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

Autonomous Institute Affiliated to VTU

## April 2025 Semester End Make-Up Examinations

**Programme: B.E.**

**Semester : V**

**Branch: Mechanical Engineering**

**Duration: 3 hrs.**

**Course Code: 23ME5AEREM**

**Max Marks: 100**

**Course: Research Methodology**

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

			UNIT - I			CO	PO	Marks		
			1	Discuss the various stages of Research with a flow diagram						
<b>OR</b>										
2	a)	Discuss the characteristics of good research				CO2	PO4	<b>08</b>		
	b)	Compare the following (i) Descriptive vs. Analytical Research (ii) Applied vs. Fundamental Research (iii) Quantitative vs. Qualitative Research (iv) Conceptual vs. Empirical Research								
<b>UNIT - II</b>										
3	a)	Discuss the criteria involved in selecting a problem				CO2	PO4	<b>12</b>		
	b)	What is the necessity of defining a problem								
<b>OR</b>										
4	What are the techniques involved in defining a problem?									
<b>UNIT - III</b>										
5	a)	Discuss the spectrum of research misconduct of authors				CO2	PO4	<b>10</b>		
	b)	Discuss the characteristics of an incredibly dull paper								
<b>OR</b>										
6	In detail, discuss the features of the following databases 1. Web of Science 2. Scopus 3. Google Scholar									

**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.

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

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B.M.S.C.E. - ODD SEM 2024