

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

Paper-4 (Technique in experimental biochemistry, Recent advances)

Date : 04/07/2025

Marks : 100

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

- Enumerate analytical methods with it's principle , significant and limitation of creatinine estimation and eGFR.

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

- Definition of quality indicator (QI) with it's standard requirements as per ISO 15189:2022.
- Define quality indicator for period of sample collection to sample receipt (minimum four QI) and for period of sample storage (minimum four QI) with process of it's monitoring and measuring elements.
- Write combined quality policy and quality objective according to your defined quality indicator

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

1. Principle and utility of Fourier Transform Infrared (FTIR) spectroscopy in clinical biochemistry laboratory. Approach to validate the result of FTIR.
2. Purpose, objective, component and assessment of "Foundation Course" for First year Indian Medical Graduate (IMG)

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

1. AETCOM
2. Dry Chemistry Analyzer vs Wet Chemistry Analyzer
3. Document Control and Control of Record as per ISO 15189:2022
4. Approach , advantage and disadvantage of patient's data moving as quality control alternative
5. Delta Bilirubin - Define and Clinical significant.
6. Principle, component, advantage and disadvantage of Flame Photometer
7. Mechanism , clinical utility and biochemical adverse event with use of GLP-1 analogues
8. Sample acceptance exception in case of wrong vacuette (Write minimum 5 scenario)