



Date: 2024

# LGS GROUP OF COLLEGES

Biology

WEEKLY TEST

XII

TEST#

WK-8

Subject: Biology	Name:.....	Roll No:					
Time: 35 mins	Objective	Marks =15					

## SECTION-I OBJECTIVE TYPE

**Note:** Four possible answer A, B, C and D to each question are given. The choice which you think is correct, fill the circle in front of that question with Marker or Pen ink in the answer-book. Cutting or filling two or more circles will result in zero mark in that question. (5 × 1 = 5)

### Q1. Select the right option.

- Which of the following cross is a test cross?
  - Unknown × AA
  - Unknown × Aa
  - Unknown × aa
  - Unknown × unknown
- A recessive gene can be expressed if the genotype is:
  - Homozygous recessive
  - Homozygous dominant
  - Heterozygous
  - both 'B' and 'C'
- If an organism with the genotype Ww is crossed with a Ww organism, what would be proportion of offspring that would be heterozygous?
  - 1/4
  - 1/2
  - 3/4
  - all would be heterozygous
- How many gene pairs contribute to wheat grain?
  - One
  - Two
  - Three
  - Four
- Bombay phenotype is an example of:
  - Pleiotropy
  - Dominance
  - Probability
  - Epistasis

## SECTION-II SUBJECTIVE TYPE

### Q2. Write short answers.

(2 × 3 = 6)

- Differentiate between parental and non-parental combinations during crossing over.
- Differentiate between epistasis and pleiotropy.
- What are polygenic traits and polygenes?

## SECTION – II (PART-II)

### Note: Attempt one question.

(4 × 1 = 4)

- Explain erythroblastosis foetalis in detail.