QP Code : 77898

(2½ Hours) [Total Marks : 60

N.B. : (1) All questions are **compulsory**.
     (2) Use of non programable calculator is allowed.
     (3) Figures to **right** indicate **full** marks.

1. (A) Attempt **any two** of the following :—
     I. Explain Blood clotting with reference to principles invovled in it.
     II. List the fat soluble vitamins. Explain the procedure of estimation of vitamin C.
     III. Discuss the principle and procedure for estimation of uric acid in serum..
     IV. Explain the role of calcium and iodine in human physiology.

  (B) "Estimation of cholesterol in blood is instrumental in prediction of disorders" Justify.   4
                              OR
  (B) Discuss the role of vitamin B complex in human diet.   4

2. (A) Attempt **any two** of the following :—   8
     I. What are carbohydrates ? How are they classified ?
     II. Describe the principle and application of RIA.
     III. Write a note on enzymes with emphasis on its properties and classification.
     IV. Explain the glucoseoxidase method for estimation of glucose.

  (B) Describe the main feature of antigen antibody interactions.   4
                              OR
  (B) Discuss the principle and procedure for estimation of fats.   4

3. (A) Attempt **any two** of the following :—   8
     I. What is food deterioration ? Explain any two factors affecting it.
     II. What is food legislation ? Give the need of it in food industry.
     III. Explain the term 'fuel value' of food. Describe the principle of method used for its determination.
     IV. "Use of chemical preservatives is an effective method for food preservation": Justify

  (B) Write a short note on "Pasteurization".   4
                              OR
  (B) Discuss the packaging materials used for cheese and milk powder.   4

4. (A) Attempt **any two** of the following :—   8
      I. Discuss the method for estimation of lactose in milk.
      II. List the components of tea. Add a note on ash content of it.
      III. Explain the principle and method for the determination of iodine value.
      IV. How are pesticide residues detected in food ? Give the significance of detection of same.

  (B) Explain the method for estimation of zinc in canned foods.   4
<div align="center">OR</div>
  (B) Give the composition of honey. Add a note on common adulterants present in honey   4

5. Attempt **any four** of the following :—   12
      I. How is createnine estimated from blood ?
      II. Describe the method for estimation of blood glucose.
      III. Write a short note on Fluoroimmunoassay.
      IV. What are amino acids? Describe their classification.
      V. Give the properties of ideal packaging material.
      VI. What is food processing? Explain the need of it.
      VII. Explain the method for estimation of gluten content of wheat flour.
      VIII. How is colouring matter in food detected and estimated ?