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| **Section** | **Description** | **Marks Allocated** | **Marks Received** |
| Introduction | * Provides background information about abiotic factors and their importance. * Relates the information to ecosystems. | 3  2 |  |
| Independent Variable | * Correctly names independent variable * Names units for independent variable | 1  1 |  |
| Dependent Variable | * Correctly names dependent variable * Names units for dependent variable | 1  1 |  |
| Controlled Variables | * Correctly names at least three controlled variables * Names manner in which variables will be controlled | 3  3 |  |
| Hypothesis | * Includes independent variable in hypothesis * Includes dependent variable in hypothesis | 1  1 |  |
| Method | * Lists all materials including quantities. * Creates a numbered, repeatable list of instructions for conducting this experiment * Methods section includes strategies for minimising uncontrolled variables and other factors | 2  2  1 |  |
| Diagram | * Includes fully labelled diagram * Diagram drawn in pencil | 1  1 |  |
| Results (Table and Notes) | * Records raw data using required number of tables * Includes dependent and independent variable labels in each table * Identifies outliers in the raw data | 4  4  1 |  |
| Graph | * Completes all required graphs * Includes an appropriate title for each graph stating dependent and independent variables * Correctly labels all axes * Includes units with labelled axes * Uses correct type of graph * Correctly plots points on the graph * Pencil and Ruler | 9  9  1  1  9  9  1 |  |
| Discussion | * Describes patterns and trends in the data * Accurately relates the patterns observed in the data to the hypothesis. * Uses questions to form paragraphs rather than simple answers. * Relates findings to the effect of abiotic factors on water quality and species diversity and abundance. | 4  2  1  10 |  |
| Evaluation | * Comments on the reliability and validity of the data collected * Comments on the reliability of the way in which data was collected * Describes at least two limitations with the experiment that may affect the accuracy of the data * Suggests at least two improvements for the experiment in the future | 2  2  2  2 |  |
| Conclusion | * Summarises findings from the investigation * Comments on whether the outcome of the investigation was valid | 2  1 |  |
| **TOTAL MARKS** |  | **100** |  |