



**ST. LAWRENCE HIGH SCHOOL**



**A JESUIT CHRISTIAN MINORITY INSTITUTION**

**WORK SHEET – 13**

**Class: XII**

**Sub: Biological Science**

**Date: 13.06.2020**

**Topic: Mendelian Inheritance (Part A)**

**F.M. : 15**

**Choose the correct option:**

**(1x15=15)**

1. \_\_\_\_\_ is known as Father of Genetics.  
a) Hugo De Vries b) Aristotle c) Gregor Mendel d) K.W. Wolff
2. Gregor Mendel was an \_\_\_\_\_ monk.  
a) Austrian b) Australian c) Egyptian d) Indian
3. The name of the original paper of Mendel which was published in the journal of Brunn was entitled as :-  
a) Experiments on plant hybridization b) Proceedings of society c) Experiments of plant breeding d) Experiments on Genetics
4. The reason why Mendel's work was ignored was :-  
a) His work was published in an obscure journal b) Scientists were busy with Darwinism c) Poor knowledge of cytogenetics d) All of these
5. Scientist who re-discovered Mendelism :-  
a) Karl Correns b) Hugo de Vries c) Tschermak d) All of these
6. Mendel carried out experiments using \_\_\_\_\_ plant.  
a) Rose b) Pea c) Snapdragon d) Lily
7. The following was not a pair of contrasting character selected by Mendel for his experiment :-  
a) Plant height b) Pod shape c) Pod number d) Pod colour
8. The law of \_\_\_\_\_ states that the alleles separate during gamete formation.  
a) Segregation b) Dominance c) All red d) None of these
9. In a cross between pure red (RR) and pure white (rr), the  $F_1$  progeny will be :-  
a) All pink b) 50 % white and 50 % red c) All red d) None of the above
10. The phenotypic ratio of  $F_2$  generation of a monohybrid cross according to Mendel is :-  
a) 2:1 b) 1:2 c) 8:4 d) 3:1
11. The alleles not only separate but also distribute themselves independently state the law :-  
a) Law of Independent assortment b) Law of dominance c) Law of segregation d) Law of purity of gametes
12. What is the phenotypic ratio of  $F_2$  generation in a dihybrid cross :-  
a) 9:7 b) 9:3:3:1 c) 9:3:4 d) 15:1

13. A cross is made between pure round and yellow seeded pea plant (RR YY) and pure wrinkled and green seeded pea plant (rr yy). The  $F_1$  generation will produce:-  
a) Round yellow seeded plants only b) Wrinkled green seeded plants only c) Both (a) and (b)  
d) A new variety
14. The reason why Mendel selected pea plant :-  
a) Bisexual flower b) Short life span c) Can be cross pollinated and self pollinated d) All of these
15. The genotypic ratio of Mendelian monohybrid cross is :-  
a) 1:2:1 b) 3:1 c) 1:1:2 d) 1:1

Shaista Ahmed