Roll No.: ……

SGT UNIVERSITY

END TERM THEORY EXAMINATION JULY - 2022

Faculty/College of Study:	**Agricultural Sciences**	**Year/Semester:**	**2nd Semester**
Program:	**B.Sc. (Hons.) Agriculture**	**Duration:**	**03:00 Hrs.**
Course/Subject:	**Principles of Genetics**	**Maximum Marks:**	**50**
Course/Subject Code:	**11010201**	**Batch:**	**2020 & 2021**

Instructions: -

1. Write Your Roll No. on the Question Paper.
2. Candidate should ensure that they have been provided correct question paper. Complaint(s) in this regard, if any should be made within 15 minutes of the commencement of the exam. No complaint(s) will be entertained thereafter.
3. All Questions are compulsory. Marks are indicated against each question.
4. Illustrate your answer with diagram wherever required.

SECTION-A

(Very Short Answer Type Questions)

Note: All Questions are compulsory: - [12X1=12]

S. No.	Question	Marks Allotted
1	Heredity	1
2	Pleiotropism	1
3	Nucleotide	1
4	Coincidence	1
5	Haploid	1
6	Sex index ratio	1
7	Sex limited traits	1
8	Nullisomy	1
9	Heterozygous	1
10	Phenotype	1
11	Qualitative traits	1
12	Incomplete dominance	1

SECTION-B

(Short Answer Type Questions)

Note: All Questions are compulsory: - **[4X2=8]**

S. No.	Question	Marks Allotted
13	Write differences between mitosis and meiosis cell division.	2
14	Write about mutation and their classification.	2
15	Write differences between DNA and RNA.	2
16	Write short note on linkage map.	2

SECTION-C

(Descriptive Answer Type Questions)

Note: All Questions are compulsory: - **[3X4=12]**

S. No.	Question	Marks Allotted
17	Describe law of independent assortment with example.	4
18	Explain recessive epistasis with example.	4
19	What do you mean by deletion? Write about all the types of deletion.	4

SECTION-D

(Long Answer Type Questions)

Note: All Questions are compulsory: - **[3X6=18]**

S. No.	Question	Marks Allotted
20	Explain cytoplasmic inheritance with examples in detail.	6
21	What is an operon? Explain the process of gene regulation in prokaryotes.	6
22	What is sex determination? Explain in brief sex determination in human.	6