



ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION



Solutions – 28

Class: XII

Sub: Biological Science

Date: 07.07.2020

Topic : Ch 7 (part 6) Natural selection – It's types and Industrial melanism

F.M. : 15

Choose the correct option:

(1x15=15)

1. The theory of Natural Selection is explained in Darwin's book:
a) The origin of Species by Natural Selection b) Origin of species c) The book of Natural selection d) none of these
Answer : The origin of species by Natural Selection (a)
2. The following is not a postulate of Darwinism:
a) Over production b) Survival of the fittest c) Acquisition of new needs by use and disuse d) Natural Selection
Answer : Acquisition of new needs by use and disuse (c)
3. The following is not the driving force in bringing about evolution:
a) Mutation b) Recombination c) Inert and unchanged environment d) Hybridization
Answer : Inert and unchanged environment (c)
4. The dissimilarity present between two individuals is called :
a) Mutation b) Recombination c) Pangenesis d) variation
Answer : Variation (d)
5. ----- is the physical force that assists in accumulation of variations in a group of individuals of a population:
a) Adaptation b) Isolation c) Natural selection d) all of these
Answer : Isolation (b)
6. A large population of interbreeding individuals on which the evolutionary forces act is called :
a) Panmictic b) Mendelian c) Experimental d) Both (a) and (b)
Answer: Both (a) and (b) (d)
7. The phenomenon of preference of darker coloured organisms over light coloured organisms is called:
a) Disruptive selection b) Industrial melanism c) Stabilizing selection d) none of these
Answer: Industrial melanism (b)

8. A type of Natural selection which favours variants at both ends of population distribution is called:
 a) Directional b) Disruptive c) Stabilizing d) none of these
Answer : Disruptive selection (b)
9. selection removes extremes variants from the population and intermediate phenotype is favourable:
 a) Directional selection b) Disruptive selection c) Stabilizing selection d) all of these
Answer : Stabilizing selection (c)
10. In a Directional selection the graph of evolved population shows:
 a) Shift of the original graph on one side b) two distinct peaks c) rise in the peak of original population curve d) All of these
Answer : Shift of the original graph on one side (a)
11. Directional selection is seen in the evolution of:
 a) Horse b) man c) *Biston betularia* d) All of these
Answer : All of these (d)
12. After industrialization Coloured moths were susceptible to the predators:
 a) black b) grey peppered c) yellow d) pink
Answer : grey peppered (b)
13. During the next 50 years of industrial revolution the population of dark coloured moths increased from 1% to %
 a) 50 b) 200 c) 99 d) 25
Answer : 99 (c)
14. has operated on eliminating genes for light coloured moths and gradual increase of genes of dark pigment:
 a) Natural selection b) Adaptation c) Isolation d) All of these
Answer : Natural selection (a)
15. Example of Natural selection :
 a) Presence of DDT resistant mosquitoes b) Presence Sickle cell anaemic individuals c) Presence of *Biston betularia carbonaria* over *Biston betularia* d) All of these
Answer : All of these (d)

