



**THE ANSWERS MUST BE ATTEMPTED ON THE ANSWER SHEET PROVIDED**

**Q.1. Answer the following short questions. (15x2=30)**

- i. Define the term nutrition.
- ii. Define RDA. What is RDA for 19-22 year male?
- iii. What is the importance of Calcium and Iron
- iv. Enlist the consequences of Protein Deficiency
- v. Define Allosteric Enzymes.
- vi. Enlist the different classes of Enzymes
- vii. Define the zymogens
- viii. What is mean by multienzyme system
- ix. What is denaturation of protein?
- x. Differentiate the enzymes lyases from ligases
- xi. What are derived lipids?
- xii. Write name of two saturated and two unsaturated fatty acids
- xiii. What do you know about a balanced diet?
- xiv. Enlist the functions of Prostaglandins?
- xv. How amino acids act as ampholytes?

**Q.2 Answer the following questions. (6x5=30)**

1. Briefly describe the structure and function of Sphingolipids.
2. What are amino acids? Write name and structural formula of one Acidic, Basic and Neutral amino acid.
3. Write a detailed note on structure and function of Hemoglobin.
4. Derive Michaelis-Menten equation for single substrate reaction.
5. Define and explain the term competitive enzyme inhibition.
6. Define and Explain thermogenic effects of food. Discuss various factors of TEF.