

## Evaluation of Formulation of Research Problem (MPTCS-101) (100 marks)

Rubric #	Parameter	Marks Allotted	High	Medium	Low
<b>Rubric 1</b> Initial Evaluation (20 marks)	<b>Identify Problem Domain</b>	<b>5</b>	Detailed and extensive explanation of the purpose and need of the project.	Moderate explanation of the purpose and need of the project.	Minimal explanation of the purpose and need of the project.
			(4-5)	(2-3)	(0-1)
	<b>Literature Survey</b>	<b>5</b>	A well-organized summary of comparative analysis of recent research gathered from multiple quality research sources.	An organized summary of comparative analysis gathered from limited number of research sources.	An inadequate summary is gathered from either a single source or non-research sources.
			(4-5)	(2-3)	(0-1)
	<b>Objectives of the proposed research</b>	<b>5</b>	Specific objectives of the proposed research are defined based on research gaps.	Some of the objectives of the proposed research are defined based on research gaps.	Objectives of the proposed research are either not defined or defined poorly.
			(4-5)	(2-3)	(0-1)
	<b>Novelty</b>	<b>5</b>	Research idea is highly innovative and novel.	Research idea is relatively less innovative or novel.	Research idea is not innovative and novel.
			(4-5)	(2-3)	(0-1)
<b>Rubric 2</b> Mid-term Evaluation (30 marks)	<b>Methodology and expected outcomes</b>	<b>10</b>	A well-defined methodology for scientific research, expected outcomes, collection and analysis of data is specified.	Methodology for scientific research, expected outcomes, collection and analysis of data is specified but may require further improvements.	Methodology to carry out research either not specified or specified inadequately.
			(8-10)	(4-7)	(0-3)

	<b>Identification of performance parameters</b>	<b>10</b>	A comprehensive set of performance parameters are identified.	A few performance parameters are identified.	No or irrelevant performance parameters are identified.
			(8-10)	(4-7)	(0-3)
	<b>Implementation Progress</b>	<b>10</b>	Partial implementation of existing research based on the selected base paper is demonstrated in an efficient way.	Partial implementation of existing research based on the selected base paper is demonstrated in a way that could be improved.	Partial implementation of existing research based on the selected base paper is demonstrated poorly.
			(8-10)	(4-7)	(0-3)
<b>Rubric 3</b> Final Internal Evaluation (50 marks)	<b>Project Execution</b>	<b>10</b>	Full execution of existing research based on the selected base paper is demonstrated in an efficient way.	Full execution of existing research based on the selected base paper is demonstrated in a way that could be improved.	Full execution of existing research based on the selected base paper is demonstrated poorly.
			(8-10)	(4-7)	(0-3)
	<b>Results</b>	<b>10</b>	Results are evaluated and relevant to the expected outcomes of the research.	Results are evaluated and to some extent relevant to the expected outcomes of the research.	Results are either not evaluated or irrelevant to the expected outcomes of the research.
			(8-10)	(4-7)	(0-3)
	<b>Conclusions and Discussion</b>	<b>10</b>	Research work is well- concluded with an adequate discussion.	Research work is well- concluded with an inadequate discussion.	Research work is not well- concluded.
			(8-10)	(4-7)	(0-3)
	<b>Presentation skills</b>	<b>10</b>	Research work is presented really well.	Research work is presented in an appropriate manner.	Research work is presented in an inappropriate manner.
			(8-10)	(4-7)	(0-3)
	<b>Report Writing</b>	<b>10</b>	Report is well- formatted with logical sequencing of contents.	Report is formatted with or without logical sequencing of contents and require improvements.	Report is poorly formatted.
			(8-10)	(4-7)	(0-3)

**Course Outcomes:**

1. Identify the research problem and review the existing literature.
2. Design the objectives of the proposed research based on literature review and identification of research gaps.
3. Propose and implement solution to the framed research problem with well-defined research methodology.
4. Evaluate the results of the proposed research work.
5. Demonstrate the ability to write and present the project report.

<b>CO#</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>
<b>1</b>	<b>3</b>					
<b>2</b>	<b>2</b>					<b>2</b>
<b>3</b>	<b>2</b>		<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>
<b>4</b>		<b>1</b>	<b>2</b>			<b>3</b>
<b>5</b>		<b>3</b>				