

Model Question paper

Genetics (Z) 1

11th Standard

Biology

Reg.No. :

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I. Answer all the questions.

II. Use blue pen only.

Time : 00:45:00 Hrs

Total Marks : 30

6 x 1 = 6

Part - A

- 1) The number of chromosomes in the body cell of *Drosophila* is -----
(a) 6 pairs (b) 4 pairs (c) 8 pairs (d) 23 pairs
- 2) The gamete that is responsible for the formation of male sex is -----
(a) Egg cell with X-chromosome (b) sperm cell with X-chromosome (c) sperm cell with XY-chromosome (d) sperm cell with Y-chromosome
- 3) Sex determination by environment can be seen in -----
(a) *Drosophila* (b) *Bonellia* (c) Vertebrates (d) Honey bees
- 4) Which of the following is the X-linked character?
(a) Eye colour in *Drosophila* (b) Skin colour in man (c) Skin colour in Rabbit (d) Wings of *Drosophila*
- 5) ABO blood group in man is an example for
(a) Pleiotropism (b) multiple allelism (c) x - linked inheritance (d) y - linked inheritance
- 6) Rh. factor in blood was discovered by-----
(a) Galton (b) Davenport (c) Landsteiner and Wiener (d) Clarence Mc Clung

Part - B

5 x 2 = 10

- 7) What are multiply alleles?
- 8) Mention the possible genotypes of the offsprings if the parental blood groups are B and B.
- 9) What is the cause for the death of a child in erythroblastosis fetalis?
- 10) What was the opinion of biometricians in genetics
- 11) Who are mulattoes?

Part - C

3 x 3 = 9

- 12) What will be the nature of the F_2 progeny, if a coloured rabbit is crossed with an albino?
- 13) Discuss how 'O' blood group is considered as an universal donor.
- 14) What is erythroblastosis fetalis?

Part - D

1 x 5 = 5

- 15) Explain genic balance mechanism of sex determination.
