

Model Question paper

Genetics(B) 1

11th Standard

Biology

Reg.No. : 

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I. Answer all the questions.

II. Use blue pen only.

Time : 01:30:00 Hrs

Total Marks : 50

5 x 1 = 5

Part - A

- 1) The smallest unit of the gene which does for an aminoacid is.....  
(a) cistron (b) Muton (c) Recon (d) Codon
- 2) The functional unit of a gene which can synthesize one polypeptide is called.....  
(a) Codon (b) cistron (c) Muton (d) Recon
- 3) The gene is present at a position on the chromosome called.....  
(a) Locus (b) Nucelotide (c) Nucleoside (d) Allele
- 4) Moist vapor theory was given by \_\_\_\_\_  
(a) Aristotle (b) Pythagoras (c) Delepatius (d) Darwin
- 5) The grandchildren may exhibit a feature of an earlier generation not seen in parents. This is called\_\_\_\_\_  
(a) Homunculus (b) Pangenesis (c) Atavism (d) Blending

Part - B

10 x 2 = 20

- 6) Define Heredity
- 7) Define Homunculus.
- 8) Define Pangenesis.
- 9) Define Exons and introns.
- 10) Define codon
- 11) Provide the genotype for Himalayan albino rabbits
- 12) What was the opinion biometricians in genetics?
- 13) What is hermaphroditism?
- 14) Why was Mendel's work not accepted by the scientific world when it was presented?
- 15) What is meant by dominant and recessive character?

Part - C

5 x 3 = 15

- 16) Explain the significance of variation
- 17) Give the early views of heredity
- 18) What are the basic features of inheritance?
- 19) Explain the molecular structure of a gene.
- 20) Give an account of the postulates of the chromosomal theory of inheritance.

Part - D

2 x 5 = 10

- 21) Draw a parallel between Mendel's factors and chromosomes and explain the chromosomal theory of inheritance.
- 22) Explain the crossing technique followed by Mendel in his hybridization experiment.

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