

10. Which of the following cells of *E. coli* are referred to as F⁻
- a) Male cells
 - b) Female cells
 - c) Both male and female cells
 - d) Neither male nor female cells

PART – B

ANSWER ALL THE QUESTIONS

(5*7=35)

11. a) Write short notes on structure of tRNA.

(OR)

b) Give a brief note on Genetic code.

12. a) Outline the Hershey and Chase experiment.

(OR)

b) Comment briefly on Experiments of Fraenkel and Singer to prove RNA as a genetic material.

13. a) List out the physical mutagenic agents.

(OR)

b) Write notes on frame shift mutation.

14. a) Describe briefly on Nucleotide excision repair mechanisms.

(OR)

b) Brief out on mismatch repair.

15. a) Give a note on process of Conjugation.

(OR)

b) Write notes on Transformation.

PART – C

ANSWER ANY THREE QUESTIONS

(3*10=30)

16. Discuss in detail on structure and types of DNA.

17. Write an essay on Griffith experiment.

18. Define mutation and add a detailed note on different types of mutation.

19. Give an account on SOS repair mechanisms.

20. Write a detailed account on specialized & generalized Transduction.