



ST. LAWRENCE HIGH SCHOOL



A JESUIT CHRISTIAN MINORITY INSTITUTION

SOLUTIONS – 20

Class: XII

Sub: Biological Science

Date: 23.06.2020

Topic: Chapter 5 (part 9) Mutation and its types

F.M. : 15

Choose the correct option:

(1x15=15)

1. Changes which takes place due to mutation are :-

- a) Sudden b) Inheritable c) Stable d) All of these

Answer : All of these (d)

2. The changes at the level of nucleotides are called :-

- a) Gene mutation b) Chromosomal aberrations c) Genomic mutation d) None of these

Answer : Gene mutation (a)

3. Due to addition / deletion of nucleotides in point mutation following occurs :-

- a) Sequence of amino acid changes b) Reading frame changes c) New polypeptide is formed
d) All of these

Answer : All of these (d)

4. Replacement of a nucleotide pair in a DNA segment is called :-

- a) Transition b) Transversion c) Transduction d) Both transition and transversion

Answer : Both transition and transversion (d)

5. Chromosomal aberrations includes :-

- a) Change in nucleotide b) Change in the number of gene in the chromosome c) Rearrangement
genes d) Both (b) and (c)

Answer : Both (b) and (c) (d)

6. If a sequence of genes is read as ABBBCDE and the original sequence of genes was ABCDE. Such type of mutation is an example of :-

- a) Deletion b) Duplication c) Inversion d) Deficiency

Answer : Duplication (b)

7. The original chromosomes ABCDEF and UVWXYZ exchange parts to form new chromosomes with arrangement as ABCD and UVWXYZEF. Such type of mutation is called :-

- a) Simple translocation b) Reciprocal translocation c) Inversion d) Duplication

Answer : Simple translocation (a)

8. Addition or loss of a complete one set or more than one haploid set of chromosomes is called :-

- a) Aneuploidy b) Frame shift mutation c) euploidy d) None of these

Answer : euploidy (c)

9. Organisms with 5n chromosomes sets are called :-
a) Triploid b) Pentaploid c) Hexaploid d) Tetraploid
Answer : Pentaploid (b)
10. Loss of one or more chromosome from the genome is :-
a) Aneuploidy b) Euploidy c) Point mutation d) All of these
Answer : Aneuploidy (a)
11. Genomic mutations include :-
a) Gross mutation b) Euploidy c) Aneuploidy d) Both euploidy and Aneuploidy
Answer : Both euploidy and Aneuploidy (d)
12. Based on the nature of genetic material the following is a mutation :-
a) Gene mutation b) Chromosomal mutation c) Genomic mutation d) All of these
Answer : All of these (d)
13. When A is replaced by T and G is replaced by C. Such type of mutation is called :-
a) Transversion b) Transition c) Inversion d) Deletion
Answer : Transition (b)
14. The smallest unit of mutation is called :-
a) Muton b) Cistron c) Recon d) All of these
Answer : Muton (a)
15. The smallest unit of mutation can be a :-
a) Single gene b) a nucleotide c) Genome d) Chromosome
Answer : A nucleotide (b)

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