Reg. No. : ....

Name : ....

V Semester B.Sc. Degree (CBCSS-Reg./Sup./Imp.) Examination, November- 2019

(2014 Admn Onwards)
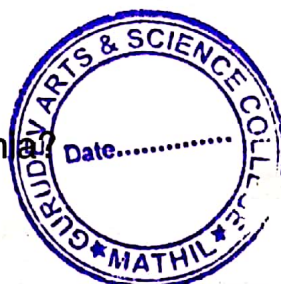
CORE COURSE IN BIOCHEMISTRY

5B10BCH : GENETICS - I

Time : 3 Hours

Max. Marks : 40

SECTION - A

Answer **All** the questions. Each question carries **one** mark.   (4×1=4)

1. Give two examples for X linked recessive genes.

2. What do you mean by genetic linkage?

3. Define the term genome.

4. What is the genetic defect in sickle cell anaemia?

SECTION - B

Answer any **Seven** questions. Each Question carries **two** marks.(7×2=14)

5. Differentiate between dominant traits and recessive traits.

6. What is the difference between homozygous and heterozygous traits?

7. What do you mean by genetic drift?

8. What is a reciprocal cross?

9. What do you mean by gene pool?

10. In a cross if the F2 ratio is 2:1 how will you interpret the results.

P.T.O.

11. What roles does the Y chromosomes play in determining the sex of the human phenotype?

12. What do you mean by pleiotropy?

13. Explain allele frequency.

14. What is a back cross?

SECTION - C

Answer any **Four** questions. Each Question carries **three** marks:(4×3=12)

15. Differentiate between additive and non additive interactions.

16. Give an account of pedigree analysis.

17. Write the Mendelian laws of inheritance.

18. Give an account of the proposed benefits of human genome project.

19. Wrote notes on Down syndrome.

20. Explain crossing over.

SECTION - D

Answer any **Two** questions. Each Question carries **Five** marks: (2×5=10)

21. Compare Klinefelter's syndrome and Turners syndrome.

22. Write an essay on chromosomal mapping.

23. Write an essay on sex determination drosophila.

24. Give an account of non-allelic and allelic interactions.

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