



SN - 413

V Semester B.Sc. Examination, November/December 2017
(Semester Scheme) (CBCS/NS) (F + R)
GENETICS - VI
Basic Human Genetics

Time : 3 Hours




Max. Marks : 70

- Instructions :** i) Answers should be written **completely** either in **Kannada** or in **English**.
ii) Draw diagrams **wherever** necessary.

PART - A

I. Answer **any five** of the following :

(5×3=15)

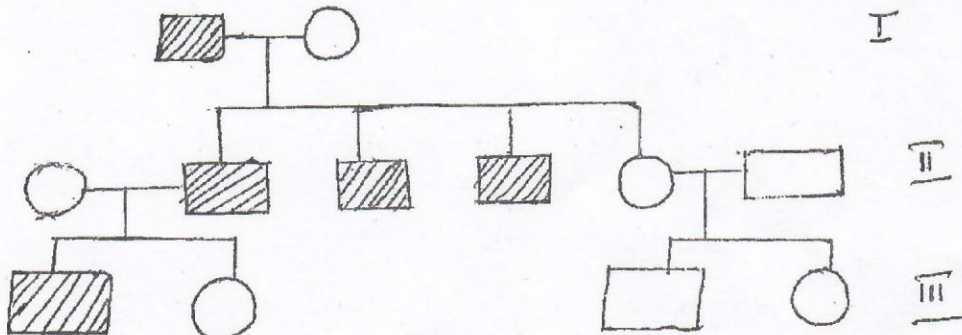
- 1) What is flow Karyotyping ?
- 2) Write short notes on testes determining factor.
- 3) Write do the following pedigree symbols represent.
a)  b)  c) 
- 4) Define innate immunity.
- 5) Briefly explain 'Leukemia'.
- 6) Mention any three finger tip patterns of Dermatoglyphics with suitable diagrams.
- 7) Comment on 'Ultrasonography' technique.

PART - B

II. Answer **any five** of the following :

(5×5=25)

- 1) Explain the genetics and pattern of inheritance involved in Mitochondrial diseases with an example.
- 2) Analyse the pattern of inheritance for the following pedigree :



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- 3) Give an account on immunosuppressors.
- 4) Comment on various types of cells of immunity.
- 5) Write a brief note on types of Cancer.
- 6) Explain clinical applications of Dermatoglyphics.
- 7) Discuss on cord blood banking technique.

PART - C

III. Answer **any two** of the following : (2×10=20)

- 1) Explain the stages of genetic counseling involved in Pedigree analysis.
- 2) Give a detailed account on Major Histocompatibility Complex.
- 3) Describe :
 - a) HLA disease association
 - b) Chronic Myeloid Leukemia.
- 4) Discuss on positive and negative eugenics.

PART - D

IV. Answer **any one** of the following : (1×10=10)

- 1) Discuss :
 - a) Paris Nomenclature
 - b) Achondroplasia
- 2) Describe :
 - a) Chorionic villus sampling technique
 - b) Human genome project.

