

Reg No:

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

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

SEMESTER EXAMINATIONS

NOVEMBER- 2016

15CPBT1A

MOLECULAR GENETICS

Time: 3 Hrs

Max.Marks : 75

SECTION-A (5x 6 =30)

Answer ALL the questions.

1. (a) Describe the types and causes of mutation.
(Or)
(b) Explain DNA damage and its repair.
2. (a) Describe the structure and processing of tRNA.
(Or)
(b) Write notes on RNA interference.
3. (a) Explain about yeast GAL regulatory pathway.
(Or)
(b) What is Tryptophan operon? Explain.
4. (a) Write notes on prokaryotic transposable elements and its types.
(Or)
(b) Give an account on general and site specific recombinations.
5. (a) Describe Agarose gel electrophoresis.
(Or)
(b) Explain about southern blotting technique.

SECTION-B (3x15 =45)

Answer any THREE of the following questions.

6. Describe the methods of transcription and gene regulation in eukaryotic cell.
7. Give an account on characteristics of genetic code and its elucidation. Discuss about the code degeneracy.
8. Define transposons in eukaryotes. Briefly mention the applications of transposons in molecular biology.
9. Explain in detail about regulation of gene expression.
10. What is PCR? Discuss the process with its applications in biology.

* * * * *