

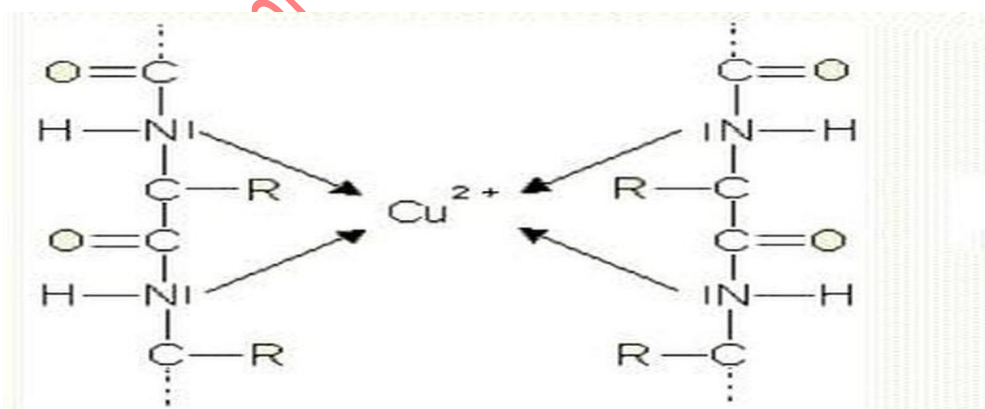
Lect. 6.**Test for proteins****Biuret test**

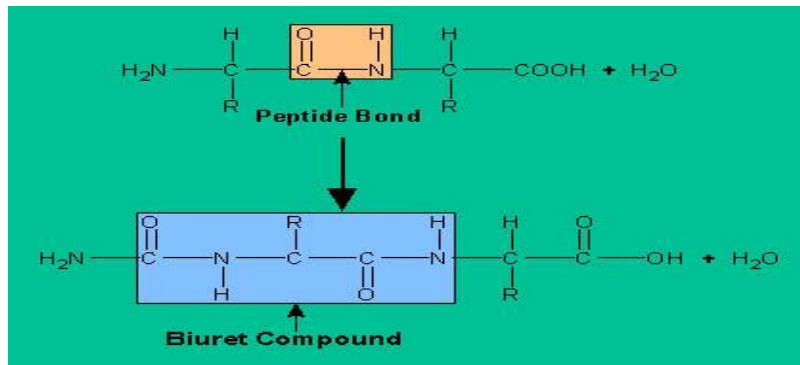
**Object:** To detect the presence of Protein in the given solution by biuret test.

**Principle :**

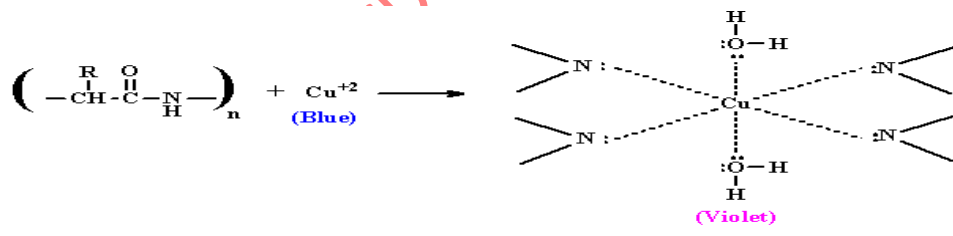
This test is given by compounds containing two or more peptide bond(CO-NH group). Since all proteins and peptides two peptide linkage's .

CuSO<sub>4</sub> reacts with compounds containing two or more peptide bonds to give a violet colored product which is due to formation of co-ordination complex of cupric ions with unshared electron pairs of peptide nitrogen and O<sub>2</sub> of water.





How to reaction





**Reagents:**

**1- (egg white albumin % 1)**

**2-sodium Hydroxide 0.5 % solution in water**

**3-Copper sulphate 10% solution in water**

**Procedure:**

**Take two dry test tube and name them A,B.**

**Put in test tube A 2ml of protein solution in test tube A , and 2ml of distilled water test tube B .**

**Add 2ml of sodium Hydroxide in both test tube.**

**Mix and add 4-6 drops of Copper sulphate solution drop by drop , mix and notice a violet colored .**



**Result:**



a violet colored (+Ve )



negative biuret  
test results

positive biuret  
test results

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reem.S.Najm 2024/ 4/1