

Post graduation (M.D. - Biochemistry) Preliminary Theory Examination
Government Medical College , Bhavnagar
Paper-3 (Molecular Biology , Immunology and Cancer)

Date : 18/10/2024

Marks : 100

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

- Define and differentiate DNA damage and mutation. Write factor responsible for it and it's repair mechanism in detail. Explain disease related to defect of repair mechanism.

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

- Role of vector and restricted endonuclease enzyme in Recombinant DNA technology. Explain Detection of clone colony of the bacteria after recombinant DNA process.

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

1. Type and Genetical basis of diversification of Immunoglobulin. Explain somatic hypermutation.
2. RFLP

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

1. Define cDNA library and it's significance.
2. Type and effect of the mutation – explain each with example
3. Quantitative Real time PCR
4. Mechanism of intron removal and splicing.
5. Lac operon
6. Explain “ All mutation are not dangerous”
7. Type and mechanism of action of Vaccines
8. Mechanism of action of Drugs used against SARS-COVID19