Date:

Exp:No:04

Test to detect the presence of Protein.

**Aim:** To test the given food sample for the presence of Protein

**Introduction :** Any of a group of complex organic macromolecules that contain carbon, hydrogen, oxygen, nitrogen, and usually sulfur and are composed of one or more chains of amino acids. Proteins are fundamental components of all living cells and include many substances, such as enzymes, hormones, and antibodies that are necessary for the proper functioning of an organism. They are essential in the diet of animals for the growth and repair of tissue and can be obtained from foods such as meat, fish, eggs, milk, and legumes  
  
**Procedure:**

* The food samples were first grinded using   
  a mortar and a pestle until a slightly fine and crushed texture is   
  attained .
* A small portion of the sample was then transferred on a spot   
  plate and a drop of Biuret reagent was applied to it .

**Conclusion**:

The food sample changes from colourless to purple/violet.

**Inference:**

**Biuret test** is used for detecting the presence of peptide bonds. It relies on the reduction of copper(II) ions to copper(I), the latter form a complex with the nitrogens of the peptide bonds in an alkaline solution. A violet color indicates the presence of proteins