

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)
BSc DEGREE EXAMINATION DECEMBER 2017
(Fifth Semester)

Branch - **ZOOLOGY**

GENETICS

Time : Three Hours

Maximum : 75 Marks

SECTION-A (20 Marks)

Answer **ALL** questions

ALL questions carry **EQUAL** marks (10 x 2 = 20)

- 1 Monohybrid cross.
- 2 Dominant character.
- 3 Polygenes.
- 4 Epistasis.
- 5 Synopsis.
- 6 Kappa particles.
- 7 Barr body.
- 8 Duplication.
- 9 Phenylketonuria.
- 10 Euthenics.

SECTION - B (25 Marks)

Answer **ALL** Questions

. **ALL** Questions Carry **EQUAL** Marks (5 x 5 = 25)

- 11 a What is co-dominance? Explain with an example.
OR
b Define the term test cross. Explain with an example.
- 12 a Write a note on the inheritance of complementary genes.
OR
b Describe the inheritance of Rh factor.
- 13 a Explain the inheritance of colour blindness in man.
OR
b What do you know about sex determination in man?
- 14 a List out the features of Turner's syndrome.
OR
b What is euploidy? Give a short note on its 2 types.
- 15 a Write a short note on sickle cell anaemia.
OR
b Give a brief account on out breeding.

SECTION - C 130 Marks)

Answer any **THREE** Questions

ALL Questions Carry **EQUAL** Marks (3 x 10 = 30)

- 16 Define the law of dominance. Explain the law with a suitable example.
- 17 Explain the inheritance of skin colour in man.
- 18 Write a detailed essay on crossing over.
- 19 What is chromosomal aberrations? Describe the changes in the structure of chromosomes.
- 20 Describe the factors affecting Hardy - Weinberg equilibrium.

Z-Z-Z

END