**1.** What is the structural feature characterising reducing sugars ?

**2.** Fructose contains a Keto group but still it reduces Tollens' reagent. Explain.

**3.** Glycine exists as a zwitter ion but *o*- and *p*- aminobenzoic acids do not. Explain.

**4.** Is a diet consisting mainly of rice an adequate diet ? Why or why not ?

**5.** (a) What changes occur in the nature of egg proteins on boiling ?

(b) Name the type of bonding which stabilizes *α*- helix structure in proteins

**6.** What are carbohydrates ? Explain the main difference between $\alpha$-D-glucose and $\beta$ - D -glucose.

**7.** Define the following terms in relation of proteins :

(i) Peptide linkage (ii) Primary structure (iii) Denaturation

**8.** Differentiate between the following with suitable examples :

(a) A globular protein and a fibrous protein (b) Primary and secondary structures of protein.

**9.** Distinguish between peptides and proteins.

**10.** Name the food sources and the deficiency diseases caused due to lack of vitamines A,C, E and K.

**11.** Differentiate between DNA and RNA. Give four differences.

**12.** Enumerate the structural differences between DNA and RNA. Write down the structure of a nucleoside, which is present only in RNA.

**13.** Give any two points of difference between DNA and RNA.