

Competitive Exams: Botany MCQs (Practice-Test 39 of 104)

1. As per the international society of soil science, what is the size of the particles of fine sand in the soil?
 - a. 0.001 mm to 0.002 mm
 - b. 0.002 mm to 0.02 mm
 - c. 0.02 mm to 0.20 mm
 - d. 0.20 mm to 2.00 mm

2. With which of the following is the name of Louis Pasteur associated?
 - a. Explanation of the formation of simple organic molecules in the early atmosphere of earth.
 - b. The proposition of the composition of gases in the early atmosphere of earth.
 - c. Disproving the theory of spontaneous generation of organisms.
 - d. Proposition that the first photosynthetic organisms were cyanobacteria.

3. • **Assertion (A):** Ferredoxin carries two electrons at a time.
• **Reason (R):** The active site of ferredoxin consists of two iron atoms bound to two sulfur atoms.
 - a. Both A and R are individually true and R is the correct explanation of A.
 - b. Both A and R are individually true but R is not the correct explanation of A.
 - c. A is true but R is false
 - d. A is false but R is true

4. • **Assertion (A):** Rice seeds germinate and begin to grow under flooded conditions.
• **Reason (R):** Embryos of rice seeds carry out facultative anaerobic respiration.
 - a. Both A and R are individually true and R is the correct explanation of A.
 - b. Both A and R are individually true but R is not the correct explanation of A.

- c. A is true but R is false
- d. A is false but R is true
5. • **Assertion (A):** Citric acid has lesser Respiratory Quotient in comparison to lipids.
- **Reason (R):** Citric acid has relatively more oxygen in comparison to lipids.
- a. Both A and R are individually true and R is the correct explanation of A.
- b. Both A and R are individually true but R is not the correct explanation of A.
- c. A is true but R is false
- d. A is false but R is true
6. • **Assertion (A):** If the oat seedlings are exposed to unilateral illumination, the stem bends towards the light.
- **Reason (R):** An auxin gradient is established in the coleoptile by the destruction of auxin in the lighted side and extra synthesis of auxin in the darker side.
- a. Both A and R are individually true and R is the correct explanation of A.
- b. Both A and R are individually true but R is not the correct explanation of A.
- c. A is true but R is false
- d. A is false but R is true
7. • **Assertion (A):** In pear fruit, the inner tissue is the true fruit and the outer tissue is the accessory fruit.
- **Reason (R):** In pear, the fruit develops from inferior Ovary.
- a. Both A and R are individually true and R is the correct explanation of A.
- b. Both A and R are individually true but R is not the correct explanation of A.
- c. A is true but R is false
- d. A is false but R is true
8. • **Assertion (A):** The rate of DNA replication is much faster in E coil than in eukaryotes.
- **Reason (R):** The length of Okazaki fragments that result from DNA Polymer I activity are much shorter in prokaryotes than in eukaryotes
- a. Both A and R are individually true and R is the correct explanation of A.

- b. Both A and R are individually true but R is not the correct explanation of A.
- c. A is true but R is false
- d. A is false but R is true
9. • **Assertion (A):** Orchid seeds lack endosperm in flowering plants.
- **Reason (R):** Double fertilization is absent in orchids.
- a. Both A and R are individually true and R is the correct explanation of A.
- b. Both A and R are individually true but R is not the correct explanation of A.
- c. A is true but R is false
- d. A is false but R is true
10. • **Assertion (A):** Segemental allopolyploids where all the chromosomes are homologous.
- **Reason (R):** Segmental allopolyploids can be identified by their meiotic behavior.
- a. Both A and R are individually true and R is the correct explanation of A.
- b. Both A and R are individually true but R is not the correct explanation of A.
- c. A is true but R is false
- d. A is false but R is true
11. • **Assertion (A):** The expression of each gene is independent of the other genes.
- **Reason (R):** Genes follow the law of independent assortment as per Mendel's studies.
- a. Both A and R are individually true and R is the correct explanation of A.
- b. Both A and R are individually true but R is not the correct explanation of A.
- c. A is true but R is false
- d. A is false but R is true
12. Consider the following statements: In vitro micro propagation has the advantages of:
- a. Range of variability
- b. Year round availability
- c. Small size of explants

d. Production of disease free prop gules.

Which of the statements given above are correct?

- a. 1, 2 and 4 only
- b. 2, 3 and 4 only
- c. 1 and 3 only
- d. 1, 2, 3 and 4

13. Who of the following is associated with the discovery of 'Restriction endow-nuclease'

- a. Hamilton Smith
- b. H. G. Khorana
- c. Marshall Nirenberg
- d. S. B. Weiss

14. Consider the following diseases of plants:

- a. Root knot of sugar-cane.
- b. Root rot of wheat.
- c. Wilt of cotton.
- d. Angular leaf spot of cotton.

Which of these diseases is/are caused by fungi?

- a. 1 and 4 only
- b. 2 only
- c. 2 and 3
- d. 1, 3 and 4

15. Which one of the following is a disease caused by zinc deficiency?

- a. Die back of rice
- b. Khaira disease of rice
- c. Black heart of potato
- d. Brown spot of rice