

Science Olympiad: Practice Questions on Biology

1. Which of the following is not a property of life?
 - (A) molding or adapting to one's environment
 - (B) regulating materials that enter or leave the system
 - (C) responding to stimuli
 - (D) reproducing, passing hereditary material to the next generation
2. Of the following biological levels of organization, which represents the smallest or lowest level?
 - (A) organs
 - (B) tissues
 - (C) cells
 - (D) organisms
3. The study of the way individual traits are transmitted from one generation to the next is called
 - (A) ecology
 - (B) genetics
 - (C) cell biology
 - (D) homology
4. Darwin explained his theory of evolution in a book called
 - (A) On the Origin of Species
 - (B) The Principles of Population
 - (C) Survival of the Fittest
 - (D) Around the World in Eighty Days
5. Ozone hole refers to
 - (A) hole in ozone layer
 - (B) decrease in the ozone layer in troposphere
 - (C) decrease in thickness of ozone layer in stratosphere
 - (D) increase in the thickness of ozone layer in troposphere
6. Pollination is best defined as
 - (A) transfer of pollen from anther to stigma
 - (B) germination of pollen grains
 - (C) growth of pollen tube in ovule
 - (D) visiting flowers by insects
7. Plants receive their nutrients mainly from
 - (A) chlorophyll
 - (B) atmosphere
 - (C) light
 - (D) soil
8. Movement of cell against concentration gradient is called
 - (A) osmosis
 - (B) active transport
 - (C) diffusion
 - (D) passive transport

9. Photosynthesis generally takes place in which parts of the plant?
- (A) Leaf and other chloroplast bearing parts
 - (B) stem and leaf
 - (C) Roots and chloroplast bearing parts
 - (D) Bark and leaf
10. Plants absorb dissolved nitrates from soil and convert them into
- (A) free nitrogen
 - (B) urea
 - (C) ammonia
 - (D) proteins
11. One of the following is not a function of bones.
- (A) Place for muscle attachment
 - (B) Protection of vital organs
 - (C) Secretion of hormones for calcium regulation in blood and bones
 - (D) Production of blood corpuscles
12. Most highly intelligent mammals are
- (A) whales
 - (B) dolphins
 - (C) elephants
 - (D) kangaroos
13. Prokaryotic cells lack
- (A) nucleolus
 - (B) nuclear membrane
 - (C) membrane bound organelles
 - (D) all of the above
14. Nucleus, the genetic material containing rounded body in each cell, was first discovered in 1831 by
- (A) Robert Hooke
 - (B) Robert Brown
 - (C) Rudolf Virchow
 - (D) Theodore Schwann
15. Plant hormone that induces cell division is
- (A) auxins
 - (B) gibberellins
 - (C) cytokinins
 - (D) ethylene
16. Phloem is a tissue found in
- (A) reproductive organs of animals
 - (B) plants
 - (C) insects
 - (D) mammals
17. Potato is a modified form (outgrowth) of
- (A) root
 - (B) stem
 - (C) fruit
 - (D) leaf

18. Of the following taxonomic categories which is the most inclusive (i.e. is the highest in hierarchy)?

- (A) Order
- (B) Subspecies
- (C) Class
- (D) Genus

19. Myopia is connected with

- (A) ears
- (B) eyes
- (C) lungs
- (D) None of these

20. Most of the red, blue and purple colours of plants are due to a pigment called

- (A) anthocyanin
- (B) carotene
- (C) chlorophyll
- (D) xanthophylls

21. Our skin, when exposed to excess sunlight, becomes dark. This is because our skin pigments called

- (A) flavoxanthin
- (B) melanin
- (C) carotene
- (D) Xanthophyll

22. Plants wilt due to excess of

- (A) transpiration
- (B) photosynthesis
- (C) absorption
- (D) None of these

23. On which of the following plants did Gregor Mendel perform his classical experiment?

- (A) Gram
- (B) Maize
- (C) Pea
- (D) Wheat

24. Night blindness is caused by lack of which vitamin?

- (A) Vitamin A
- (B) Vitamin B
- (C) Vitamin C
- (D) Vitamin D

25. Monocot root differs from dicot root in having

- (A) open vascular bundles
- (B) scattered vascular bundles
- (C) well developed pith
- (D) radially arranged vascular bundles