

## **Benedict's Test**

1. Write a presentation explaining:
  - a. Examples of reducing sugars and their importance in biology.
  - b. Benedict's Test with principle.
  
2. Design a hands-on experiment where students perform Benedict's Test.
  - a. Provide a step-by-step guide for the procedure.
  - b. Why do reducing sugars react with Benedict's reagent?
  - c. Predict the result when testing a glucose solution.
  - d. What color changes were observed, and what do they indicate?
  
- 3 Applications of Benedict's Test.
  - a. A 45-year-old patient visits the clinic complaining of fatigue, frequent urination, and excessive thirst. The doctor suspects diabetes mellitus and orders a series of tests. One of the preliminary tests involves checking the presence of reducing sugars in the patient's urine sample using Benedict's Test. The solution turns orange, indicating a high glucose concentration in the urine. Interpret sugar concentrations in this case.