



THE ANSWERS MUST BE ATTEMPTED ON THE ANSWER SHEET PROVIDED

Q.1. Explain the following:

(15x2=30)

1. HETEROCHROMATIN
2. FRAME SHIFT MUTATIONS
3. TRANSFORMATION
4. PHAGE PHENOTYPE
5. P-ELEMENTS
6. CONSTITUTIVE ENZYMES
7. *Hfr*
8. VIRULENT PHAGE
9. AUXOTROPH
10. GENE SUPPRESSION
11. DEGENERACY
12. TOPOISOMERASE
13. PRIMER
14. F-PILI
15. ANTICODON

Q.2. Answer the following questions.

(5x6=30)

1. What are CONDITIONAL LETHAL MUTANTS? How we can study these mutants?
2. What do you understand by the term SPECIALIZED TRANSDUCTION? Explain with the help of diagram.
3. Explain in detail the general features of GENETIC CODE.
4. Explain the HOLIDAY MODEL of RECOMBINATION. Draw diagram also.
5. How can we use the phenomenon of CONJUGATION with reference to gene mapping?