

Post graduation (M.D. - Biochemistry) Preliminary Theory Examination

Government Medical College , Bhavnagar

Paper-1 (General and Clinical Biochemistry - Enzymology and Biostatistics )

Date : 14/10/2024

Marks : 100

**Q-1 Write detail notes on following. (20 Marks)**

- Explain principle of potentiometry using Ion Selective Electrode for pH, pO<sub>2</sub>, pCO<sub>2</sub> and glucose estimation. Draw figure for each ISE based electrode and define it's part with significance.

**Q-2 Write detail notes on following. (20 Marks)**

- Write salvage pathway of purine and it's disorder. Explain biochemical reason for different type of hyperuricemia and it's management

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

1. Explain primary structure relationship with protein function with two example.
2. Explain any five different mechanism of chemotherapeutic drug.

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

1. Technic, Advantage and disadvantage of eLearning teaching and assessment method.
2. Define harmonization as per ISO 15189:2022 and write it's need with criteria.
3. Significant of essential fatty acid
4. Technic, advantage and disadvantage of Problem based learning
5. Principle, type and use of ELISA
6. Clinical utility of enzyme inhibition.
7. Role of Gene expression for regulation of ferritin and transferrin synthesis.
8. Explain Type of lipoprotein with it function