

**NATIONAL INSTITUTE OF TECHNICAL TEACHERS TRAINING AND  
RESEARCH, CHANDIGARH**

**(ELECTRONICS & COMMUNICATION ENGINEERING DEPARTMENT)**

**LAB SKILLS EVALUATION RUBRIC FOR M.E.**

<b>Score Distribution (in marks):</b>
Maximum Marks: 50
Internal Final Viva-Voce: 15 Minimum 05 Question to be asked
Lab Work: 20 (From R1: Rubric for Assessing Lab Work)
Lab Report: 15 (From R2: Rubric for Assessing Lab Report)

**LAB SKILLS EVALUATION RUBRIC FOR M.E.**

**R1: RUBRIC FOR ASSESSING LAB WORK**

**Maximum Marks: 20**

**Rubrics Review**

<b>Assessment Parameter (AP)</b>	<b>Criteria</b>	<b>Review Assessment Weightage (in marks)</b>
AP1	Problem solving approach	4
AP2	Knowledge of Tools and Procedures	4
AP3	Team Working Skills	4
AP4	Result Analysis and Data Interpretation	4
AP5	Task Management	4
<b>Total Weightage</b>		<b>20</b>

Level of Achievement						
Assessment Parameter		Excellent (4)	Very Good (3)	Fair (2)	Poor (1)	Score
AP1	<b>Problem Solving Approach</b>	Selects appropriate strategies and/or skills specific to the task, and applies them in an innovative way, without any error	Selects appropriate strategies and/or skills specific to the task and applies them without significant errors	Selects appropriate strategies and/or skills required by the task, but makes a number of non-critical errors in applying them	Selects inappropriate strategies and/or skills required by the task and makes critical errors in applying them	
AP2	<b>Knowledge of Tools and Procedures</b>	Demonstrates deep knowledge of tools and procedures; answer the related questions with explanations and elaboration	Adequate knowledge of most tools and procedures; answer the related questions, but fails to elaborate	Superficial knowledge of tools and procedures; able to answer only some of the related basic questions	Lack of information about most of the tools and procedures; cannot even answer basic related questions	
AP3	<b>Team Working Skills</b>	Positive in interacting with all group members, encourages such interaction in others, and always sensitive to the abilities and feelings of others' contributions; Actively helps to identify group goals and works effectively to meet them in assigned roles	Interacts with all group members spontaneously and contributes in a way that is sensitive to the abilities and feelings of others; Demonstrates commitment to group goals and carries out assigned roles effectively	Interacts with other group members if prompted, but sometimes expresses opinions which are insensitive to the abilities and feelings of others; Demonstrates commitment to group goals, but has difficulty performing assigned roles	Rarely interacts within a group, even with prompting, and shows frequent lack of sensitivity to others' feelings and abilities in opinions expressed; Shows little commitment to group goals and fails to perform assigned roles	
AP4	<b>Result Analysis and Data Interpretation</b>	Excellent insight and well focused results and discussion; Data completely and appropriately interpreted and no over-interpretation	Adequate insight but missed some important points in results and discussion; Interpreted most data correctly but some conclusions may be suspect or over-interpreted	Little insight and analyzed only the most basic points; Interpreted some data correctly but significant errors, omissions still present.	No insight and entirely missed the point of the experiment; Little or no attempt to interpret data or over-interpreted data.	
AP5	<b>Task Management</b>	Very Effective in managing the assigned task and allow experimenter(s) to achieve all goals	Somewhat effective in managing the assigned tasks and allow experimenter(s) to achieve most goals.	Somewhat ineffective in managing the assigned task and allow experimenter(s) to achieve only few goals.	Very ineffective and would not allow experimenters to achieve any goals	

**R1: RUBRIC FOR ASSESSING LAB WORK**  
**R2: RUBRIC FOR ASSESSING LAB REPORT**

**Maximum Marks\* : 20**  
**Maximum Marks\* : 15**

### Rubrics Review

Assessment Parameter (AP)	Criteria	Review Assessment Weightage (in marks)
AP1	Data Writing in Report	7
AP2	Organisation of Report and timely submission	8
<b>Total Weightage</b>		15

Level of Achievement						
Assessment Parameter		Excellent (7-8)	Very Good (5-6)	Fair (3-4)	Poor (1-2)	Score
<b>AP1</b>	<b>Data Writing in Report</b>	Data is complete and relevant; Tables (wherever applicable) are easy to read and units are provided. Graphs (wherever applicable) are labelled and show trends	Tables and graphs (wherever applicable) are drawn but few readings missing or not clearly specified	Data is brief and missing significant pieces of information; Tables and graphs (wherever applicable), are incomplete	No data reported	
<b>AP2</b>	<b>Organisation of Report and Timely Submission</b>	Lab report is well organized as directed and submitted on time	Lab report is well organised but not submitted on time.	Report contains few errors and not submitted on time	Poor organization and late submission	