

QB365 Question Bank Software Study Materials

Botany - Plant Breeding 50 Important 1 Marks Questions With Answers (Book Back and Creative)

12th Standard

Biology

Total Marks : 50

Multiple Choice Question

50 x 1 = 50

- 1) **Assertion(A):** Genetic variation provides the raw material for selection
Reason(R): Genetic variations are differences in genotypes of the individuals.
- (a) Assertion is right and reason is wrong. (b) Assertion is wrong and reason is right
(c) Both reason and assertion is right. (d) Both reason and assertion is wrong.
- 2) While studying the history of domestication of various cultivated plants _____ were recognized earlier
(a) Centres of origin (b) Centres of domestication (c) Centres of hybrid (d) Centres of variation
- 3) Pick out the odd pair
 (a) Mass selection - Morphological characters (b) Purline selection - Repeated self pollination
(c) Clonal selection - Sexually propagated (d) Natural selection - Involves nature
- 4) Match Column I with Column II
- | Column I | Column II |
|------------------------|---------------------------|
| i) William S. Gaud | I) Heterosis |
| ii) Shull | II) Mutation breeding |
| iii) Cotton Mather | III) Green revolution |
| iv) Muller and Stadler | IV) Natural hybridization |
- (a)

i	ii	iii	iv
III	II	IV	I

 (b)

i	ii	iii	iv
III	IV	II	I

 (c)

i	ii	iii	iv
IV	III	I	II

 (d)

i	ii	iii	iv
II	IV	III	I
- 5) The quickest method of plant breeding is _____.
 (a) Introduction (b) Selection (c) Hybridization **(d) Mutation breeding**
- 6) Desired improved variety of economically useful crops are raised by _____.
 (a) Natural Selection **(b) hybridization** (c) mutation (d) biofertilisers
- 7) Plants having similar genotypes produced by plant breeding are called _____.
(a) clone (b) haploid (c) autopolyploid (d) genome
- 8) Importing better varieties and plants from outside and acclimatising them to local environment is called _____.
 (a) cloning (b) heterosis (c) selection **(d) introduction**
- 9) Dwarfing gene of wheat is _____.
 (a) pal 1 (b) Atomita 1 **(c) Norin 10** (d) pelita 2
- 10) Crosses between the plants of the same variety are called _____.
 (a) interspecific (b) inter varietal **(c) intra varietal** (d) inter generic
- 11) Progeny obtained as a result of repeat self pollination a cross pollinated crop to called
(a) pure line (b) pedigree line (c) inbreed line (d) heterosis

12) Jaya and Ratna are the semi dwarf varieties of _____.

- (a) wheat (b) **rice** (c) cowpea (d) mustard

13) Which one of the following are the species that are crossed to give sugarcane varieties with high sugar, high yield, thick stems and ability to grow in the sugarcane belt of North India?

- (a) **Saccharum robustum and Saccharum officinarum** (b) Saccharum barberi and Saccharum officinarum
(c) Saccharum sinense and Saccharum officinarum (d) Saccharum barberi and Saccharum robustum

14) Match column I (crop) with column II (Corresponding disease resistant variety) and select the correct option from the given codes.

Column I	Column II
I) Cowpea	i) Himgiri
II) Wheat	ii) Pusa komal
III) Chilli	iii) Pusa Sadabahar
IV) Brassica	iv) Pusa Swarnim

- (a)

I	II	III	IV
iv	iii	ii	i

 (b)

I	II	III	IV
ii	i	iii	iv

 (c)

I	II	III	IV
ii	iv	i	iii

 (d)

I	II	III	IV
i	iii	iv	ii

15) A wheat variety, Atlas 66 which has been used as a donor for improving cultivated wheat, which is rich in _____.

- (a) iron (b) carbohydrates (c) **proteins** (d) vitamins

16) Which one of the following crop varieties correct matches with its resistance to a disease?

- (a)

Variety	Resistance to disease
Pusa Komal	Bacterial blight

 (b)

Variety	Resistance to disease
Pusa Sadabahar	White rust

 (c)

Variety	Resistance to disease
Pusa Shubhra	Chilli mosaic virus

 (d)

Variety	Resistance to disease
Brassica	Pusa swarnim

17) Which of the following is incorrectly paired?

- (a) Wheat - Himgiri (b) Milch breed - Sahiwal (c) Rice - Ratna (d) **Pusa Komal - Brassica**

18) Match list I with list II

List I	List II
Biofertilizer	Organisms
i) Free living N ₂	a) Aspergillus
ii) Symbiotic N ₂	b) Amanita
iii) P Solubilizing	c) Anabaena azollae
iv) P Mobilizing	d) Azotobactor

- (a)

i	ii	iii	iv
c	a	b	d

 (b)

i	ii	iii	iv
d	c	a	b

 (c)

i	ii	iii	iv
a	c	b	d

 (d)

i	ii	iii	iv
b	a	d	c

19) _____ is the process of bringing a plant species under human control.

- (a) Emasculation (b) Hybridization (c) **Domestication** (d) Acclimatization

20) Which is not a free-living nitrogen-fixing species?

- (a) Azotobacter (b) Clostridium (c) Nostoc (d) **Anabaena**

21) Azolla is best suited biofertilizer for _____

- (a) Sugar cane cultivation (b) **Paddy cultivation** (c) Wheat cultivation (d) Cotton cultivation

- 22) Assertion (A): SLF promotes vigorous growth and provide resistance against diseases.
Reason (R): SLF is made from kelp containing more than 70 minerals.
- (a) Both A and R are true. R explains A.** (b) A is true R is false (c) A is false R is true. (d) Both A and R are false
- 23) Assertion (A): Hybrids show increased growth and elevated yield.
Reason (R): F1 hybrids show Heterosis.
- (a) Both A and R are true. R explains A.** (b) A is true R is false (c) A is false R is true (d) Both A and R are false
- 24) Statement (1): Clonal selection is carried out in asexually propagating plants.
Statement (2): Clones show similar genotypes.
- (a) Statement 1 is correct and Statement 2 is incorrect (b) Statement 1 is incorrect and Statement 2 is correct
(c) Both the statements are correct (d) Both the statements are incorrect
- 25) Intraspecific hybridization is also termed as _____
- (a) Intravarietal hybridization **(b) Intervarietal hybridization** (c) Interspecific hybridization
(d) Intergeneric hybridization
- 26) The term green revolution was coined by _____
- (a) William S Gaud** (b) M.S. Swaminathan (c) Dr. B.P. Pal (d) Dr. N.E. Borla
- 27) The first established Atomic Garden in India was _____
- (a) Bhabha Atomic Research Institute (b) Indira Gandhi Centre for Atomic Research
(c) Indian Agricultural Research Institute **(d) Bose Research Institute**
- 28) Raphanobrassica is an example for _____
- (a) Autopolyploid **(b) Allopolyploid** (c) Polyploid (d) Polysomy
- 29) Atomita 2 - rice is a product by _____
- (a) Polyploid breeding (b) Hybridization **(c) Mutation breeding** (d) Clonal selection
- 30) Luxuriance is the term used on par with _____
- (a) Heterosis** (b) Anthesis (c) Hybrids (d) Mutant breeds
- 31) Which one of the following is an entomopathogenic fungus?
- (a) Beauveria** (b) Trichoderma (c) Mucor (d) Rhizopus
- 32) Match the following and select the option given below
- | | |
|------------------|--|
| (a) Selection | (i) Removal of anthers |
| (b) Emasculation | (ii) Formation of seeds |
| (c) Bagging | (iii) Desired characters |
| (d) Crossing | (iv) protected against undesirable pollen grains |
| (e) Harvesting | (v) Transfer of pollen grams |
- (a) a(ii),b (iii),c (iv),d(v),e (i) (b) a (v), b (i), c (ii),d (iii), e (iv) **(c) a (iii),b (i), c (iv), d (v), e (ii)**
(d) a (iv),b (v), c (ii), d (iii), e (i)
- 33) Tephrosia purpurea is a ____.
- (a) Bio-herbicide (b) Bio- fertilizer **(c) Green manure** (d) Bio-pesticide
- 34) Which one of the following can be grown in the border rows or as intercrops along with the main crop?
- (a) Shoe flower (b) Neem tree (c) Spinach **(d) Sun hemp**

- 35) Rice variety IR 8 was introduced from the country _____
 (a) China (b) Mexico **(c) Philippines** (d) Brazil
- 36) Which one of the following is not an objective of plant Breeding?
 (a) To prevent the premature falling of buds (b) To develop photosensitive and thermos sensitive varieties
(c) To exploit the nature by applying chemical fertilizers (d) To, increase tolerance to environmental condition.
- 37) Find out the mismatched pair
(a) Ethiopia - Tomato (b) South America - Pine apple (c) The Chiloe Centre - potato (d) Mediterranean - Olive
- 38) Match the following
- | | |
|-------------------------|--|
| (a) Dr. B.P. Pal | (i) Eminent rice breeder |
| (b) Dr. K. Ramiah | (ii) Developed C 591 |
| (c) N.G.P Rao | (iii) Developed superior disease resistant wheat |
| (d) C.T Patel | (iv) Sorghum breeder |
| (e) Choundhary Ram Dhan | (v) Developed first cotton hybrid |
- (a) (a)(i), (b)(iv), (c)(v), (d)(ii), (e)(iii) (b) (a)(iv), (b)(v), (c)(ii), (d)(iii), (e)(i) (c) (a)(v), (b)(ii), (c)(iii), (d)(i), (e)(iv)
(d) (a)(iii), (b)(i), (c)(iv), (d)(v), (e)(ii)
- 39) Arbuscular mycorrhizae belong to the fungal group _____
 (a) Ascomycetes (b) Basidiomycetes **(c) Phycomycetes** (d) Deutromycetes
- 40) Choose the correct statement about heterosis
 (a) termed by N.G.P. Rao (b) All the hybrids are not fertile (c) Genetic diversity is affected
(d) Desired characters can not be lost
- 41) Who was the director of IARI during green revolution?
(a) B.P. Pal (b) M.S. Swaminathan (c) N.E. Boralug (d) C.T. Patel
- 42) Which one of the following is not a free living N₂ fixing organism?
(a) Anabaena azollae (b) Azotobacter (c) Clostridium (d) Nostoc
- 43) Name the plant which is pest resistant and saline tolerant
 (a) Sonalika (b) Triticale (c) Rhapsanobrassica **(d) Atomita - 2**
- 44) Some of the major species cultivated in Agroforestry for commercial use
 (a) Erythrina, Albizzia **(b) Malavembu, Kadambu** (c) Acacia, Azadirachta Indica (d) Sesbania, Acacia
- 45) Selection is a method of
 (a) cytology (b) Plant Phycology **(c) plant breeding** (d) genetics
- 46) Plant breeding methods by which new and better varieties of plants can be formed?
 (a) Hybridization (b) Selection (c) Testing **(d) Hybridization followed by selection**
- 47) A collection of plants and seeds having diverse alleles of all the genes of a crop is called
 (a) genome (b) herbarium **(c) germplasm** (d) gene library
- 48) _____ was the first scientist to use the term heterosis.
 (a) Muller and Stadler (b) Cotton Mather (c) G.H. Shull **(d) William S. Gaud**
- 49) The oldest and basic method of plant breeding is:

(a) Introduction **(b) Selection** (c) Hybridization (d) Mutation Breeding

50) The term Green Revolution was coined by:

(a) William S. Gaud (b) Dr. B.P. Pal (c) N.E. Borlang (d) M.S. Swaminathan