

Model Question Paper
Modern Genetics - Part II
12th Standard

Biology

Reg.No. :

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- I. Answer all the questions.
- II. Use Blue pen only.
- III. Question No 20 is compulsory.

Time : 01:00:00 Hrs

Total Marks : 60

5 x 1 = 5

Section-A

- 1) The Technique of separating complete set of chromosomes from cells is known as
(a) Karyotyping (b) Karyogram (c) Idiogram (d) Immunogram
- 2) The chemical used to stop the mitosis is at metaphase
(a) colchine (b) colchicine (c) colamide (d) bromide
- 3) The nutritive solution which is used for culture of foetal cells is
(a) Phytohaemarrage (b) Phytohaematin (c) Phytohaemonin (d) Phytohaemagglutinin
- 4) The 4 and 5 chromosomes of human Karyo typing are of this type
(a) metacentric (b) submeta centric (c) acrocentric (d) acentric
- 5) The Karyotyping method which is used to identify the sex of individuals during pregnancy is
(a) allantocentric (b) chromocentesis (c) aminocentesis (d) utero centesis

Section-B

- 6) Write a note on SCID (or) Bubble boy syndrome.
- 7) Name a few genetic diseases found in human.
- 8) What is proteomics?
- 9) What is cloning?
- 10) What are the benefits of cloning?
- 11) Write any three demerits of cloning.
- 12) What is Totipotent?
- 13) What is transfection (or) transfected cell?
- 14) Mention uses of transfection (or) transfected cell.

9 x 3 = 27

Section-C

- 15) Explain the method of preparing human karyogram. (or) Explain the method of preparing karyogram and its uses.
- 16) Explain karyo typing of human chromosomes (or) Write about seven groups of chromosomes in human.
- 17) Write the use of Bioinformatics.
- 18) Write about any three Genetic diseases in human.
- 19) Write the significance and benefits of Human Genome Project.

5 x 5 = 25

Section-D

- 20) a) Write an essay on bioinformatics.

1 x 10 = 10

(OR)

- b) Write an essay on protein structure and protein model and its uses.
