

1. Domestication is the process of
 - a) growing the plants in their natural habitat
 - b) Shifting the plants from wild to cultivated condition**
 - c) crossing of plants with their wild relatives
 - d) None of the above

2. Mass selection method is used for
 - a) self pollinated crops
 - b) cross pollinated crops**
 - c) For both the crops
 - d) none of the above

3. Mating the progeny back to a plant having the genotype of the superior parent is called
 - a) test cross
 - b) back cross**
 - c) pedigree method
 - d) none of the above

4. Emasculation is the process of
 - a) Removal of gynoecium
 - b) Removal of anthers from flower**
 - c) Removal of petal
 - d) Removal of calyx

5. Which one is a physical mutagen
 - a) base analogues,
 - b) acridine dyes
 - c) Gamma rays**
 - d) None of the above

6. Heterosis or hybrid vigour is
 - a) superiority of F1 hybrid in one or more characters over its parents**

b) decrease in superior characters

c) increasing variability

c)None of the above

7. Term heterosis was coined by

a)Watson

b)Shull

c) Renner

d) None of the above

8. Selection of homozygous plants is

a)Mass selection

b) pur line selection

c) Both a and b

d) None of the above

9. Heterosis loss due tocontinuous inbreedingis called

a)hybrid vigour

b) inbreeding depression

c) outbreeding depression

d) none of the above

10. Variabilities and adaptation is more in

a) self pollinated crops

b) cross pollinated crops

c)In both the crops

d) none of the above

11. Pure line breed refers to

a) heterozygosity only

b) homozygosity only

c) homozygosity and self assortment

d) heterozygosity and linkage

12. The quickest method of plant breeding is

a) introduction

b) Selection

c) Hybridisation

d) Mutation Breeding

13. Genetically most pure seed is

a) nucleus seed

b) breeder seed

c) certified seed

d) foundation seed

14. The revolutionary high yielding and disease resistant varieties of important crops are the products of

a) Plant breeding

b) Linkage and cross over

c) Mutation

d) Gene expression

15. Physiological race is

a) Individuals, those are morphologically similar but differ with respect to their pathogenicity on particular set of host varieties

b) Individuals of same species

c) Individuals, those are morphologically different but have same pathogenicity on particular set of host varieties.

d) None of the above

16. For artificial hybridisation experiment in bisexual flower, which of the sequences is correct?

- (a) Bagging → Emasculation → Cross pollination → Tagging
- (b) Emasculation → Bagging → Cross pollination → Tagging
- (c) Cross pollination → Bagging → Emasculation → Tagging
- (d) Self-pollination → Bagging → Emasculation → Tagging

17. Who first discovered mutation in Drosophila

- a) **Morgan**
- b) De Vries
- c) Walker
- d) None of the above

18. Gene mutation or mutation at molecular level

- a) Frame shift mutations
- b) Spontaneous mutations
- c) **Point mutations**
- d) None of the above

19. Physical or chemical agents which greatly enhance the frequency of mutation are called

- a) Catalyst
- b) **Mutagen**
- c) Enhancer
- d) None of the above

20. The process of shifting hydrogen atoms from one position to another in a purine or pyrimidine base is called

- a) Ionization
- b) **Tautomerization**
- c) Depurination
- d) Deamination

21. The genetic improvement of crop plants for various economic characters through the use of induced mutations is called

- a) Disease resistance
- b) Hybridization
- c) mutation breeding
- d) None of the above

22. The plant variety protected in India include

- (a) Extant variety

- (b) Essentially derived variety
- (c) Farmer's variety
- (d) **All the above**

23. To register a plant variety, it should be

- (a) New
- (b) Distinct
- (c) Uniform
- (d) **All the above**

24. Certification is not required for

- a) Nucleus seed
- b) **Breeder seed**
- c) Foundation seed
- d) Certified seed

25. Breeder seed is the progeny of

- a) Foundation seed
- b) Registered seed
- c) **Nucleus seed**
- d) Certified seed

26. Improved seed includes

- a) Breeders
- b) Nucleus
- c) Foundation
- d) **All of the above**

27. Which of the following is not a commercial class of seed?

- producer
- foundation
- registered
- breeder

28. Seed test that provides information on weed seed and inert material is called:

- wholesomeness test
- purity test
- clean seed test
- viability test

