	<i>CO2</i>	<i>PO4</i>	12
		b)	What is the necessity of defining a problem	<i>CO2</i>	<i>PO4</i>	08
			OR			
	4		What are the techniques involved in defining a problem?			20
			UNIT - III			
	5	a)	Discuss the spectrum of research misconduct of authors	<i>CO2</i>	<i>PO4</i>	10
		b)	Discuss the characteristics of an incredibly dull paper	<i>CO2</i>	<i>PO4</i>	10
			OR			
	6		In detail, discuss the features of the following databases 1 Web of Science 2.Scopus 3.Google Scholar	<i>CO2</i>	<i>PO4</i>	20

			UNIT - IV			
	7	a)	Discuss the procedure adopted to get the patent	CO2	PO4	07
		b)	Who is True and first inventor	CO2	PO4	08
		c)	What are the differences between Product patent and process patent?	CO2	PO4	05
			OR			
	8		What are the principles underlying the patent law in India?			20
			UNIT - V			
	9	a)	Discuss the characteristics of Copy right.	CO2	PO4	10
		b)	Which are non-patentable items	CO2	PO4	10
			OR			
	10	a)	Discuss the features of registered trade mark.	CO2	PO4	06
		b)	Discuss the procedure for patent registration.	CO2	PO4	06
		c)	Which acts amount to copy right infringement and which are not considered infringement	CO2	PO4	08
