**Industry Visit Report Marking Guide**

**Marking Guide Introduction**

The information provided in this marking guide is a summary of the topics students are expected to cover in their report with scientific depth and understanding. Information provided by students outside of that provided below can also be considered if it falls within the Report Guidelines and Rubric. The marks for each criterion have been sub-sectioned based on the expected content from students within each criteria.

**Industry Report Guidelines (% marks in brackets)**

1. **InterGrain overview (10%):** Briefly describe the role and significance of InterGrain in the grain industry. In a paragraph or two, reflect upon your overall experience of the visit and any key insights you have gained.

* Provides a succinct explanation of InterGrain's role as a leader in grain breeding, focusing on quality and innovation, and their significance in the industry. (5 marks)
* Reflects on the visit, mentioning hands-on experiences that deepened understanding. (5 marks)

1. **Grain breeding processes and field operation activities (20%):** Discuss the main objectives of wheat breeding and the key stages involved. Evaluate how field operation activities contribute to the wheat breeding process. Include any practical examples or interactions from the visit.

* Outlines the objectives of grain breeding: improved yield, pest resistance, and nutritional quality etc. (5 marks)
* Describes the key stages: include selection, crossbreeding, and field testing etc. (5 marks)
* Evaluates field activities like planting, data collection, and selection etc. (5 marks)
* Includes practical examples from the visit like observing crossbreeding techniques or data collection methods etc. (5 marks)

1. **Milling operations (20%):** Discuss the different stages involved in milling operations and analyse how these stages contribute to the quality of the end-product. Supplement this with relevant industry practices and scientific research.

* Describes the various stages of milling: cleaning, conditioning, milling (breaking and grinding/size reduction), separation etc. (10 marks)
* Analyses how each stage impacts the final product's quality—such as the importance of the breaking process for ensuring uniform grain size (10 marks).
* Cites industry practices and scientific literature to support the analysis.

1. **Laboratory Quality tests (30%):** Outline the parameters assessed during wheat quality testing and the specific laboratory tests used. Discuss in detail the importance of one specific quality test and its role in end product quality.

* Specifies the parameters assessed and outlines specific tests used: moisture content (Near InfraRed), protein content (NIR, Kjeldahl), gluten strength/dough quality (farinograph, extensiograph, alveograph etc), starch quality (Falling Number, Rapid ViscoAnalyser). (15 marks)
* Discusses in depth the importance of one quality test, and how it influences the end product’s baking quality. (15 marks)

1. **References (10%):** Ensure to include in-text citations and a reference list adhering to APA 7th edition format. Your references should be from credible sources like peer-reviewed scientific articles and industry reports.
2. **English Writing competency (10%):** Your report should be grammatically correct and free from spelling errors. Display a clear structure and flow of ideas.