**2.2.3. Quality of Experiments (15)**

**A. Experimental methodologies (05)**

Maharashtra State Board of Technical Education, (MSBTE) Mumbai, is autonomous body of state of Maharashtra. MSBTE has designed laboratory manuals for most of the subject in curriculum. The “I” Scheme laboratory manuals are designed so that practical of subject should focus on outcomes. These manuals are designed to help all stakeholders, especially students, teachers and instructors to develop pre-determined outcomes in the students. Generally, Experiments are conducted in group of 3 to 4 students. For practical purpose, batch size of 20 students in a batch is considered. While performing experiments, special focus is given so that skills in cognitive domain, psychomotor domain and affective domain are developed in students. As experiments are designed by MBSTE, For each practical, following (for subject named – Data Structure using ‘C’ ) stages/steps is mentioned in laboratory manual.

* Practical Significance
* Relevant Program Outcomes
* Competency and Practical skills
* Relevant Course Outcome(s)
* Practical Outcomes(PrOs)
* Relevant Affective domain related Outcomes
* Minimum Theoretical Background
* Algorithm
* Flowchart
* Program Code
* Resources Required
* Precautions
* Resources Used
* Result (Output of Program)
* Conclusion
* Practical related questions
* Exercise
* References/Suggestions for further reading
* Assessment Scheme

Above steps help teachers as well as students to focus on competencies for achieving outcomes. The Images on next page shows above list of stages given by MBSTE Laboratory Manual.

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| First Page.jpg | 9.jpg |
| 10.jpg | 11.jpg |
| 12.jpg | 13.jpg |
| 15.jpg | |

**B. Innovative experiments including industry attached practices, virtual labs (05)**

**C. Relevance to outcomes (05)**