

EXERCISE

1. Emasculation is achieved by-
 - (1) Removal of anther
 - (2) Removal of stigma
 - (3) Removal of entire organisms
 - (4) Removal of petals and sepals
2. In crop improvement programme haploids are of great importance, because they -
 - (1) Grow better under adverse conditions
 - (2) Are useful in studies for meiosis
 - (3) Require only about half the amount of chemical fertilisers compared to diploids.
 - (4) Give homozygous lines following diploidisation.
3. Cellular totipotency is demonstrated by :-
 - (1) Only gymnosperm cells
 - (2) All plant cells
 - (3) All eukaryotic cells
 - (4) Only bacterial cells
4. Heterosis (Hybrid Vigor) desirable in vegetatively propagated plants, because :-
 - (1) Heterosis maintains longer duration
 - (2) These plants are easy to cultivate
 - (3) Vegetative reproduction help in fast multiplication
 - (4) It is due to homozygosity
5. Somaclonal variations appears in -
 - (1) Organism produced through somatic hybridization
 - (2) Plants growing in highly polluted conditions
 - (3) Apomictic plants
 - (4) Tissue culture raised plants
6. Pomato is -
 - (1) Somatic hybrid
 - (2) Allopolyploid
 - (3) Natural mutant
 - (4) (1) and (2) both
7. Plant part, used for culture is called -
 - (1) Scion
 - (2) Stock
 - (3) Explant
 - (4) Callus
8. Protoplast fusion causes :-
 - (1) Rapid growth of offspring
 - (2) Somatic hybridization
 - (3) Production of useful allopolyploid
 - (4) (2) & (3) both
9. Virus free plant can be obtained through :-
 - (1) Grafting
 - (2) Callus culture
 - (3) Shoot tip culture
 - (4) Suspension culture
10. Which of the following hormone is used for shoot differentiation in callus ?
 - (1) 2, 4-D
 - (2) Benzyl amino purine (BAP)
 - (3) Deformylase
 - (4) Gibberelic acid
11. Which of the following type of culture is used in some interspecific crosses, where endosperm of developing hybrid seed degenerates very early ?
 - (1) Meristem culture
 - (2) Shoot tip culture
 - (3) Embryo culture
 - (4) Anther culture
12. What is the root of any breeding programme
 - (1) Mutation
 - (2) Green revolution
 - (3) Genetic variability
 - (4) Genetic similarity
13. Which tropical canes grown in south india had thicker stems and high sugar content but did not grow well in north India.
 - (1) Saccharum barberi
 - (2) Saccharum spontaneum
 - (3) Saccharum robustum
 - (4) Saccharum officinarum
14. "*Pusa Komal*" variety of cow pea, which developed by hybridisation and selection is mainly resistance for
 - (1) Powdery mildew
 - (2) Yellow mosaic virus
 - (3) Bacterial blight
 - (4) White rust
15. Read the statements carefully
 - (A) Wheat variety, Atlas 66 having a high protein content
 - (B) SCP is the Alternate sources of proteins for animal and human nutrition
 - (C) Plants developed by micropropagation will be genetically different to the original plant from which they were grown
 - (D) Semi-dwarf rice varieties were derived from IR-8 and Taichung Native-1
 Find out the correct statements
 - (1) A, B, C
 - (2) C, D, A
 - (3) B, C, D
 - (4) A, B, D
16. In which crop resistance to yellow mosaic virus were induced by mutation
 - (1) Mung bean
 - (2) Cow pea
 - (3) Wheat
 - (4) Brassica
17. Smooth leaved and nectar less cotton varieties do not attract which one of following pests
 - (1) Aphids
 - (2) Jssids
 - (3) Boll worms
 - (4) Shoot borer

