Post graduation (M.D. - Biochemistry) Preliminary Theory Examination Government Medical College, Bhavnagar

Paper-2 (Metabolism, Bioenergetics, Nutrition, Vitamins and Hormones)

Date: 16/10/2024 Marks: 100

Q-1 Write detail notes on following.

(20 Marks)

• Type of haemoglobinopathies. Biochemical and molecular basis of pathogenesis, clinical feature, diagnosis and treatment of sickle cell disease.

Q-2 Write detail notes on following.

(20 Marks)

• Biochemical changes occurs diabetes mellitus ketoacidosis. Write it's diagnosis with biochemistry explanation of changes in parameters and management of same.

Q-3 Write short notes on following.

(20 Marks)

- 1. Biochemical basis of etiology, clinical features, diagnosis and treatment of various hyperhomocystinemia
- 2. Draw flow chart for understanding of Von-Gierke's disease pathogenesis and it's consequences.

Q-4 Write short notes on following.

(40 Marks)

- 1. Metabolic changes during starvation.
- 2. Overview of HDL metabolism
- 3. G6PD deficiency and it's clinical significant with treatment of malaria.
- 4. Metabolism and fates of phenylalanine.
- 5. Energy formation from palmitic acid through beta oxidation.
- 6. Alcohol metabolism and it's effect on other metabolism.
- 7. Effect of pancreatitis on digestion absorption and it's consequences.
- 8. Dietary advice for patient of coronary artery disease, with biochemical reason.