## **Assessment Rubrics**

## • Question 1

Components	Band 3 (1-3)	Band 2 (4-6)	Band 1 (7-10)
Identification of points	<ul> <li>Unable to identify relevant points</li> <li>Superficial explanation/no explanation of point</li> </ul>	<ul> <li>Able to identify some relevant points</li> <li>Attempt to describe points with somewhat clear explanation</li> <li>Attempt to link any relevant information to support elaboration of points</li> </ul>	<ul> <li>Able to identify multiple relevant points</li> <li>Able to provide in-depth analysis on each point</li> <li>Able to link any relevant information to support elaboration of points</li> </ul>
Research	<ul> <li>Lack of research to support argument</li> <li>Few insights provided from research information</li> <li>Many unjustified claims</li> </ul>	<ul> <li>Demonstrates reasonable use of research to support arguments</li> <li>Provide some insights into information obtained from research</li> <li>Most claims are justified</li> </ul>	<ul> <li>Demonstrates extensive research in work</li> <li>Able to provide deep insights from research</li> <li>All claims are justified</li> </ul>
Clarity of report and citations	<ul> <li>Report has inconsistent flow and is difficult to understand</li> <li>Assumptions are sometimes unclear or unrelated to the discussion</li> <li>No citations in the report</li> </ul>	<ul> <li>Report has a coherent flow and is presented clearly</li> <li>Assumptions are largely presented clearly and relevant to the discussion</li> <li>Some citations observed</li> </ul>	<ul> <li>Report is very clear and logical</li> <li>All assumptions made are clearly presented and relevant to the discussion</li> <li>All claims are cited with relevant sources</li> </ul>

## • Question 2

Component	Band 3 (1-3)	Band 2 (4-6)	Band 1 (7-10)
Task 1: Forecasting Model	<ul> <li>Model is not suitable for dataset</li> <li>Few/No explanation for formulation of model</li> </ul>	<ul> <li>Model is somewhat appropriate for dataset</li> <li>Some explanation provided for the formulation of model</li> </ul>	<ul> <li>Model accounts for most of the features of the dataset is a good fit</li> <li>Excellent explanation of model formulation</li> </ul>
Task 2: Number of machines required	<ul> <li>Calculations are illogical and poorly justified</li> </ul>	<ul> <li>Calculations are somewhat logical and justified</li> </ul>	<ul> <li>Calculations are logical and well-justified</li> </ul>
Reasoning and assumptions	<ul> <li>Assumptions are poorly reasoned and irrelevant</li> </ul>	<ul> <li>Assumptions are somewhat reasonable and relevant</li> </ul>	Assumptions made are reasonable and relevant
Task 3: Feasibility and Depth of solutions	<ul> <li>Ideas are generic, lack depth and/or feasibility</li> <li>Many ideas proposed do not address the issues/concerns</li> <li>Evaluation of ideas is brief with no explanations</li> </ul>	<ul> <li>Some ideas proposed are         "off the shell" rather than         designed to address the         problem/concern</li> <li>Some proposed ideas do         not fully address the         concerns and/or some are         not feasible</li> <li>Evaluation of ideas are         adequate</li> </ul>	<ul> <li>Ideas proposed are creative, feasible and fully addresses the problems/concerns</li> <li>Evaluation of ideas are deep and elegant.</li> <li>Contain insightful explanations to justify the team's stance</li> </ul>

## • Question 3

Component	Band 3 (1-3)	Band 2 (4-6)	Band 1 (7-10)
Linear program formulation	No/wrong linear formulation details are provided	Unclear formulation of linear program	<ul> <li>Clear formulation of linear program</li> <li>Includes         <ul> <li>Objective</li> <li>Decision variables</li> <li>Constraints</li> </ul> </li> </ul>
Numerical Answer	Wrong answer/Blank (0 marks)	Not Applicable	<ul> <li>Correct number of machines of each type (5 marks)</li> <li>Correct daily cost incurred (5 marks)</li> </ul>