

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

MSc DEGREE EXAMINATION MAY 2018
(First Semester)

Branch --ZOOLOGY

MOLECULAR GENETICS

Time: Three Hours

Maximum: 75 Marks

Answer ALL questions
ALL questions carry EQUAL Marks (5 x 15 = 75)

- 1 a Describe different models of DNA replication in circular chromosome.
OR
b Give an account on requirement substances and enzymes of prokaryotic DNA replication.
- 2 a What is Excision repair? What are its types? Discuss its mechanism.
OR
b Write an essay on fine structure of gene.
- 3 a Discuss the role of RNA polymerases in eukaryotic transcription.
OR
b Explain the process of RNA transcripts and splicing of RNA.
- 4 a Elaborate the role of amino acid activating enzyme in protein synthesis.
OR
b Describe common structural features of a gene in gene expression.
- 5 a Explain the role of chemical mutagens in inducing mutations.
OR
b What are the functional consequences of macro mutation in DNA?

Z-Z-Z

END