

## Science Quiz: November, 2020

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1. Asexual reproduction takes place through budding in  
(a) amoeba (b) yeast (c) plasmodium (d) leishmania
2. Which of the following is not a part of the female reproductive system in human beings?  
(a) Ovary (b) Uterus (c) Vas deferens (d) Fallopian tube
3. The anther contains-----  
(a) sepals (b) ovules (c) carpel (d) pollen grains
4. Characters that are transmitted from parents to offspring during reproduction show ----  
(a) only similarities with parents  
(b) only variations with parents  
(c) both similarities and variations with parents  
(d) neither similarities nor variations
5. Which among the following diseases is not sexually transmitted?  
(a) syphilis (b) hepatitis (c) HIV-AIDS (d) gonorrhea
6. A feature of reproduction that is common to Amoeba, Spirogyra and yeast is that-----  
(a) they reproduce asexually  
(b) they are all unicellular  
(c) they reproduce only sexually  
(d) they are all multicellular
7. Which among the following statements are true for unisexual flowers?  
I. They possess both stamen and pistil.  
II. They possess either stamen or pistil.  
III. They exhibit cross-pollination.  
IV. Unisexual flowers possessing only stamens cannot produce fruits.  
(a) I and IV (b) II, III and IV (c) III and IV (d) I, III and IV

8. Length of pollen tube depends on the distance between ---

- (a) pollen grain and upper surface of stigma.
- (b) pollen grain on upper surface of stigma and ovule.
- (c) pollen grain in anther and upper surface of stigma.
- (d) upper surface of stigma and lower part of style.

9. Which among the following statements are true for sexual reproduction in flowering plants?

- I. It requires two types of gametes.
- II. Fertilization is a compulsory event.
- III. It always results in formation of zygote.
- IV. Offsprings formed are clones.

- (a) I and IV
- (b) I and II
- (c) I, II and III
- (d) I, II and IV

10. Factors responsible for the rapid spread of bread mould on slices of bread are ----

- I large number of spores.
- II availability of moisture and nutrients in bread.
- III presence of tubular branched hyphae.
- IV formation of round-shaped sporangia

- (a) I and III
- (b) II and IV
- (c) I and II
- (d) III and IV

11. During adolescence various changes occur in the body of humans. Mark one change associated with sexual maturation in males.

- (a) Loss of milk teeth
- (b) Increase in body height
- (c) Cracking of voice
- (d) Weight gain

12. The correct sequence of reproductive stages seen in flowering plants is -----

- (a) gametes, zygote, embryo, seedling
- (b) zygote, gametes, embryo, seedling
- (c) seedling, embryo, zygote, gametes
- (d) gametes, embryo, zygote, seedling

13. Offspring formed by asexual method of reproduction have greater similarity among themselves because -----
- I. asexual reproduction involves only one parent.
  - II. asexual reproduction does not involve gametes.
  - III. asexual reproduction occurs before sexual reproduction.
  - IV. asexual reproduction occurs after sexual reproduction.
- (a) I and II  
(b) I and III  
(c) II and IV  
(d) III and IV
14. Two flowers are identified by a botanist with the following features that flower A is having only stamen and flower B is having both stamen and pistil. Which of the following statements is correct?
- (a) Flower A will bear seeds and flower B cannot bear seeds after fertilization.
  - (b) Flower A will produce pollen grains and flower B cannot produce pollen grains.
  - (c) Flower A cannot be fertilized and flower B can show fertilization.
  - (d) Neither flower A and nor flower B can show self-pollination.
15. Element X forms a chloride with the formula  $XCl_2$ , which is solid with a high melting point. X would most likely to be in the same group of the periodic table as-----
- (a) Na      (b) Mg      (c) Al      (d) Si
16. Which of the following is the outermost shell for elements of 2nd period?
- (a) K-shell   (b) L-shell   (c) M-shell   (d) N-shell
17. An element which is an essential constituent of all organic compounds belongs to
- (a) group 1      (b) group 14      (c) group 15      (d) group 16
18. Which one of the following elements exhibit maximum number of valence electrons?
- (a) Na      (b) Al      (c) Si      (d) P
19. Which of the given elements A, B, C, D and E with atomic number 2, 3, 7, 10 and 30 respectively belong to the same period?
- (a) A, B, C      (b) B, C, D      (c) A, D, E      (d) B, D, E
20. The elements A, B, C, D and E have atomic number 9, 11, 17, 12 and 13 respectively. Which pair of elements belongs to the same group?
- (a) A and B  
(b) B and D  
(c) A and C  
(d) D and E

21. In Mendeleev's periodic table, gaps were left for the elements to be discovered later. Which one of the following elements found a place in the periodic table later?
- (a) germanium      (b) chlorine      (c) oxygen      (d) silicon
22. Which of the following are the characteristics of isotopes of an element?
- (i) Isotopes of an element have same atomic masses.  
(ii) Isotopes of an element have same atomic number.  
(iii) Isotopes of an element show same physical properties.  
(iv) Isotopes of an element show same chemical properties.
- (a) (i), (iii) and (iv)      (b) (ii), (iii) and (iv)      (c) (ii) and (iii)      (d) (ii) and (iv)
23. Which of the following elements would lose an electron easily?
- (a) Mg      (b) Na      (c) K      (d) Ca
24. Which among the following elements has the largest atomic radii?
- (a) Na      (b) Mg      (c) K      (d) Ca
25. Which of the following statements is not a correct statement about the trends when going from left to right across the periods of periodic table?
- (a) The elements become less metallic in nature  
(b) The number of valence electrons increases  
(c) The atoms lose their electrons more easily  
(d) The oxides become more acidic

1. (b)      2. (c)      3. (d)      4. (c)      5. (b)      6. (a)      7. (b)      8. (b)      9. (c)      10. (c)      11. (c)  
12. (a)      13. (a)      14. (c)      15. (b)      16. (b)      17. (b)      18. (d)      19. (b)      20. (c)      21. (a)      22. (c)  
23. (c)      24. (c)      25. (c)

### Answers to the Quiz