

NEP- Gene Organization, Replication and Repair

Sem IV

2023-24 Even Semester

April 30, 2024

Date of submission: May 02, 2024

Maximum marks: 16

Attempt all the questions:

- 1. Explain the process of Homologous recombination with diagram. (3)**
- 2. Define the following: (1)**
 - a. Chiasma**
 - b. Holliday junction**
- 3. Discuss the role of enzymes involved in Homologous recombination. (2)**
- 4. Differentiate between Serine and Tyrosine recombinases. (3)**
- 5. Discuss different classes of transposable elements. (3)**
- 6. Explain with diagram: DNA transposition by cut and paste and replicative mechanism. (4)**