

1. In peas, a pure tall plant (TT) is crossed with a pure short plant (tt). The ratio of pure tall plants to pure short plants in F₂ generation will be:

- (a) 1 : 3
(b) 3 : 1
(c) 1 : 1
(d) 2 : 1

2. Which is the one characteristic of the parents that can be inherited by their children?

- (a) Deep scar on chin
(b) Snub nose
(c) Technique of swimming
(d) Cut nose

3. What could be the reason for the fossil of an organism to be found in the deeper layers of the earth?

- (a) The extinction of organism has occurred few years back
(b) The extinction of organism has occurred thousands of years ago
(c) The position of fossil in the layers of earth is not related to its time of extinction
(d) Time of extinction cannot be determined.

4. What is the ancient name for all human beings?

- (a) Monkey
(b) Chimpanzee
(c) Homo sapiens
(d) Invertebrates

5. Which of the following pair of organ is not homologous?

- (a) Forelimbs in humans and lizard
(b) Forelimbs in lizard and frog
(c) Wings in butterfly and bat
(d) none of these

6. A Mendelian experiment consisted of breeding of tall pea plants bearing violet flowers with short pea plants bearing white flowers. The progeny all bore violet flowers but almost half of it was short. This suggests that the genetic makeup of tall parent can be depicted as:

- A) TTWW
B) TTww
C) TtWW
D) TtWw

7 The preserved traces of living organisms are called _____.

- A) Fossils
B) Species
C) Non living materials
D) None

8. Human teeth and elephant's tusk are

- (a) Analogous organs
(b) Vestigial organs
(c) Homologous organs
(d) Rudimentary organs

9. Evolution of wild cabbage is an example of:

- (a) Artificial selection (b) Natural selection
(c) Mutation
(d) Genetic drift

10 The modern day Human species has evolved from its earliest ancestors who lived in:

- (a) Asia (b) Australia
(c) Africa (d) China

11. Some dinosaurs had feathers although they could not fly but birds have feathers that help them to fly. In the context of evolution this means that

- (a) reptiles have evolved from birds
(b) there is no evolutionary connection between reptiles and birds
(c) feathers are homologous structures in both the organisms
(d) birds have evolved from reptiles

12. A zygote which has an X-chromosome inherited from the father will develop into a

- (a) girl (b) boy
(c) either boy or girl
(d) X-chromosome does not influence the sex of a child

13. A cross between two individuals results in a ratio of 9: 3: 3:1 for four possible phenotypes of progeny. This is an example of a

- (a) Monohybrid cross (b) Dihybrid cross
(c) Test cross (d) F1 generation

14.Those organs which have different basic structure but have similar appearance and perform similar functions are called

- (a) Analogous organs (b) Homologous organs
(c) Vestigial organs (d) None of these

15. A pure dominant pea plant producing round yellow seeds is crossed with pure recessive pea plant producing wrinkled green seeds. The number of plants bearing round green in F1 generation is

- a.1 b.0 c.9 d.3

16. A tall plant with red flowers is crossed with a dwarf plant with white flowers. Which of the following represents dwarf plant with white flowers?

- a. TtRr b.TTRR c.ttrr d.ttRr