SCIENCE QUIZ - APRIL 2022

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1. When two parents are crossed, the offspring are referred to as:
   (A) recessive (B) test cross (C) F1 generation (D) F2 generation

2. A cross between two individuals results in a ratio of 9:3:3:1 for four possible progenies. This is an example of a:
   (A) dihybrid cross (B) monohybrid cross (C) test cross (D) none of these

3. For his experiments on heredity, Mendel's used:
   (A) papaya plants (B) potato plants (C) pea plants (D) pear plants

4. The human animal which has an XY pair of chromosomes is called:
   (A) male (B) hybrid (C) female (D) doomed

5. The science of heredity is known as:
   (A) biology (B) embryology (C) genetic (D) biochemistry

6. A gene is a:
   (A) hybrid (B) heritable trait (C) pour breed (D) part of a chromosomes that transmits a trait

7. A normal cell of human body contains 23 pairs of chromosomes. The Number of chromosomes in a sex cell (sperm or ovum) of a human being is most likely to be:
   (A) 46 (B)23 (C)21 (D)42

8. In order to ensure that he had pure -breeding plants for his experiments, Mendel:
   (A) cross fertilized each variety with each other
   (B) let each variety self-fertilized for several generations
   (C) removed the female parts of the plant
   (D) removed the male parts of the plants

9. A plant with two 'small' genes breed with a plant with two 'tall' genes to produce:
   (A) small plants and tall plants in the ratio 1 :3
   (B) all small plants
   (C) all tall plants
   (D) tall plants and small plants in the ratio 3 : 1

10. The palisade cells of a species of plant contains 28 chromosomes. How many chromosomes will there be in each gamete produced by the plant?
    (A) 56 (B) 28 (C) 14 (D) 4

11. Which of the following may be used to obtain and F2 generation?
    (A) allowing flowers on a parent plant to be self-pollinated
    (B) allowing flowers on an F1 plant to be self-pollinated
    (C) cross pollinated an F1 plant with a parent plant
    (D) cross pollinating parent plant

12. The following results were obtained by a scientist who cross the F1 generation of pure -breeding parents for round and wrinkle seeds.
dominant traits; recessive traits; No. of F2 offspring; round seeds; wrinkled seeds 7524 .
From these results, it can be concluded that the actual number of the round seeds he obtained was:
(A) 1881 (B) 22572 (C) 2508 (D) 5643

13. The visible characteristics in an organism is known as:
(A) prototype (B) stereotype (C) phenotype (D) genotype

14. The exchange of genetic material takes place in:
(A) vegetative reproduction (B) asexual reproduction (C) sexual reproduction (D) budding

15. A cross between a tall plant (TT) and short plant (tt) resulted in progeny that were all tall plants because:
(A) tallness is the dominant trait (B) shortness is the dominant trait
(C) tallness is the recessive trait (D) height of plant is not governed by gene T or t

16. In evolutionary terms, we have more in common with:
(A) a chinese school boy (B) a chimpanzee (C) a spider (D) a bacterium

17. The human species has genetic roots in:
(A) America (B) Africa (C) Australia (D) Antarctica

18. Which of the following gas was not present in early earth atmosphere?
(A) ammonia (B) oxygen (C) hydrogen sulphide (D) methane

19. A gradual change over a long period, in a form of life is known as:
(A) erosion (B) evolution (C) revolution (D) evaluation

20. Scientists believe that all life originated in:
(A) the sea (B) the soil (C) the ground (D) the air

21. According to scientists, aves have evolved from:
(A) mammals (B) amphibians (C) reptiles (D) arthropods

22. The theory of evolution of species by natural selection was given by:
(A) Mendel (B) Darwin (C) Dalton (D) Lamarck

23. The term ‘father of genetics’ is used for the scientist:
(A) Morgan (B) Mendel (C) Darwin (D) Marie Curie

24. One of the following traits cannot be inherited. This one is:
(A) colour of eye (B) colour of skin (C) size of body (D) nature of here

25. Only one of the following characteristics of the parents can be inherited by their children. This one is:
(A) deep scar on chin (B) snub nose (C) technique of swimming (D) cut nose

26. The organs which perform different functions but have the same basic structures are known as:
(A) homologous organs (B) analogous organs (C) homolytic organs (D) analytic organs

27. The organs which perform similar functions but have different basic structures are called:
(A) asymmetric organs (B) analogous organs (C) homologous organs (D) homophonic organs

28. Wing of an insect and forelimb of a bird are:
(A) analogous organs (B) analeptic organs (C) homologous organs (D) homophobic organs

29. If the fossil of an organism is found the deeper layer of earth, then we can predict that:
(A) the extinction of organism has occurred recently
(B) the extinction of organism has occurred thousands of years ago
(C) the fossils position in the layer of earth is not related to its time of extinction
(D) time of extension cannot be determined

30. Which of the following statement is incorrect with respect to variations?
(A) all variation in a species have equal chance of survival
(B) change in genetic composition results in variations
(C) selection of variations by environmental factor forms the basis of evolutionary process
(D) variation are the minimum in asexual reproduction.

ANSWERS

1. (C) 2. (A) 3. (C) 4. (A) 5. (C) 6. (D) 7. (B) 8. (B) 9. (C) 10. (C)
11. (B) 12. (D) 13. (C) 14. (C) 15. (A) 16. (B) 17. (B) 18. (B) 19. (B) 20. (A)
21. (C) 22. (B) 23. (B) 24. (C) 25. (B) 26. (A) 27. (B) 28. (A) 29. (B) 30. (A)

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