

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

MSc DEGREE EXAMINATION DECEMBER 2018
(First Semester)

Branch -ZOOLOGY

MOLECULAR GENETICS

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

(10 x 1 = 10)

- 1 DNA is
(i) positively charged (ii) negatively charged
(iii) neutral (iv) none of these
- 2 The diameter of DNA helix is
(i) 10 Angstrom (ii) 20 angstrom
(iii) 1 nm (iv) 2 nm
- 3 The function of enzyme involved in base excision repairs.
(i) Addition of correct base (ii) Addition on correct nucleotide
(iii) Removal of incorrect base (iv) Removal of phosphodiester bond
- 4 Most protein coding genes are
(i) single copy (ii) repetitive DNA
(iii) RNA (iv) circular DNA
- 5 Degeneracy of genetic code was identified by
(i) Waston (ii) Crick
(iii) Lagervist (iv) Darwin
- 6 Modification of 5' ends of eukaryotic mRNA is called
(i) Polyadenylation (ii) Capping
(iii) Splicing (iv) Transcription
- 7 An operon is made up of
(i) promoter (ii) operator
(iii) structural gene (iv) all of above
- 8 RNA is
(i) single stranded (ii) double stranded
(iii) triple stranded (iv) both (i) & (ii)
- 9 Point mutation involves
(i) deletion (ii) insertion
(iii) duplication (iv) change in single base pair
- 10 Genetic drift is an account of
(i) C-4 (ii) C-6 ,
(iii) C-1 (iv) C-2

SECTION - B (35 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks (5 x 7 = 35)