## **Guidance of the Report of Heterocyclic Compound**

| Items                               |                   | Details   | Points |
|-------------------------------------|-------------------|---|--------|
| Compound<br>Name                    | IUPAC             | The official scientific name of the compound according to IUPAC rules.  | 1      |
|                                     | Commercial        | Trade names under which the compound is known, especially if used in pharmaceuticals or industry.   | 1      |
| Chemical Structure                  |                   | Drawing or image of the compound structure, showing the heterocyclic ring and atom arrangement.   | 1      |
| Physical<br>Properties              | Physical<br>State | <b>Physical State:</b> Indicate whether the compound is solid, liquid, or gas at room temperature   | 1      |
|                                     | Melting<br>Point  | Melting Point (°C): Temperature at which the compound begins to melt.   | 1      |
|                                     | Boiling<br>Point  | Boiling Point (°C): Temperature at which the compound begins to boil.   |        |
| Preparation Methods                 |                   | <ul> <li>Laboratory Preparation Method: Outline of laboratory preparation steps, including the chemicals used.</li> <li>Chemical Reaction Equation: If applicable, provide the reaction equation illustrating the compound's synthesis.</li> </ul>  | 3      |
| Applications and Uses               |                   | <ul> <li>Industrial or Medical Applications: Fields in which the compound is used (e.g., pharmaceuticals, pesticides, food industry).</li> <li>Typical Doses or Quantities Used: If applicable, the standard doses or quantities used in industry or medicine.</li> </ul>                           | 2      |
| Literature Review                   |                   | <ul> <li>Summary of Previous Studies: A brief summary of key studies on the compound, especially regarding applications or reactions.</li> <li>Key Scientific Sources: A list of important references or research that focuses on the compound to guide students in further exploration.</li> </ul> | 3      |
| Environmental and<br>Health Impacts |                   | <ul> <li>Environmental Effects: Describe if the compound has any harmful or beneficial effects on the environment.</li> <li>Health Effects: Mention any harmful or beneficial effects on human health from exposure to the compound.</li> </ul>   | 2      |