

DPP

DAILY PRACTICE PROBLEMS

Class : XIIth

Date :

Subject : BIOLOGY

DPP No. : 4

Topic :- Evolution

1. Somatic cells of gorilla, chimpanzee and orangutan have
 - a) 44 chromosomes
 - b) 42 chromosomes
 - c) 46 chromosomes
 - d) 48 chromosomes

2. Natural selection
 - I. tends to increase its characters that enhances survival and reproduction
 - II. causes adaptation
 - III. acts on organism phenotype
 - IV. mechanism of evolution explained by Darwin
 Which of the following statements are correct?
 - a) I, II, III
 - b) I and II
 - c) II and IV
 - d) I and III

3. Darwinian fitness can be estimated by
 - a) How long different individual in a population survive
 - b) Number of offsprings produced by different individual in population
 - c) Individual have a large size in population
 - d) Species recover after mass extinction

4. The first life on earth consists of
 - a) Provirus
 - b) Protovirus
 - c) Virus
 - d) Bacteria

5. Factor affecting the process of speciation are
 - I. Mutation
 - II. Recombination
 - III. Natural selection
 - IV. Hybridisation
 - V. Genetic drift
 - VI. Polyploid
 - VII. Isolation
 Choose the correct combination
 - a) I, II, V, VII and VI
 - b) II, VI, IV, III and V
 - c) III, IV, V, VII and II
 - d) I, II, III, IV, V, VI and VII

6. Jurassic period of the Mesozoic era is characterized by
a) Gymnosperms are dominant plants and first birds appear
b) Radiation of reptiles and origin of mammals like reptiles
c) Dinosaurs become extinct and angiosperms appear
d) Flowering plants and first dinosaurs appear
7. Blood groups-A and B are found in
a) Monkeys b) Apes c) Dogs d) Cats
8. An organism which is the connecting link between the animals and plants is
a) Bacteria b) Cyanobacteria c) *Euglena* d) *Amoeba*
9. organs shows adaptive radiation.
Complete the given statement with an appropriate option given below
a) Homologous b) Analogous c) Progressive organs d) Similar in structure
10. Identify the phenomenon in which a new set of population is formed the set of existing population due to the excessive change in the allele frequency
a) Founder effect b) Evolutionary effect c) Bottle-neck effect d) None of the above
11. Age of gymnosperm is
a) Cenozoic era b) Mesozoic era c) Palaeozoic era d) Proterozoic era
12. Which of the following example of variation is not important from an evolutionary standpoint?
a) Genetic differences between individual organisms comprising the population
b) Inherited difference between individual organisms comprising the population
c) Both (a) and (b)
d) Difference due to diet, health, age and accident that have no affect on an individual's ability to survive and reproduce
13. Organs which are anatomically different, but performs similar functions are called
a) Analogous organs b) Homologous organ c) Vestigial organs d) Heterologous organs
14. Coacervates are
a) Protobionts having polysaccharide, protein and H₂O
b) Protein aggregate
c) Protein and lipid aggregates
d) None of the above
15. The primates nearest to humans in the evolutionary line is
a) New world monkeys b) Apes c) Lemurs d) Echidna

16. Primitive man was originated during
a) Miocene b) Holocene c) Pleistocene d) Pliocene
17. Survival of the fittest is the basic principle of a competition. Its importance in organic evolution was explained by
a) Lamarck b) de Vries c) Darwin d) Mendel
18. Which of the following is an example of an ancestral homology?
a) Almost all modern reptiles, birds and mammals have forelimbs, a trait they also share with contemporary amphibians
b) The first birds and all their descendant species have feathers, a trait that is unknown in any other group
c) Humans and many insect species have eyes
d) All of the above
19. Swan-necked flask experiment proved
a) Biogenesis b) Abiogenesis c) Gene therapy d) Both (a) and (b)
20. Industrial melanism was highlighted by
a) *Mimosa pudica* b) *Triticum aestivum* c) *Biston betularia* d) Rock python

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