



# ST. LAWRENCE HIGH SCHOOL



A JESUIT CHRISTIAN MINORITY INSTITUTION

## WORK SHEET – 21

Class: XII

Sub: Biological Science

Date: 24.06.2020

**Topic: Chapter 5 (Part 10) Mutation and chromosomal disorders**

**F.M. : 15**

**Choose the correct option:**

**(1x15=15)**

1. Loss or gain of one or more chromosomes in a genome includes :-  
a) Hypoploidy b) Hyperploidy c) Euploidy d) Both (a) and (b)
2. The addition of one chromosome to the genome is called :-  
a) Nullisomy b) Trisomy c) Monosomy d) All of these
3. The chromosome number in case of monosomy is represented as :-  
a)  $2n+1$  b)  $2n+2$  c)  $2n-1$  d)  $2n-2$
4. Down syndrome occurs due to the following type of mutation :-  
a) Monosomy b) Trisomy c) Tetrasomy d) Nullisomy
5. Trisomy takes place in the chromosome number \_\_\_\_\_ in Down's syndrome.  
a) 21 b) 19 c) 17 d) 15
6. The characteristic feature of a child suffering with Down's Syndrome includes :-  
a) Epicanthic folds b) Protruding tongue c) Mental retardation d) All of these
7. The following is not an example of disease related to sex chromosome :-  
a) Klinefelter syndrome b) Turner's syndrome c) Haemophilia d) Down's Syndrome
8. The genotype of the person suffering with Turner Syndrome is :-  
a)  $44+XY$  b)  $44+XX$  c)  $44+XO$  d)  $44+XXX$
9. A female suffering with Turner syndrome has the following characteristic :-  
a) Streaked gonads b) Webbed neck c) Underdeveloped Breast and uterus d) All of these
10. Turner syndrome is caused due to :-  
a) Nullisomy b) Monosomy c) Trisomy d) Tetrasomy
11. Turner syndrome and Klinefelter syndrome is due to :-  
a) Non-dysjunction of X-chromosome b) Zero crossing over c) Failure of cytokinesis  
d) All of these
12. Klinefelter syndrome males have the following genotype :-  
a)  $44+XO$  b)  $44+XY$  c)  $44+XXY$  d) None of these
13. The total number of chromosomes in a person suffering with Klinefelter syndrome is :-  
a) 45 b) 47 c) 46 d) 44

14. The following is not a characteristic feature of Klinefelter syndrome in male :-  
a) Mongoloid features b) Sparse Body hair c) Sterility d) Breast development
15. The following is an example of autosomal disorder :-  
a) Turner syndrome b) Down Syndrome c) Klinefelter syndrome d) All of these

Shaista Ahmed