NET, IAS, State-SET (KSET, WBSET, MPSET, etc.), GATE, CUET, Olympiads etc.: Botany MCQs (Practice_Test 76 of 104)

1. The number of hydrogen bonds needed to bind cytosine with guanine in a DNA stand is
   a. One
   b. Two
   c. Three
   d. Four
2. Which one of the following combinations possesses the integrated protein synthesizing machinery?
   a. Ribosome, t-RNA, amino aid
   b. m-RNA, t-RNA and amino acid
   c. Ribosome, t-RNA, m-RNA and amino acid
   d. t-RNA, ribosome, nucleus and m-RNA
3. Which one of the following secondary metabolites of plants has been used as fish poison?
   a. Tritcrpene
   b. Glycoside
   c. Carotene
   d. Saponin
4. In plant tissue culture, induction of roots and shoots can be accomplished by
   a. Using tissue of a certain minimum size
   b. Using a specific concentration of sucrose in the culture medium
   c. Using a particular auxin-cytokinin ratio
   d. Manipulating physical factors such as duration of light, temperature, ph etc.
5. Which one of the following statements is correct?
   a. Pollen wall proteins play an important role in determining sexual incompatibility
   b. Shape of the stigma plays an important role in sexual incompatibility

c. Cryptic fertilization is an important phenomenon associated with sexual incompatibility

d. Placental pollination helps in overcoming self incompatibility

6. During germination of barley grain, the enzyme a-amylase is secreted by

a. Seed coat

b. Aleuronic layer

c. Coleorhizae

d. Coleoptiles

7. Verbalization is used to overcome chemical dormancy in seeds. The temperature range used for this purpose is

a. Zero to 4 degrees C

b. 15 to 20 degrees C

c. 20 to 30 degrees C

d. 30 to 40 degrees C

8. Which of the following pairs are correctly matched?

a.
- Match Item 1: Nutation
- Match Item 2: Movement of growing tips of twining plants
- Match Item 1: Traumatotropism
- Match Item 2: Curvature of due to injury to plant organs.

b.
- Match Item 1: Thigmotropism
- Match Item 2: Movement of tendrils due to contact.
- Match Item 1: Seism nasty
- Match Item 2: Movements caused by change in turgor pressure.

- Select the correct answer using the codes given codes below:

  a. 1,2, 3 and 4

  b. 1,2 and 3

  c. 2,3 and 4

  d. 1 and 4

9. In maize (Zea mays) fertilization takes place between a female parent having colourless endosperm and the male parent having yellow endosperm. After fertilization, the endosperm of the new seed becomes yellow. This phenomenon is known as

a. Dominance

b. Xenia

c. Met xenia

d. Paternal influence

10. In which one of the following sets of plants is the endosperm chlorophyll us?
    a. Rosa, Prunus
    b. Crinum, Raphanus
    c. Arachis, Cicer
    d. Linum, Olea
11. Dichogamy refers to
    a. Male and female sex organs maturing at the same time
    b. Male and female sex organs maturing at different times
    c. Male sterility
    d. Female sterility
12. If a leaf cell of gymnosperm plant had 24 chromosomes, then its endosperm cell would contain
    a. 24 chromosomes
    b. 36 chromosomes
    c. 12 chromosomes
    d. 48 chromosomes
13. The main advantage of vegetative propagation is that it
    a. Is quit easy
    b. Is reliable
    c. Produces genetically uniform progeny
    d. Produces healthy, disease resistant plants
14. Absence of sexual union and failure of meiosis is called
    a. Anisospory
    b. Amphimixis
    c. Apomixis
    d. Anisogamety
15. In germinating oil seeds beta-oxidation of free fatty acids takes place in the
    a. Oleosomes
    b. Glyoxysomes
    c. Mitochondria
    d. Lysosomes