

Post graduation (M.D. - Biochemistry) Preliminary Theory Examination
Government Medical College , Bhavnagar
Paper-2 (Metabolism , Bioenergetics, Nutrition , Vitamins and Hormones)

Date : 02/07/2026

Marks : 100

Q-1 Write detailed notes on the following. (20 Marks)

- Define tertiary structure of protein with domain and chaperon. Explain pathogenesis of prion disease with an example of amyloidosis.

Q-2 Write detailed notes on the following. (20 Marks)

- Enumerate cholesterol synthesis with regulation. Describe type of dyslipidemia. Explain framingham risk scores for cardiovascular risk.

Q-3 Write short notes on following. (20 Marks).

1. Write overview of inter - relation of all major metabolic pathways
(preferably explain with flow chart or diagram)
2. Classify of glycogen storage disease. Write pathogenesis of of Von-Gierke's disease pathogenesis.

Q-4 Write short notes on following. (40 Marks)

1. Metabolic and neuro-transmitter alteration during alcohol addiction and withdrawal.
2. Classify obesity. Explain endocrinal pathogenesis of obesity.
3. Function and significant of PTH and Intact PTH.
4. Ubiquitine and ubiquitinylation.
5. Effect of cirrhosis of liver on metabolism and digestion – absorption
6. Genetic regulation of haemoglobin synthesis and impact of therapeutic drugs & metal on it.
7. Explain “Role of vitamins on metabolism” (with examples)
8. Alteration in blood buffer and renal buffer in case of extensive interstitial lung disease.