

DPP

DAILY PRACTICE PROBLEMS

Class : XIIth
Date :

Subject : BIOLOGY
DPP No. : 10

Topic :- Evolution

1. Birbal Sahni was

a) Palaeobotanist	b) Zoologist	c) Ornithologist	d) Palaeozoologist
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2. England in 1850s, *i.e.*, before industrialization set in, it was observed that there were more white-winged moths on trees than dark-winged or melanised moths. However, in the collection carried out from the same area, but after industrialization, *i.e.*, in 1920, there were more dark-winged moths in the same area, *i.e.*, the proportion was reversed. Predict the possible reason for such change

a) Natural selection	b) Artificial selection	c) Conditional selection	d) Divergent selection
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3. In a given population, the ...A... of occurrence of alleles of a gene is supposed to remain ...B... and even remain the same through generations. Hardy-Weinberg principle stated it using ...C... equation. Choose the correct option for A, B and C to complete the given NCERT statement

a) A-frequency, B-unstable, C-algebraic	b) A-frequency, B-stable, C-algebraic
c) A-frequency, B-stable, C-simple	d) A-frequency, B-stable, C-complex

4. Which of the following provides most evident proof of evolution?

a) Fossils	b) Morphology	c) Embryo	d) Vestigial organs
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5. Which set includes only analogous organs?
 - a) Wings of butterfly, housefly and bat
 - b) Hindlegs of horse, grasshopper and bat
 - c) Wings of butterfly and wingspread of bat and birds
 - d) Mandibles of cockroach, mosquito and honey bee

6. Study of fossils is called

a) Organic evolution	b) Herpetology	c) Cytology	d) Palaeontology
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7. Hugo de Vries's experimental organism was

a) Fruitfly	b) China rose plant	c) Four O'clock plant	d) Evening primrose
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8. A biologist is trying to infer how five closely related species of snakes are related to one another. She noticed that some of the snakes have forked tongues and others do not. Which of the following would help her to distinguish their ancestral state?
- She looks among snake fossils for evidences that being forked is a characteristic of the ancestor of this group, but determines no such fossils exists
 - She locates a specimen of a more distantly related snake to see if it has a forked tongue
 - She looks at a representative mammal species to see if it has a forked tongue
 - She flips a coin

9. Origin of life occurred in
- Precambrian
 - Coenozoic
 - Palaeozoic
 - Mesozoic

10. In which of the following situations would evolution would occur

Migration	Selection Pressure	Variations due to Mutation
I. Absent	Low	Low
II. Absent	High	High
III. High	Low	High
IV. High	High	Low

Select the correct using the codes given below

- I and II
 - I and III
 - I and IV
 - II, III and IV
11. Theory of natural selection was given by
- Lamarck
 - Darwin
 - Alfred Wallace
 - JBS Haldane
12. What's the difference between natural selection and sexual selection?
- Sexual selection occurs during sexual inter course
 - Natural selection is a type of sexual selection
 - Sexual selection is a type of natural selection
 - Sexual selection occurs within demes
13. What do homologous organs indicates?
- Different ancestry
 - Common ancestry
 - Independent development
 - Dependent development
14. Proteins found in the blood of man and ape are similar. This is an example of
- Cellular homology
 - Molecular homology
 - Cellular analogy
 - Molecular analogy
15. According to the Neo-Darwinian theory, which of the following is responsible for the origin of new species?
- Mutations
 - Useful variations
 - Mutation together with natural selection
 - Hybridization

16. 'Continuity of germplasm' theory was given by
a) Hugo de Vries b) Weismann c) Darwin d) Lamarck
17. Select the wrong pair
a) Oparin – Probiont b) Spallanzani – Approve abiogenesis
c) Haldane – Hot dilute soup d) Fox – Coacervates
18. Divergent evolution gives rise to
a) Homologous organ b) Analogous organs c) Both (a) and (b) d) None of these
19. The greatest evolutionary change enabling the land vertebrates to be completely free from the water. Habitat was the development of
a) Four legs b) Four-chambered heart
c) Lungs d) Shelled eggs and internal fertilization
20. Which of the following is not an examples of adaptive radiation?
a) Wombat, marsupial rat, flying phalanges b) Darwin's finches
c) Different placental mammals in Australia d) Placental wolf and Tasmanian wolf

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