

DPP

DAILY PRACTICE PROBLEMS

Class : XIIth
Date :

Subject : BIOLOGY
DPP No. : 8

Topic :- Evolution

1. The concept that the species have changed over long period of time is known as
 - a) Ecology
 - b) Embryology
 - c) Spontaneous generation
 - d) Organic evolution

2. Choose the wrong statements
 - I. The essence of Darwinian theory about evolution can be seen in the phenomenon of natural selection
 - II. The rate of appearance of new forms is not linked to the evolution
 - III. Adaptive ability is a complete evolution
 - IV. Mutations are random and directionless
 The correct option is
 - a) I and II
 - b) III and II
 - c) I and III
 - d) I and IV

3. Connecting links are organism which shows characters of
 - a) Its phylum only
 - b) Two groups (phylums)
 - c) Its class only
 - d) Its order only

4. The ratio of methane, ammonia and hydrogen in Stanley Miller's experiment was
 - a) 3 : 1 : 2
 - b) 2 : 1 : 2
 - c) 1 : 2 : 1
 - d) 5 : 4 : 1

5. Proteinoids are
 - a) Carbohydrate structure consisting of branched sugars
 - b) Fatty acid structure consisting of branched fatty molecules
 - c) Protein structure consisting of branched amino acids
 - d) Protein structure consisting of unbranched amino acids

6. Evolutionary history of an organism is known as
 - a) Phylogeny
 - b) ancestry
 - c) Palaeontology
 - d) Ontogeny

7. Evolutionary convergence is the development of
 - a) Common set of characters in closely related groups
 - b) Common set of characters in the group of different ancestry
 - c) Random mating
 - d) Dissimilar characters in the closely related groups

8. Random genetic drift in a population probably results from
- a) Constant low mutation rate
 - b) Large population size
 - c) Highly genetically variable individuals
 - d) Interbreeding within this population
9. Organs differ in origin but performing similar function
- a) Analogous
 - b) Homologous
 - c) Vestigial
 - d) Atavism
10. *Homo sapiens* were arose in
- a) India
 - b) America
 - c) England
 - d) Africa
11. 'PP' is a type of selection that favours both small sized and large-sized individual. 'PP' eliminates most of the members with mean expression, so as to produce two peak in the distribution of the tract that many lead to the development of two different populations. Identify 'PP'
- a) Disruptive selection
 - b) Opposite of stabilizing selection
 - c) Diversifying sekection
 - d) All of these
12. Formation of simple and less elaborated forms from the more complex and specialized one is called
- a) Progressive evolution
 - b) Microevolution
 - c) Macroevolution
 - d) Retrogressive evolution
13. Natural selection means
- a) Better adaptability
 - b) Elimination of less adapted
 - c) Better survival
 - d) All of the above
14. Which of the following statements are correct?
- I. Directional selection favours one extreme form over the other extreme and over intermediate forms of a trait
 - II. Stabilising selection favours the intermediate forms of a trait
 - III. Disruptive selection favours both the extreme forms of a trait
 - IV. Fossils are the remnants of hard parts of life forms present in rocks
 - V. A study of fossils in different sedimentary layers indicates the geological period in which they live
 - VI. Radio isotopes are often used to determine the age of the fossils
 - VII. Study of fossils is called Palaeontology
 - VIII. Most fossils are found in sedimentary rocks
 - IX. The unit of evolution is population
- a) All except I, III and X
 - b) All except IV, V and II
 - c) All except VII, V and IX
 - d) All of the above

15. ...A... is a binomial expression of $(p + q)^2$. When frequency measured, differs from the expected values, the difference indicates the extent of ...B...
Choose the option for A and B to complete the given NCERT statement
- a) $A - p^2 + 2pq + q^2 = 1$; B-evolutionary change b) $A - p^2 + 2pq + q^2 + q^2 = 1$; B-genetic change
c) $A - p^2 + 2pq + q^2 \geq 1$; B-genetic change d) $A - p^2 + 2pq + q^2 \leq 1$; B-evolutionary change
16. Which one of the following features occurs in the direction of the evolution for human species?
a) Well developed brain b) Opposable thumb c) Binocular vision d) All of these
17. The theory of random genetic drift was proposed by
a) Hardy -Weinberg b) R A Fischer c) Sewall Wright d) Mayr
18. How old is our universe?
a) 10 billion year old b) 20 billion year old c) 15 billion year old d) 5 billion year old
19. Which of the following defines Hardy -Weinberg law?
a) $p^2 + 2pq + q^2 = 1$ b) $p^2 + 2pq + q^2 = 1$ c) $p^2 + 2pq + q^2 = 0$ d) $q^2 + p^2 + 2pq = 0$
20. Correct order of evolutionary scale is
a) Palaeozoic → Archeozoic → Cenozoic
b) Archaeozoic → Palaeozoic → Proterozoic
c) Palaeozoic, Mesozoic, Cenozoic
d) Mesozoic → Archaeozoic → Proterozoic

