

BIOLOGY QUESTIONS

1. The Galapagos Islands are associated with the visit of

- (a) Jean Lamarck
- (b) Charles Darwin
- (c) Gregor Mendel
- (d) Alfred Wallace

Ans. (b)

2. Which of the following was most influential upon Darwin's formulation of theory of natural selection?

- (a) De Vries concept of mutation
- (b) Wallace's paper on survival
- (c) Malthus's essay on population
- (d) Lamarck's on inheritance of acquired characters

Ans. (c)

3. „Survival of the fittest“ was used by

- (a) Charles Darwin
- (b) Jean Baptiste Lamarck
- (c) Hugo deVries
- (d) Herbert Spencer

Ans. (d)

4. After observing the variations HUGO DE VRIES first of all described the mutation in

- (a) *Oenothera lamarckiana*
- (b) *Neurospora crassa*
- (c) *Pisum sativum*
- (d) *Drosophila melanogaster*

Ans. (a)

5. According to scientists, the Big Bang occurred approximately ? years ago.

- (a) 100 million
- (b) 100 thousand
- (c) 1 billion
- (d) 15 billion

Ans. (d)

6. PASTEUR succeeded in disproving the spontaneous generation theory because

- (a) he was lucky
- (b) he was ingenious in drawing out the neck of glass flasks, so as to provide access to air but not to microorganisms
- (c) of the fact that sample of yeast taken by him was dead
- (d) of the clear surrounding of his laboratory

Ans. (b)

7. The first organisms were

- (a) primitive eukaryotes
- (b) aerobic bacteria
- (c) prokaryotic
- (d) photosynthetic

Ans. (c)

8. Why was the primitive atmosphere of Earth more beneficial to the origin of life than the modern atmosphere of Earth?

- (a) The primitive atmosphere had a layer of ozone that shielded the first delicate cells
- (b) The primitive atmosphere was reducing one that facilitated the formation of complex substances from simple molecules
- (c) The primitive atmosphere was an oxidising one that facilitated the formation of complex substances from simple molecules
- (d) The primitive atmosphere has less free energy than the modern atmosphere, and thus newly

formed organisms were less likely to be destroyed

Ans. (b)

9. Russian scientist who proposed the theory of origin of life was

- (a) Oparin
- (b) Miller
- (c) Haldane
- (d) Fox

Ans. (a)

10. In their laboratory simulation of early Earth, Miller and Urey observed the abiotic synthesis

- (a) amino acids
- (b) coacervates
- (c) DNA
- (d) liposomes

Ans. (a)

11. The richest source of fossils is

- (a) basalt
- (b) granite
- (c) lava
- (d) sedimentary

rock Ans. (d)

12. Biologists who study the sequences of organisms in the fossil record are

- (a) taxonomists
- (b) palaeobiologists
- (c) misologists
- (d) systematists

Ans. (b)

13. Which were dominant in Mesozoic?

- (a) Dinosaurs
- (b) Gymnosperms
- (c) Fishes
- (d) Mammals

Ans. (a)

14. The "Golden age of Reptiles" was

- (a) Late Paleozoic
- (b) Cenozoic
- (c) Mesozoic
- (d) Proterozoic

Ans. (c)

15. The fossil remains of Archaeopteryx is a connecting link between

- (a) amphibians
- (b) reptiles and birds
- (c) fish and amphibians
- (d) reptiles and

mammals Ans. (a)

16. Which of the following set is the evidence of evolution?

- (a) Homologous and vestigial organs
- (b) Analogous and vestigial organs
- (c) Homologous and analogous organs
- (d) All of the above

Ans. (a)

17. Of the following anatomical structures, which is homologous to the wing of a bat?

- (a) The arm of a human
- (b) The wing of a butterfly
- (c) The tail of a fish

(d) The dorsal fin of a shark Ans. (a)

18. Which one of the following sets of structures includes only analogous organs?

- (a) Wings of butterfly, housefly and bat
- (b) Hind legs of horse
- (c) Hands of man, monkey and kangaroo
- (d) Mandibles of cockroach, mosquito and honeybee Ans. (a)

19. Which of the following set represents all vestigial structures in the human body?

- (a) Vermiform appendix, body hair and cochlea
- (b) Wisdom teeth, coccyx and patella
- (c) Coccyx, vermiform appendix and muscles of ear pinna
- (d) Body hair, muscles of ear pinna and atlas vertebra Ans. (c)

20. The earliest animal to have been domesticated by man most likely the

- (a) horse
- (b) pig
- (c) dog
- (d) cow Ans. (c)

21. Presence of gill slits in the embryo of all vertebrates supports the theory of

- (a) organic evolution
- (b) recapitulation
- (c) metamorphosis
- (d) biogenesis Ans. (b)

22. Appearance of ancestral characters in the new borne, such as tail, multiple mammae, etc., are known as

- (a) homologous
- (b) analogous
- (c) atavistic
- (d) vestigial Ans. (c)

23. Evolution is defined as

- (a) history of race
 - (b) development of race
 - (c) history and development of race with variations
 - (d) progressive history of race
- Ans. (c)

24. The book named "Philosophic zoologique" was published in 1809 and was written by:

- (a) Mendel
- (b) Darwin
- (c) De Vries
- (d) Lamarck Ans. (d)

25. Penguin is a bird that lost the use of its wings by not flying. Such a statement would express the views of

- (a) Darwin
 - (b) Wallace
 - (c) Lamarck
 - (d) Huxley
- Ans. (c)