

ST. LAWRENCE HIGH SCHOOL

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A JESUIT CHRISTIAN MINORITY INSTITUTION WORK SHEET – 14

Class: XII Sub: Biological Science Date: 15.06.2020

Topic: Mendelian Inheritance (Part B) Non-mendelism (Part A) – Incomplete Dominance Co-dominance

F.M.: 15

Choose the correct option:

(1x15=15)

- 1. Law of dominance is violated by the phenomenon of :
 - a) Incomplete dominance b) Co-dominance c) Epistasis d) All of these
- 2. The phenomenon of Linkage violates :
 - a) Law of Dominance b) Law of Segregation c) Law of Independent Assortment
 - d) Both (b) and (c)
- 3. Limitations of the law of Segregation:
 - a) Applies to diploid organisms only b)Not applicable on pleiotropic genes c) Not applicable on epistatic genes d) All of these
- 4. The phenomenon where one gene does not completely masks the effect of its recessive gene called :
 - a) Incomplete Dominance b) Dominance c) Epistasis d)Co-dominance
- 5. The phenotype of F₁ generation in incomplete dominance is the :
 - a) Phenotype of dominant allele b) Intermediate phenotype of both alleles c) Phenotype of recessive allele d) All of the above
- 6. The phenotypic ratio in incomplete dominance in F₂ generation is :
 - a) 3:1 b) 2:1:1 c) 1:2:1 d) 2:3
- 7. Incomplete dominance is seen in :
 - a) Mirabilis jalapa b) Andulasian fowl c) Antirrhinum d) All of these
- 8. A cross is made between a homozygous red snapdragon flowers (RR) and a white snapdragon (rr) flower. What would be the colour of the progeny in F_1 generation? a)All red b) 50 % red and 50 % white c) All pink d) All white
- 9. The phenomenon where both allelic genes are equally and independently expressed in an organism:
 - a) Co-dominance b) Blending inheritance c) Epistasis d) Pleiotophy
- 10. Co-dominance is observed in :
 - a) Coat colour of mice b) Coat colour of cattle c) Snapdragon d) All of these

- 11. If a black coat male cattle is crossed with a white coat female cattle. What is the phenotype of F₁ generation?
 - a) All black b) Grey c) White d) Roan coat colour
- 12. The co-dominant gene pair of Human ABO blood group system is :
 - a) I^A I b) I^A I^B c) I^B I d) None of these
- 13. What would be the genotype of a person with AB blood group?
 - a) $I^A i$ b) $I^A I^A$ c) $I^A I^B$ d) $I^B i$
- 14. Characteristic of ABO blood group is :
 - a) Presence of 3 alleles b) I^A and I^B are co-dominant c) i is recessive to I^A and I^B d) All of these
- 15. The glycoprotein present on RBC membrane of a person with AB blood group is :
 - a) Glycoproteins A and B b)Glycoproteins A c) Glycoprotein B d) None of these

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