

# QB365 Question Bank Software Study Materials

## Zoology - Evolution 50 Important 1 Marks Questions With Answers (Book Back and Creative)

12th Standard

### Biology

Total Marks : 50

#### Multiple Choice Question

50 x 1 = 50

- 1) The first life on earth originated  
(a) in air (b) on land **(c) in water** (d) on mountain
- 2) Who published the book "Origin of species by Natural Selection" in 1859?  
**(a) Charles Darwin** (b) Lamarck (c) Weismann (d) Hugo de Vries
- 3) Which of the following was the contribution of Hugo de Vries?  
**(a) Theory of mutation** (b) Theory of natural Selection (c) Theory of inheritance of acquired characters  
(d) Germplasm theory
- 4) The wings of birds and butterflies is an example of  
(a) Adaptive radiation **(b) convergent evolution** (c) divergent evolution (d) variation
- 5) The phenomenon of "Industrial Melanism" demonstrates  
**(a) Natural selection** (b) induced mutation (c) reproductive isolation (d) geographical isolation
- 6) Darwin's finches are an excellent example of  
(a) connecting links (b) seasonal migration **(c) adaptive radiation** (d) parasitism
- 7) Who proposed the Germplasm theory?  
(a) Darwin **(b) August Weismann** (c) Lamarck (d) Alfred Wallace
- 8) The age of fossils can be determined by  
(a) electron microscope (b) weighing the fossils **(c) carbon dating** (d) analysis of bones
- 9) Fossils are generally found in  
(a) igneous rocks (b) metamorphic rocks (c) volcanic rocks **(d) sedimentary rocks**
- 10) Evolutionary history of an organism is called  
**(a) Ancestry** (b) ontogeny (c) phylogeny (d) paleontology
- 11) The golden age of reptiles was  
**(a) Mesozoic era** (b) Cenozoic era (c) Paleozoic era (d) Proterozoic era
- 12) Which period was called "Age of fishes"?  
(a) Permian (b) Triassic **(c) Devonian** (d) Ordovician
- 13) Modern man belongs to which period?  
**(a) Quaternary** (b) Cretaceous (c) Silurian (d) Cambrian
- 14) The Neanderthal man had the brain capacity of  
(a) 650 – 800cc (b) 1200cc (c) 900cc **(d) 1400cc**

- 15) According to Darwin, the organic evolution is due to
- (a) Intraspecific competition    **(b) Interspecific competition**    (c) Competition within closely related species.  
 (d) Reduced feeding efficiency in one species due to the presence of interfering species.
- 16) A population will not exist in Hardy- Weinberg equilibrium if
- (a) Individuals mate selectively**    (b) There are no mutations    (c) There is no migration    (d) The population is large
- 17) Origin of fishes occurred in \_\_\_\_\_ period
- (a) Devonian    **(b) Silurian**    (c) Cambrian    (d) Permian
- 18) \_\_\_\_\_ era is called age of mammals
- (a) Precambrian    (b) Permian    **(c) Cenozoic**    (d) Paleozoic
- 19) Emergence of modern birds occurred in \_\_\_\_\_ period.
- (a) Devonian    (b) Silurian    (c) Jurassic    **(d) Cretaceous**
- 20) Founder's effect is related to
- (a) Genetic drift**    (b) Gene mutation    (c) Extinction    (d) Artificial selection
- 21) Homo sapiens or modern human arose in \_\_\_\_\_
- (a) Australia    **(b) Africa**    (c) Germany    (d) Eurasia
- 22) The factor which affects Hardy Weinberg equation
- (a) Gene flow**    (b) Random mating    (c) No mutation    (d) none of the above
- 23) Who coined the term prebiotic soup?
- (a) Haldane**    (b) Darwin    (c) Thomas Huxley    (d) Henry Bastian
- 24) All the following provided the energy for chemical reaction in the primitive earth Except:
- (a) Rain**    (b) Lightning    (c) UV radiations    (d) volcanic activity
- 25) This does not produce any genetic variations but once such variations occur, it favours some genetic changes while rejecting others.
- (a) Genetic recombination    (b) Chromosomal mutation    (c) Reproductive isolation    **(d) Natural selection**
- 26) Darwin's finches in Galapagos islands and Australian Marsupials are the example of
- (a) Industrial mechanism    (b) Reproductive isolation    (c) Genetic recombination    **(d) Adaptive recombination**
- 27) Which one of the following brings about evidence for convergent evolution?
- (a) Homologous structure    **(b) Analogous structure**    (c) Vestigial organs    (d) Atavistic organs
- 28) Molecule which is used to study the evolution of respiratory pathway is.
- (a) DNA    (b) RNA    (c) r RNA    **(d) cytochrome C**
- 29) Theory of chemical evolution was proposed by \_\_\_\_\_
- (a) Stanley    **(b) Urey**    (c) Lamarck    (d) Wiessmann
- 30) Living organisms originated from non-living materials and occurred through stepwise chemical and molecular evolution is called \_\_\_\_\_ and this started in the theory of \_\_\_\_\_
- (a) Coacervates, biogenesis    **(b) Abiogenesis, spontaneous generation.**    (c) Pre-existing life, chemical evolution.  
 (d) Pre-cell, special creation.
- 31) Peripatus is the connection link between Annelida and \_\_\_\_\_

(a) **Arthropoda** (b) Platyhelminthes (c) Mollusca (d) Echinodermata

- 32) Due to change in the diet containing less cellulose, \_\_\_\_\_ in human become functionless and is reduced to a Vermiform appendix.  
(a) Small intestine (b) large intestine (c) **Rectum** (d) caecum
- 33) In Hardy - Weinberg equation, the frequency of heterozygous individual is represented by  
(a)  $P_2$  (b)  **$2pq$**  (c)  $pq$  (d)  $q^2$
- 34) Identify the incorrect statement in concern with Neanderthals  
(a) Neanderthal human were found in Germany (b) They possessed flat cranium (c) They used to bury their dead  
(d) **Their brain size is of 650 - 800 cc**
- 35) Identify the mismatched pairs  
(a) **Thorn of Bougainvillea and Tendril of cucurbita - Analogy** (b) Forelimbs of whale and cat - Analogy  
(c) Octopus eye & Mammalian eye - Homology (d) Root of sweet potato & stem of potato - Homology
- 36) Witnesses for evolution are found in \_\_\_\_\_  
(a) Rocks (b) Ocean beds (c) **Fossils** (d) Desert
- 37) Assertion (A): Hardy - Weinberg principle states that allelic frequency of a population remain constant  
Reason (R): Constancy is maintained through natural selection and mutation  
(a) **A is true R is false** (b) A is false R is true (c) Both A and R are true (d) R explains A
- 38) Genetic drift leads to  
(a) Mutation (b) **Bottle neck effect** (c) Immigration (d) Isolation
- 39) Atavism refers to \_\_\_\_\_  
(a) Inheritance of trait by mother (b) Inheritance of trait by father (c) Criss-cross inheritance  
(d) **Inheritance of characters not shown by parents**
- 40) There is no life on moon due to absence of  
(a) silicates (b) air (c) nitrogen (d) **water**
- 41) The synthesis of nucleoproteins provided the first sign of  
(a) evolution (b) **life** (c) speciation (d) none
- 42) Which one is vestigial organ in human?  
(a) ear pinnae (b) adrenal glands (c) **vermiform appendix** (d) sebaceous glands
- 43) Homologous structures are  
(a) dissimilar in origin, similar in function (b) dissimilar in origin and function both  
(c) **similar in origin but similar or dissimilar in function** (d) similar in origin and dissimilar in function
- 44) A vestigial organ of man is  
(a) ileum (b) tooth (c) ear pinnae (d) **ear muscle**
- 45) Which of the following is not a ozone depleting substance?  
(a) Methyl chloroform (b) Carbon tetrachloride (c) Hydrochloro fluorocarbons (d) **Nitrous oxide**

- 46) Match the following and find the correct answer

|                    |                   |
|--------------------|-------------------|
| i) Tertiary period | (A) Age of fishes |
|--------------------|-------------------|

|                       |                                |
|-----------------------|--------------------------------|
| ii) Jurassic period   | (B) dominance of invertebrates |
| iii) Devonian period  | (C) Mammals and birds          |
| iv) Ordovician period | (D) Golden age of reptiles     |

(a) (i) - B, (ii) - C, (iii) - D (iv) - A    (b) (i) - C, (ii) - D, (iii) - B (iv) - A    (c) (i) - D, (ii) - C, (iii) - B (iv) - A

**(d) (i) - C, (ii) - D, (iii) - A (iv) - B**

47) There is no life on moon because it has no

(a) nitrogen    (b) sulphur    (c) oxygen    **(d) water**

48) Russian scientist first to propose modern theory of origin of life

**(a) Oparin**    (b) Haldane    (c) Miller    (d) Bahadur

49) Golden age of dinosaurs / age of reptiles was

**(a) Mesozoic**    (b) Cenozoic    (c) palaeozoic    (d) psychozoic

50) Identify the correct sequence from oldest to youngest

(a) Cambrian → Permian → Devonian → Silurian → Ordovician

(b) Permian → Silurian → Devonian → Ordovician → Cambrian

(c) Permian → Devonian → Silurian → Cambrian → Ordovician

**(d) Cambrian → Ordovician → Silurian → Devonian → Permian**