

**NEET : CHAPTER WISE TEST- 6****SUBJECT :- BIOLOGY****CLASS :- 12<sup>th</sup>****CHAPTER :- EVOLUTION**

DATE.....

NAME.....

SECTION.....

**(SECTION-A)**

1. Which of the following correctly describes "abiogenesis"?  
(A) Origin of viruses  
(B) Origin of prokaryotes  
(C) Origin of life from pre-existing life  
(D) Origin of life from non-living matter
2. According to Oparin and Haldane,  
(A) Mutations caused speciation.  
(B) The first form of life could have originated from pre-existing non-living organic molecules.  
(C) The evolution of life was driven by the use and disuse of organs.  
(D) Oxygen was abundant in the primitive atmosphere.
3. In the Miller Urey experiment, the control set-up was different from the actual experimental set-up in.  
(A) Presence of oxygen in control set-up.  
(B) Ratio of gases used in chamber.  
(C) Presence or absence of energy source.  
(D) Types of gases used in reaction mixture.
4. Life cannot originate from the inorganic materials these days because of  
(A) Absence of raw materials.  
(B) High atmospheric oxygen.  
(C) Low atmospheric hydrogen.  
(D) Presence of ozone.
5. The ratio of hydrogen, ammonia, and methane in Miller's experiment was  
(A) 2:1:1. (B) 2:1:2.  
(C) 1:2:1. (D) 1:2:2.
6. Evolutionary biology is  
(A) Origin of life from non-living matter.  
(B) Origin of life from pre-existing life.  
(C) Formation of diverse organic molecules inorganic constituents.  
(D) Study of life forms on earth.
7. Whales, bats, cheetah, and humans share similarities in the  
(A) Shape of jaw.  
(B) Number of teeth.  
(C) Pattern of bones of forelimbs.  
(D) Pattern of bones of vertebral column.
8. Which of the following is not an example of analogous organs?  
(A) Sting of honeybee and scorpion  
(B) Fins of shark and flipper of dolphins.  
(C) Stem tendril of Passiflora and leaf tendril of Lathyrus aphaca  
(D) Thorn of Bougainvillea and a tendril of Cucurbita
9. Which of the following is an avian character of Archaeopteryx?  
(A) The digits of forelimbs had claws.  
(B) Bones were solid.  
(C) Teeth were present within jaws.  
(D) Forelimbs were modified into wings.
10. The strongest evidence for change over a long period of time comes from  
(A) Analogous organs.  
(B) Embryo studies.  
(C) Biogeography.  
(D) Palaeontology.
11. Which of the following is a mismatch?  
(A) Ordovician period-Age of giant molluscs  
(B) Cambrian period-Origin of trilobites  
(C) Devonian period-Origin of pisces  
(D) Permian period-Origin of mammal-like reptile
12. The biogenetic law stating "Ontogeny recapitulates Phylogeny" was proposed by  
(A) Von Baer. (B) Ernst Haeckel.  
(C) Wallace. (D) Libby.
13. An important evidence in favour of organic evolution is the occurrence of  
(A) Homologous and vestigial organs.  
(B) Analogous and vestigial organs.  
(C) Homologous and analogous organs.  
(D) Homologous organs only.
14. Read the following statements:  
(i) Birbal Sahni is the father of Indian palaeobotany.  
(ii) Sweet potato (root modification) and potato (stem modification) are examples of analogous organs.  
(iii) Convergent evolution is seen between lemur and spotted cuscus.  
(iv) The first organisms that invaded land were insects.  
(v) Jawless fish evolved around 500 million years ago.  
Which of the above statements are incorrect?  
(A) (i) and (ii) (B) (ii) and (iii)  
(C) (iv) and (v) (D) (ii) and (v)
15. Which one of the following are analogous structure?  
(A) Flipper of dolphin and leg of horse  
(B) Mouthpart of housefly and cockroach  
(C) Gills of prawn and lungs of human  
(D) Wings of bat and flipper of whale

16. The Cenozoic Era is the  
 (A) Age of pisces.  
 (B) Age of reptiles.  
 (C) Age of mammals.  
 (D) Age of amphibians.
17. Crocodile and penguin are similar to whale and dogfish in which one of the following features?  
 (A) Possess bony skeleton  
 (B) Lay eggs and guard them till they hatch  
 (C) Have gill slits at some stage  
 (D) Possess a single solid nerve cord
18. The evolution of different species in a given area starting from a point and spreading to other geographical areas is known as  
 (A) Migration.  
 (B) Adaptive radiation.  
 (D) Convergent evolution.  
 (C) Natural selection.
19. Footprints, trails, tracks, and tunnels of various organisms made in mud are rapidly filled in with sand and covered by sediments. This is an example of which of the following types of fossil?  
 (A) Coprolites (B) Imprints  
 (C) Gastroliths (D) Petrified fossils
20. The study of fossils is useful evidence of evolution as it suggests  
 (A) Life originated spontaneously from non-living matter.  
 (B) Life came on earth as spores or Panspermia from other planets.  
 (C) New forms of life arose at the same time in the history of earth.  
 (D) Life forms varied over time and certain life forms are restricted to certain geological time spans.
21. Match the options given in Column I with Column II  
**Column I**  
 A. Carboniferous  
 B. Cretaceous  
 C. Ordovician  
 D. Jurassic  
**Column II**  
 (i) Dinosaurs dominated over earth  
 (ii) Dinosaurs became extinct, origin of angiosperms  
 (iii) Age of amphibians, origin of reptiles  
 (iv) Age of invertebrates  
 (A) A-(iii), B - (ii) , C - (iv) , D-(i)  
 (B) A-(i), B-(ii), C-(iii), D - (iv)  
 (C) A-(iv), B - (i) C-(ii), D-(iii)  
 (D) A - (ii) B-(iii), C - (iv) , D - (i)
22. Molecular homology deals with  
 (A) The different types of nucleic acids and proteins in closely related animals.  
 (B) The similarities in anatomical structures of different organisms.  
 (C) The similarities in anatomical structures of closely related animals.  
 (D) The similarities of base sequence in nucleic acid and proteins of different organisms.
23. The best example of adaptive radiation is/are  
 (A) Darwin's finches.  
 (B) Australian marsupials.  
 (C) Lack of limbs in snakes.  
 (D) Both (A) and (B).
24. The idea of "natural selection" as the fundamental process of evolutionary changes was reached  
 (A) By Charles Darwin in 1866.  
 (B) By Alfred Russel Wallace in 1901.  
 (C) By Mendel in 1866.  
 (D) Independently by Charles Darwin and Alfred Russel Wallace in 1859.
25. According to Darwin, evolution is  
 (A) A slow and discontinuous process.  
 (B) A slow, gradual, and continuous process.  
 (C) A sudden and discontinuous process.  
 (D) A slow, sudden, and continuous process.
26. Which of the following is an incorrect statement?  
 (A) The book Origin of Species was written by Darwin.  
 (B) The unit of evolution is population.  
 (C) Ernst Mayr is called the "Darwin of 20th Century".  
 (D) Single-step large mutation leading to speciation is called genetic drift.
27. Which of the following is incorrect about Lamarckism?  
 (A) Evolution of life forms occurred driven by the use and disuse of organs.  
 (B) Giraffes elongated their neck to forage leaves on tall trees.  
 (C) Giraffes with longer necks produced more offspring than those having shorter necks.  
 (D) Giraffes passed on the acquired character of elongated neck to succeeding generations.

28. Darwin's theory of natural selection was based on certain observations. Which of the following is not an observation made by Darwin?  
 (A) Natural resources are limited.  
 (B) Populations are stable in size except for seasonal fluctuations.  
 (C) Members of population are similar in characteristics.  
 (D) Most of the variations are inherited

29. Match the options given in Column I with those given in Column II.

**Column I**

- A. Primary abiogenesis  
 B. Reproductive fitness  
 C. Saltation  
 D. Biogenesis

**Column II**

- (i) Louis Pasteur  
 (ii) Hugo de Vries  
 (iii) Charles Darwin  
 (iv) Oparin-Haldane  
 (A) A - (i) B-(ii), C - (iv) , D-(iii)  
 (B) A - (iv) B-(iii), C - (ii) D - (i)  
 (C) A-(ii), B-(i), C-(iii), D-(iv)  
 (D) A - (ii) B - (i) C-(iii), D - (iv)

30. The "doctrine of appetency" was part of \_\_\_\_\_ theory of evolution.  
 (A) Darwin (B) Lamarck  
 (C) Oparin (D) Hugo de Vries

31. Which of the following plants can grow in soil rich in selenium?  
 (A) *Agrostis tenuis*  
 (B) *Impatiens balsamina*  
 (C) *Oenothera lamarckianabol*  
 (D) *Astragalus* and *Haplopappus*

32. The placental mammals in Australia evolved into several varieties each of which appears to be "similar" to a corresponding marsupial because of  
 (A) Anthropogenic action.  
 (B) Adaptive radiation and convergent evolution.  
 (C) Theory of germplasm.  
 (D) Inheritance of acquired characters.

33. The Hardy-Weinberg equation helps in knowing  
 (A) Whether population size is constant.  
 (B) Whether evolution is occurring in a population  
 (C) Behaviours of individuals in a population.  
 (D) Different characters of individuals in population.

34. Which of the following factors will not cause change in gene frequency?  
 (A) Random mating  
 (B) Genetic drift  
 (C) Gene migration  
 (D) Non-random mating

35. Population is said to be non-evolving if all of the following features exist, except  
 (A) Random mating.  
 (B) Large population size.  
 (C) Mutations are not taking place.  
 (D) New members migrate into this population from outside.

**(SECTION-B)**

36. If two species of a plant in the same pond do not interbreed because one blooms at night while the other blooms during day, this reproductive barrier between them is an example of  
 (A) Gametic isolation.  
 (B) Mechanical isolation.  
 (C) Temporal isolation.  
 (D) Geographical isolation.

37. Allopatric speciation is caused by  
 (A) Bottleneck phenomena.  
 (B) Genetic drift.  
 (C) Reproductive isolation due to geographical isolation.  
 (D) Reproductive isolation without geographical isolation.

38. If two species live in different habitats and cannot interbreed, it is called  
 (A) Temporal isolation.  
 (B) Ecological isolation.  
 (C) Mechanical isolation.  
 (D) Behavioural isolation.

39. The occurrence of large and small birds and the absence of medium-sized birds are an example of  
 (A) Stabilising selection.  
 (B) Balancing selection  
 (C) Directional selection.  
 (D) Disruptive selection.

40. Mayr used the term "paraspecies" for  
 (A) Species that breed in captivity.  
 (B) Species that are morphologically similar, yet they do not interbreed.  
 (C) Morphologically grouped asexual species.  
 (D) Morphologically distinct interbreeding species.

41. In a population of wolves, which would be considered the fittest?  
 (A) Wolf that eats the maximum  
 (B) The biggest wolf  
 (C) Wolf having most number of mutations  
 (D) Wolf that leaves most number of offspring

42. Which of the following is a post-mating factor causing reproductive isolation?  
(A) Temporal isolation  
(B) Ethological isolation  
(C) Geographical isolation  
(D) Hybrid breakdown
43. The fossil of *Australopithecus africanus* was named  
(A) Lucy. (B) Java man.  
(C) Proconsul. (D) Taung baby.
44. Find the mismatch among the given fossil men and their brain sizes.  
(A) *Homo habilis*-650-800 cc  
(B) *Homo erectus*-900 cc  
(C) *Homo sapiens*-900 cc  
(D) *Australopithecus*-500 cc
45. The most significant aspect of human evolution is  
(A) Erect posture.  
(B) Opposable thumb.  
(C) Increased brain size.  
(D) Absence of tail.
46. Which of the following hominid is associated with cave paintings?  
(A) Peking man  
(B) Java man  
(C) Cro-Magnon man  
(D) Neanderthal man
47. The hominid fossils discovered in Java in 1891 revealed a stage in human evolution which was called  
(A) *Homo sapiens fossilis*.  
(B) *Homo habilis*.  
(C) *Homo erectus*.  
(D) *Australopithecus*
48. Peking man is also called  
(A) *Dryopithecus*. (B) *Sinanthropus*.  
(C) *Australopithecus*. (D) *Zinjanthropus*.
49. The prehistoric human Pleistocene epoch was that lived during the late pleistocene epoch was  
(A) Cro-Magnon man.  
(B) *Australopithecus*.  
(C) Neanderthal man.  
(D) *Dryopithecus*.
50. Which of the following is the most primitive ancestor of human?  
(A) *Homo erectus*  
(B) *Homo sapiens neanderthalensis*  
(C) *Australopithecus*  
(D) *Ramapithecus*