

D.K.M.COLLEGE FOR WOMEN (AUTONOMOUS), VELLORE-1

SEMESTER EXAMINATIONS NOVEMBER - 2017

MOLECULAR GENETICS

15CPBT1A

Max.Marks:75

Time : 3 Hrs

SECTION-A (5x 6 = 30)

Answer ALL the questions.

1. (a) Explain DNA damage and repair mechanism.

(Or)

- (b) Describe various types and causes of mutation.
- 2. (a) Describe about RNA interference.

(Or)

- (b) Explain the structure of t-RNA.
- 3. (a) Write notes on Tryptophan Operon.

(Or)

- (b) Give an account on Yeast LAC Operon.
- 4. (a) What is Transposable element? Describe.

(Or)

- (b) Describe site specific recombination.
- 5. (a) Briefly write about southern blotting.

(Or)

(b) Give an account on nucleic acid hybridization.

SECTION-B (3x15 = 45)

Answer any THREE of the following questions.

- 6. Describe gene replication in prokaryotes.
- 7. Give an account on the characteristics of genetic code and its elucidation.
- 8. Write an essay on DNA sequence rearrangement in Salmonella.
- 9. Elaborate the biological significance of recombination and transposable elements.
- 10. Explain in detail about PCR and its applications.

* * * * * * *