

# Paper – Agriculture

## PART – I : OBJECTIVE / MCQ

Each question carries 2 marks:

(75X2= 150 Marks)

### PAPER - I

1. (AxB)XC is
  - a. Test cross
  - b. Double cross
  - c. Three way cross
  - d. Top cross
2. .... the physical methods used for controlling nematodes.
  - a. Heat treatment
  - b. Radiation
  - c. Osmotic pressure
  - d. All of the above
3. 'Ascent of cell sap' from root to the tree top is exercised by
  - a. Cambium cell
  - b. Xylem
  - c. Phloem
  - d. Cuticle
4. 'Queen' is the variety of
  - a. Sapota
  - b. Guava
  - c. Pine apple
  - d. Mango
5. Cause of deterioration of variety is
  - a. Mendelian variation
  - b. Mutation
  - c. Mechanical mixture
  - d. All of the above
6. Conversion of nitrate nitrogen to molecular nitrogen is known as
  - a. Denitrification
  - b. Nitrification
  - c. Nitrogen release
  - d. None of the above

7. Cytogenetic male sterility is utilized in
  - a. Pure line selection
  - b. Hybrid seed production
  - c. Back cross method
  - d. Progeny test
  
8. Edible banana fruit is seedless because of
  - a. Embryo abortion
  - b. Absence of stigma
  - c. Vegetative parthenocarpy
  - d. Stimulated parthenocarpy
  
9. Genetically the purest seed is
  - a. Breeder's seed
  - b. Registered seed
  - c. Certified seed
  - d. Nucleus seed
  
10. Mendel's laws of inheritance operate during
  - a. Mitosis
  - b. Meiosis
  - c. Gametogenesis
  - d. Pollination
  
11. Pure line may be defined as the progeny of
  - a. Any two individuals
  - b. A homozygous individual
  - c. A self fertilized individual
  - d. A homozygous and self-fertilized individual
  
12. Rock phosphate can be safely used in
  - a. Lateritic soil
  - b. Alkali soil
  - c. Calcareous soil
  - d. Acid soil
  
13. Splitting of pods is caused by
  - a. Hydrotropic movement
  - b. Hydration movement
  - c. Phototropic movement
  - d. Photoperiodic movement
  
14. Solubility of rock phosphate can be improved by
  - a. Nitrosomonas
  - b. Nitrobacter

- c. Azotobacter
  - d. Bacillus polymexa
15. The electron transport carriers are located in the
- a. Mitochondrial membrane
  - b. Granum membrane
  - c. Stroma
  - d. Thylakoid
16. The initial acceptor of the carbon dioxide molecule is
- a. Ribulosedinucleotide
  - b. Ribulose1,5 biphosphate
  - c. Formaldehyde
  - d. Phosphoglycerate
17. Most difficult problem in the production of seed potato is the production of
- a. Good variety
  - b. Virus free seed
  - c. Cold resistant variety
  - d. Fungi resistance seed
18. The photolysis of water takes place in the
- a. Thylakoid
  - b. Granum
  - c. Stromata
  - d. None of the above
19. The pathogen of loose smut of wheat is
- a. Soil borne
  - b. Internally seed borne
  - c. Both a and b
  - d. Not seed borne
20. Which of the following is controlled by gibberellic acid?
- a. Fruit development
  - b. Ripening of fruits
  - c. Vegetative growth
  - d. Prevention of the loss of flowers
21. Which of the following is ethylene absorbent?
- a.  $\text{KMnO}_4$
  - b.  $\text{KNO}_2$
  - c.  $\text{K}_2\text{SO}_4$
  - d.  $\text{KCl}$

22. When a gene hides the effect of a second gene when both are present, it is called as
- Modifying action
  - Epistasis
  - Inhibiting
  - Additive dominance
23. When a segment of a chromosome is missing, the condition is known as
- Translocation
  - Inversion
  - Deletion
  - Transportation
24. 'V' notch is a
- Parshall flume
  - Orifice set
  - Weir
  - Submerged orifice
25. Arrowing refers to
- Flower primordial initiation in maize
  - Flowering of cotton
  - Flowering of maize
  - Flowering of sugarcane
26. A weed that spreads Asthma is
- Colotropis
  - Parthenium
  - Cynodon
  - Cyperus
27. Application of nitrogen in cowpea at the time of planting is known as
- Basal dose
  - Synergistic dose
  - Starter dose
  - Additional dose
28. Black soils are deficient in
- Potash
  - Calcium

- c. Nitrogen
  - d. Lime
29. Broadcast potassium is ..... than banded.
- a. Highly efficient
  - b. As efficient as
  - c. Less efficient
  - d. None of these
30. Dwarfing gene in rice is
- a. Norin- 10
  - b. Branchytic-2
  - c. Dee-gee-woo-gen
  - d. Opaque-21
31. Embryo seed dormancy is mainly found in
- a. Tropical climate seeds
  - b. Temperate climate seeds
  - c. Sub-tropical seeds
  - d. None of these
32. Field water use efficiency is calculated by
- a.  $WUE = Y/WR$
  - b.  $WUE = Y/ET$
  - c.  $WUE = Y/CU$
  - d. None of these
33. High yielding dwarf varieties of wheat was developed by
- a. Dr. B. P. Pal
  - b. Dr. N. E. Borlaug
  - c. Dr. E. W. Burton
  - d. Dr. M. S. Swaminathan
34. If there is 500 kg seed then how much samples should be taken for testing?
- a. 8
  - b. 3
  - c. 5
  - d. 10
35. IFFCO is a
- a. Farmers club organization
  - b. Private Fertilizer Company
  - c. Farmer's Fertilizer Co-operative
  - d. Farmer's Core Society

36. In a predominantly biological system, mineralization of phosphorus from organic matter of crop residues is dependent on soil ..... activity.
- Chemical
  - Physical
  - Physio-chemical
  - Biological
37. Maize protein is deficient in
- Betadine
  - Tryptophane and lysine
  - Lysine
  - Tryptophane
38. Name a cereal with maximum protein content
- Basmati Rice
  - Maize
  - Sorghum
  - Whole wheat
39. Removal of a uniform thin layer of soil by the action of water is referred as
- Splash erosion
  - Sheet erosion
  - Rill erosion
  - Gully erosion
40. Seed plot technique of potato is used to produce
- Insect free seeds
  - Nematode free seeds
  - Virus free seeds
  - Large size tubers
41. Sesamum belongs to the family
- Leguminosae
  - Papilionaceae
  - Pedaliaceae
  - Chenopodeaceae
42. Maize- potato- wheat- green gram is an example of
- Tetra cropping
  - Multistoried cropping

- c. Relay cropping
  - d. Inter cropping
43. The best green manuring crop is
- a. Napier
  - b. Sunhemp
  - c. Dhaincha
  - d. None of these
44. The first irrigation in wheat is normally recommended at
- a. Tillering stage
  - b. Crown root initiation stage
  - c. Flowering stage
  - d. Seeding stage
45. The major part of nitrogen uptake by the maize is over by the
- a. Knee high stage
  - b. Tasselling stage
  - c. Silking stage
  - d. Grain maturing stage
46. The most critical stage for irrigation in potato is
- a. Root formation
  - b. Tuberization
  - c. 25% tuber formation
  - d. All of these
47. Wheat protein is called as
- a. Lutein
  - b. Gluten
  - c. Dhurin
  - d. Ricin
48. Which of the mulch is best and cheap to minimize wind erosion?
- a. Paper mulch
  - b. Straw mulch
  - c. Stubble mulch
  - d. Saw dust mulch
49. Banana suckers arise from
- a. Underground rhizomes
  - b. Underground corms
  - c. Stolons
  - d. Pseudostems
50. Browning of cauliflower is caused by the deficiency of

- a. Potassium
  - b. Manganese
  - c. Iron
  - d. Boron
51. Kinnow is a cross between
- a. King and Willow leaf
  - b. Mandarin and Sweet orange
  - c. Willow leaf and Wilking
  - d. King and Queen
52. Spacing between fruit plant is determined on the basis of
- a. Choice of planer
  - b. Spreading behavior of plants
  - c. Availability of land
  - d. All of these
53. Which one of the following fruits is cured in smoke for ripening?
- a. Mango
  - b. Guava
  - c. Jackfruit
  - d. Banana
54. Which one of the following is not a self incompatible fruit crop?
- a. Pear
  - b. Mango
  - c. Apple
  - d. Guava
55. French merogold is
- a. Diploid
  - b. Tetraploid
  - c. Triploid
  - d. Aneuploid
56. First 15 cm layer of land which is ploughed for cultivation of crop is called
- a. Furrow slice
  - b. Rhizosphere soil
  - c. Soil horizon
  - d. Soil profile
57. Dominant organisms found in a compost pit are
- a. Thermophilic
  - b. Psychrophilic



- c. Mesophilic
  - d. All of these
58. The direct exchange of ions between the roots and clay colloids called
- a. Soil solution theory
  - b. Contact exchange theory
  - c. Diffusion theory
  - d. None of the above
59. Phosphorus is essential for
- a. Cell division
  - b. Development of meristematic tissues
  - c. Both of these
  - d. None of these
60. Hybrid seeds can be produced through open pollination with the use of
- a. Inbreds
  - b. Clones
  - c. Pure lines
  - d. Male fertile lines
61. In  $C_4$  pathway  $CO_2$  combines with
- a. Ribulose monophosphate
  - b. Phosphoglyceric acid
  - c. Ribulosediphosphate
  - d. Phosphoenol pyruvate
62. Wilt disease takes place in
- a. Guava
  - b. Papaya
  - c. Mango
  - d. Ber
63. Diphenyl amine is an indicator which is used in determination of
- a. Organic carbon
  - b. Phosphorus
  - c. Potassium
  - d. Boron
64. Humus colloids are composed basically of
- a. Carbon
  - b. NPK
  - c. Ozone
  - d. Helium

65. The first passage through which nutrients enters into the leaves
- Intercuticular passage
  - Mesophyll tunnel
  - Cell wall plasmic membrane
  - None of the above
66. In RNA, nitrogen bases are same as in DNA except
- Uracil instead of Thymine
  - Cytosin instead of Thymine
  - Adenine instead of Guanine
  - Thymine instead of Adenine
67. Which is citrus nematode?
- Hoplolaimus
  - Pratylenchus
  - Rotylenchulus
  - Tylenchus
68. Taphrina causes the disease
- Chillies leaf curl
  - Tomato leaf curl
  - Peach leaf curl
  - Brinjalleaf curl
69. Breeder seed is the progeny of
- Foundation seed
  - Registered seed
  - Nucleus seed
  - Certified seed
70. The number of functional plant nutrients are
- 26
  - 20
  - 16
  - 10
71. The fruit of linseed is known as
- Pod
  - Canum
  - Seedball
  - Knob
72. If a dihybrid is test crossed, the phenotypic ratio of progeny will be