

Assessment Guidelines for the Practical Skills In Each Assessment Area

Area A The possession of appropriate manipulative skills

<i>Marks</i>	<i>Performance</i>
10-9	Good all-round ability to carry out full range of skills. Intuitively does the right things. Good appreciation of precision of apparatus. Quantitative results within the expected range.
8-7	Good general ability but limited in certain skills.
6-5	Routine worker who does not vary his degree of precision in accordance with the requirements of the particular situation. Does not always appreciate delicacy of apparatus.
4-3	Rather careless in handling of apparatus. Sometimes fails to follow experimental instructions.
2-1	Careless in handling apparatus. Quantitative results not acceptable.

Area A Skill in observation and accurate recording of observations

<i>Marks</i>	<i>Performance</i>
10-9	For observational exercises: correct observations from reagents specified, unexpected result noted. For quantitative exercises: errors and inaccuracies not ignored, results lying outside the range noted. Recordings of results: all relevant information accurately recorded in a form appropriate for calculation or evaluation.
8-7	Good presentation of data but little attention to errors, such as a result outside the normal range. For observational exercises: largely complete description but lacking in finer detail.
6-5	Adequate presentation of data. Inclusion in mean of wide spread of values. Some essential features omitted from description.
4-3	Poor presentation. Student's attention had to be drawn to points he should have seen for himself. Many omissions of essential features in description.
2-1	Very poor presentation, only part of data reported. Results/observation not acceptable. Relies upon other students.

Area B Ability to interpret practical experience

<i>Marks</i>	<i>Performance</i>
10-9	Good appreciation of data, appreciation of error and limitation of experiment. Knows when to obtain additional results. Good analytical approach. Good appreciation of apparatus required, scale of experiment, etc. Ability to calculate accurately results from experimental data. Good written and, where appropriate, oral appreciation of results and appreciation of variables. The ability to relate the whole of his practical experience to particular problems.
8-7	Data appreciated. Adequate analysis of procedure and analysis of error. Method of calculation correct but liable to minor errors.
6-5	Data appreciated. Some help required. Some progress in calculation.
4-3	Little understanding of the relevance of data. Difficulty in handling data and carrying out calculations. Requires assistance in interpreting results and applying experience. Offers no comment or chemically stupid answers.
2-1	Needs a great deal of help at all stages.

Area B Ability to plan and carry out experiments

<i>Marks</i>	<i>Performance</i>
10-9	Able to present a plan with regard to such points as scale of apparatus. e.g. in a preparation, need of thermostat, exclusion of moisture, precision of apparatus required, time available. Plan able to be carried out by another person, i.e. clear, concise, complete list of requirements. Ability to put plan into operation in a specified time, modifying it during the experiment if necessary, without help. Able to discuss critically.
8-7	Good plan, well-presented but in some need of modification. Ability to assemble apparatus and carry out modified plan making further modifications if necessary. Can see overall line of attack for problem in hand.
6-5	Plan well-presented but needs modification. Help needed in putting it into operation. Not a very critical approach.
4-3	Poor plan needing considerable modification or being inadequate. Instructions not followed. Ineffective planning, tends to run out of time.
2-1	Little idea of how to tackle the problem. Much help needed in preparing the plan and in carrying it out.

Area C Attitudes

<i>Marks</i>	<i>Performance</i>
10-9	Self-reliant, able to work with little supervision. Willing to tackle problems and persevere until solved. Can work as part of a team as well as on own. Safety conscious. Willing to help in general running of laboratory if asked. Consistent and perseveres when things are difficult. Tackles his practical work with enthusiasm.
8-7	Work well and with enthusiasm within context of what is asked of him. Shows consideration for others in the laboratory.
6-5	Works reasonably well but with little initiative or enthusiasm.
4-3	Poor persistence. Needs to be kept to the task in hand.
2-1	Inconsiderate of the needs of others in the laboratory. Allows others to do the work. Work consistently needs to be checked. Tries to use other students' results. Easily distracted. Liable to engage in playing in the laboratory.