



8. Which of the given pairs are correct  
I. Wings of insects and birds are homologous organ  
II. Wings of bats and bird are homologous organ  
III. Wings of insect and bats are analogous  
IV. Wings of insect and bird are analogous  
Choose the correct option  
a) I and II                      b) I and III                      c) I and IV                      d) II, III and IV
9. In a random mating population in equilibrium, which of the following brings about a change in gene frequency in non-directional manner?  
a) Selection                      b) Migration                      c) Mutation                      d) Random drift
10. The theory of pangenesis was rejected due to the acceptance of  
a) Spallanzani theory of biogenesis                      b) Richter theory of cosmozoic  
c) Cuvier theory of catastrophism                      d) Weismann theory of germplasm
11. There was no life in  
a) Cenozoic era                      b) Mesozoic era                      c) Palaeozoic era                      d) Azoic era
12. Why is the advent of reproductive isolation important from an evolutionary standpoint  
a) When the organisms comprising two population of a species can no longer interbreed, the flow of genetic material between them stops  
b) It is not important from an evolutionary standpoint. The question is based on a false assumption  
c) Reproductive isolation increases the mutational rate  
d) Reproductive isolation may slow down reproduction
13. There are two opposing views about origin of Modern man. According to one view, *Homo erectus* in Asia were the ancestors of modern man. A study of variations of DNA however suggested African origin of modern man. What kind of observation on DNA variation could suggest this?  
a) Greater variation in African than in Asia                      b) Variation only in Asia and no variation in Africa  
c) Greater variation in Asia than in Africa                      d) Similar variation in Africa and Asia
14. A population containing a gene 'X' with two alleles 'Aa' is in Hardy-Weinberg equilibrium for gene 'X'. If the gene frequency of allele 'A' is 0.2, allele frequency of 'a' is  
a) 0.2                      b) 0.42                      c) 0.8                      d) 1
15. Which of the following are the correct pair of homologous organs?  
I. Hands of man and wings of bat  
II. Wings of bat and wings of cockroach  
III. Wings of bird and wings of butterfly  
IV. Fins of fish and forelimbs of horse  
V. Forearm of human and forelimbs of horse  
The correct combination is visible in option

- a) I and II                      b) I and V                      c) III and IV                      d) IV and V
16. Which of the following presumably possesses a cranial capacity larger than modern man?  
a) Neanderthal man              b) Peking man                      c) *Australopithecus*              d) Cro –magnon man
17. Hardy-Weinberg principle is the  
a) Genetic structure of a non-evolving population  
b) Genetic structure of an evolving population  
c) Phenotypic structure of an evolving population  
d) Phenotypic structure of a non-evolving population
18. Which of the following statement is correct?  
a) Adaptation due to geographical isolation  
b) Evolution of different species from a common ancestor  
c) Migration of members of a species to different geographical areas  
d) Power of adaptation in an individual to a variety of environments
19. Genetic drift is also known as  
a) Hardy effect                      b) Weinberg effect  
c) Hardy-Weinberg effect              d) Sewall Wright effect
20. Which of the following is the first vascular plant to be represented by an extinct group?  
a) Bryophytes                      b) Lycopods                      c) Conifers                      d) Cycads

