



ST. LAWRENCE HIGH SCHOOL



A JESUIT CHRISTIAN MINORITY INSTITUTION

SOLUTIONS – 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
Answer :Gregor Mendel (c)
2. Gregor Mendel was an _____ monk.
a) Austrian b) Australian c) Egyptian d) Indian
Answer : Austrian (a)
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
Answer :Experiments on plant hybridization (a)
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
Answer :All of these(d)
5. Scientist who re-discovered Mendelism :-
a) Karl Correns b) Hugo de Vries c) Tschermak d) All of these
Answer :All of these (d)
6. Mendel carried out experiments using _____ plant.
a) Rose b) Pea c) Snapdragon d) Lily
Answer :Pea (b)
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
Answer : Pod number(c)
8. The law of _____ states that the alleles separate during gamete formation.
a) Segregation b) Dominance c) All red d) None of these
Answer : Segregation (a)

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
Answer : All red (c)
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
Answer : 3:1 (d)
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
Answer : Law of Independent assortment (a)
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
Answer : 9:3:3:1 (b)
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
Answer : Round yellow seeded plants only (a)
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
Answer : All of these (d)
15. The genotypic ratio of Mendelian monohybrid cross is :-
a) 1:2:1 b) 3:1 c) 1:1:2 d) 1:1
Answer : 1:2:1 (a)