61518

Fifth Semester B.Sc. Degree Examination, March/April 2021

(CBCS Scheme)

Genetics – VI

Paper GNT 502 – BASIC HUMAN GENETICS

Time : 3 Hours] *[Max. Marks : 70*

Instructions to Candidates : Draw neat labelled diagrams wherever necessary.

PART – A

I. Answer any **FIVE** of the following : **(5 × 3 = 15)**

1. Explain Paris nomenclature.

2. Write the pedigree symbols for (a) normal male (b) consanguineous marriage (c) abortion.

3. Differentiate between innate and acquired immunity.

4. What is X-linked aggamaglobulinaemia?

5. Mention the chromosomal abnormality involved in CML.

6. Write the advantages of dermatoglyphics.

7. Define Euthenics.

PART – B

II. Answer any **FIVE** of the following : **(5 × 5 = 25)**

8. Explain the genetics involved in diabetes mellitus.

9. Give a note on human karyotyping.

10. Differentiate Benign and Malignant tumors.

11. Explain the genes involved in cancer.

12. Write a note on cells of immune system.

13. Give an account on amniocentesis.

14. Explain gene therapy with reference to SCID.

PART – C

III. Answer any **THREE** of the following : **(3 × 10 = 30)**

15. Explain the genetics and inheritance pattern of any two autosomal recessive diseases.

16. Give a detailed note on MHC complex.

17. Describe stem cells and stem cell therapy.

18. Explain :

    (a) Genetic counseling

    (b) Ultrasonography.

19. Write an elaborative note on properties of malignant cells.