Examrace

Competitive Exams: Botany MCQs (Practice_Test 13 of 104)

1. The diagrams given below show population dispersion: Which of these illustrates clumped dispersion pattern in a Population? Select the correct answer using the codes given below:
   a. 2 and 3
   b. 3 and 5
   c. 3 and 4
   d. 1 and 5
2. One of the main causes of the silting of big dams is
   a. Deforestation in the catchments area
   b. Increase in the population of wild animals in the forests around the dam
   c. Insufficient rainfall
   d. Excessive evaporation of water
3. Common indicator organism of water pollution is
   a. Salmonella typhi
   b. Entamoeba histytic
   c. Vibrio cholerae
   d. Escherichia coli
4. Which of the species given below indicate the higher salinity level of the soil?
   a. Prosopis juliflora
   b. Azadirachta indica
   c. Sueda fruticosa
   d. Chenopodium album

   Select the correct answer using the codes given below:
   a. 1 and 2

b. 2 and 3

c. 3 and 4

d. 2 and 4

5. ◦ **Assertion (A)** : In the leaves of gymnosperms the transfusion tissue is the only conducting tissue.

◦ **Reason (R)** : Scarcity of veins has led to the development of transfusion tissue in the leaves of gymnosperms

a. Both A and Rare true and R is the correct explanation of A

b. Both A and R are 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)** : In prokaryotes, transcription and translation occur simultaneously, while in eukaryotes their occurrence is temporally and spatially separated.

◦ **Reason (R)** : In eukaryotes, transcription occurs in nucleus and the encoded message is translated in cytoplasm, but in prokaryotes there is no demarcation between cytoplasm and nudes having no nuclear membrane.

a. Both A and Rare true and R is the correct explanation of A

b. Both A and R are 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)** : Phytochrome in green plans is different from phytochrome in etiolated tissues.

◦ **Reason (R)** : The form of phytochrome expressed in etiolated tissues is only of five gene products.

a. Both A and Rare true and R is the correct explanation of A

b. Both A and R are 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)** : Apodictic seeds of a plant produce clonal population.

◦ **Reason (R)** : In apodictic plants, embryo is formed without meiosis and fertilization.

a. Both A and Rare true and R is the correct explanation of A

b. Both A and R are 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)** : Mendel did not explain the phenomenon of linkage.
   ◦ **Reason (R)** : Factors (Genes) for all the seven characters in garden pea considered by Mendel were present in different homologous chromosomes.

a. Both A and Rare true and R is the correct explanation of A

b. Both A and R are 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)** : Translocation heterozygote semisecret and are accompanied with multivalent association.
    ◦ **Reason (R)** : The gametes formed through alternate disjunction, are functional while those formed by adjacent disjunction are nonviable.

a. Both A and Rare true and R is the correct explanation of A

b. Both A and R are 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)** : Frequency of crossing-over in chromosome is directly proportional to the distance between two genes.
    ◦ **Reason (R)** : Crossing-over at a point on a chromosome discourages the accidence of another crossing over in the vicinity.

a. Both A and Rare true and R is the correct explanation of A

b. Both A and R are 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. ◦ **Assertion (A)** : The hypersensitive response (HR) occurs only in specific host-pathogen combination in which the host and pathogen are incompatible.
    ◦ **Reason (R)** : A resistant gene (R) recognizes and is triggered into action by the elicitor molecules released by the pathogen.

a. Both A and Rare true and R is the correct explanation of A

b. Both A and R are 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

13.
- **Assertion (A)** : Jute fibers always occur in long wedge-shaped bundles outside the xylem.
- **Reason (R)** : Jute fibers always made up of phloem cells.

a. Both A and Rare true and R is the correct explanation of A

b. Both A and R are 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

14.
- **Assertion (A)** : Deodar is one of the most proffered timber woods.
- **Reason (R)** : It is durable and has stability, resistance to temperature, insects and humidity.

a. Both A and Rare true and R is the correct explanation of A

b. Both A and R are 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

15. Which one of the following statements correctly defines Convergent evolution?

a. The development of similar characters/states in different lineages that are related through a common ancestry

b. The convergence of many characters/states in descents of the same lineage

c. The development of similar characters/states in different lineages that are not directly related through a common ancestry

d. The development of different characters/states in descendants of the same lineage