

# V P & R P T P SCIENCE COLLEGE

## 5<sup>TH</sup> SEM INTERNAL TEST 2013

US 05 CZOO 05

TIME: 1.00-2.00 PM

DATE: 05/01/2013

MARKS: 30

### Q-1 MULTIPLE CHOICE QUESTION:

[06]

1. MONOHYBRID IS AN INTERACTION BETWEEN.....CHARACTERS  
A, SINGLE B, TWO C, THREE D, ALL
2. 1:2:1 IS A MODIFICATION OF.....CROSS  
A, DIHYBRID B, MONOHYBRID C, LETHAL GENE D, NONE
3. ANTIGENS ARE NOT PRESENT IN BLOOD GROUP  
A, O B, AB C, A D, B
4. FUNCTIONS OF MITOCHONDRIAL DNA TO SYNTHESIS  
A, PROTEIN B, ENZYMES C, ATP D, COENZYMES
5. CHROMOSOMES REGULATE SEX IN HUMAN ARE  
A, 21<sup>ST</sup> B, 22<sup>ND</sup> C, 23<sup>RD</sup> D, NONE
6. GENERALLY CROSSING OVER TAKES PLACE DURING  
A, PROPHASE B, METAPHASE C, ANAPHASE D, TELOPHASE

### Q-2 ANSWER IN SHORT [ANY THREE]

[06]

1. WRITE ABOUT MENDEL
2. WRITE ABOUT 3:1 RATIO
3. WHAT IS BACK CROSS
4. WRITE ABOUT CHLOROPLAST DNA
5. WRITE ABOUT CHROMOSOMES OF DROSOPHILA
6. WRITE ABOUT SINGLE CROSSING OVER



- Q-3 A, WHAT IS CO DOMINANCE? EXPLAIN [03]  
B, WHAT ARE LETHAL GENES? EXPLAIN [03]

OR

- Q-3 A, EXPLAIN 3:6:3:1:2:1 RATIO [03]  
B, EXPLAIN LAW OF INDEPENDENT ASSORTMENT [03]

- Q-4 WHAT IS EPISTASIS? EXPLAIN BY GIVING PROPER EXAMPLE [06]

- Q-4 EXPLAIN MULTIPLE ALLELES IN ASPECT OF BLOOD GROUP [06]

- Q-5 A, EXPLAIN SEX DETERMINATION IN HUMAN [03]  
B, EXPLAIN Y LINKED GENES [03]

OR

- Q-5 A, EXPLAIN THEORIES OF CROSSING OVER [03]  
B, WHAT IS GENE LINKAGE? EXPLAIN [03]