

MIZORAM PUBLIC SERVICE COMMISSION

TECHNICAL COMPETITIVE EXAMINATIONS FOR RECRUITMENT TO THE POST OF SENIOR HORTICULTURE DEMONSTRATOR UNDER HORTICULTURE DEPARTMENT, APRIL, 2018

AGRICULTURE PAPER - II

Time Allowed: 2 hours

Full Marks: 150

All questions carry equal marks of 2 each.

Attempt all questions.

1. Seed lot certificate colour is
 - (a) Orange
 - (b) Green
 - (c) Purple
 - (d) Orange or Green
2. Seed sample certificate colour is-
 - (a) Blue
 - (b) Orange
 - (c) Purple
 - (d) White
3. Difference between seed and grain is
 - (a) Seed processing
 - (b) Genetic purity
 - (c) Seed quality
 - (d) Cost
4. A sound seed certification programme requires
 - (a) Direct participation of breeder
 - (b) Use of sophisticated equipment
 - (c) Classification of seed
 - (d) Support of law
5. The seed which farms generally used are called
 - (a) Breeder seed
 - (b) Foundation seed
 - (c) Certified seed
 - (d) Nucleus seed
6. Seed drying is very important to maintain its
 - (a) Viability and vigour
 - (b) Protein content
 - (c) Oil content
 - (d) Chemical composition
7. The two most important factors influencing the life span of seeds under storage are:
 - (a) Relative humidity and temperature
 - (b) Rainfall and RH
 - (c) Climate and temperature
 - (d) Seed size and moisture content.
8. Development of embryo without fertilization is
 - (a) Apomixis
 - (b) Amghimixis
 - (c) Parthenocarpy
 - (d) None of these
9. Male sterility is used to develop
 - (a) Inbreds
 - (b) Hybrids
 - (c) Synthetics
 - (d) None of these

10. Occurrence of more than one embryo in seed is known as
 - (a) Polysomy
 - (b) Polyembryony
 - (c) Apogamy
 - (d) None
11. Seedlessness in fruits is called as
 - (a) Parthenogenesis
 - (b) Parthenocarpy
 - (c) Apomixis
 - (d) None
12. A polyploidy having chromosome sets from different sources such as different species is known as
 - (a) Autopolyploid
 - (b) Aneuploid
 - (c) Tetraploid
 - (d) Allopolyploid
13. An example of heterozygous but homogeneous population is
 - (a) Pureline
 - (b) Open pollinated variety
 - (c) Hybrid variety
 - (d) Synthetic variety
14. A common crop which is grown of natural autopolyploid grown
 - (a) Mustard
 - (b) Wheat
 - (c) Potato
 - (d) Cotton
15. The most important factor which determines stability of seed is
 - (a) Light
 - (b) Temperature
 - (c) Moisture
 - (d) Nutrient
16. 'Law of homologous series' is given by
 - (a) Biffen
 - (b) Debary
 - (c) Darwin
 - (d) Vavilov
17. First man made cereal is
 - (a) Triticale
 - (b) Raphanobrasica
 - (c) Pomato
 - (d) None of these
18. Cells without cell wall are known as
 - (a) Protoplasts
 - (b) Proplastids
 - (c) Chloroplast
 - (d) Crybrids
19. Inability of a hybrid to produce viable offspring is known as
 - (a) Hybrid sterility
 - (b) Hybrid inviability
 - (c) Hybrid breakdown
 - (d) All of these
20. Highest uniformity is present in
 - (a) Double cross
 - (b) Multiple cross
 - (c) Single cross
 - (d) Three way cross
21. Botanically, pineapple fruit is
 - (a) Sorosis
 - (b) Balusta
 - (c) Berry
 - (d) Pome
22. Which phyto hormone is used for development of synthetic seeds?
 - (a) Auxin
 - (b) GA
 - (c) ABA
 - (d) Ethylene

23. Most of the fruit tree varieties are heterozygous, therefore, for commercial plantation, their propagation is recommended by
- (a) True seeds (b) Asexual propagation
(c) Mutation (d) All
24. "T" budding is also referred to as
- (a) Shield budding (b) Patch budding
(c) Annular budding (d) Ring budding
25. Commercial propagation of papaya is done through
- (a) Budding (b) Layering
(c) Seeds (d) Cutting
26. Growth regulator CCC is used in grapes for
- (a) Increase vegetable growth (b) Increase TSS
(c) Increase fruitfulness (d) None
27. NPK are regarded in plant nutrition as
- (a) Macro nutrients (b) Micro nutrients
(c) Trace elements (d) Basic elements
28. Dwarf Cavendish is a variety of
- (a) Tomato (b) Mango
(c) Banana (d) Grape
29. Stooling method of propagation is generally used in cause of
- (a) Grapes (b) Walnut
(c) Guava (d) Apple
30. Rains during ripening of grapes cause
- (a) Low TSS (b) Fruit drop
(c) Berry cracking (d) Higher marketable yield.
31. There are no commercial by hybrids in
- (a) Cucumbers (b) Tomatoes
(c) Cabbage (d) Pea
32. Amongst vegetable crops, leaving aside potatoes the maximum production in the world is that of.
- (a) Cucumber (b) Brinjal
(c) Onion (d) Tomato
33. Which kind of variety in tomato needs staking?
- (a) Dwarf (b) Determinate
(c) Indeterminate (d) None
34. For direct seeding of bitter gourd, following quantity of seeds is enough to plant one hectare
- (a) 10 kg (b) 5 kg
(c) 20 kg (d) 40 kg
35. Stratification is essentially a
- (a) Storing (b) hilling treatment
(c) Aging (d) Heating

36. Seeds of Mandarin orange should be sown as under:
- (a) After vernalization
 - (b) After stratification
 - (c) After dormancy
 - (d) Immediately after extraction
37. Pride of India is a variety of:
- (a) Radish
 - (b) Turnip
 - (c) Cabbage
 - (d) Cauliflower
38. "Whip tail" is a physiological disorder of:
- (a) Potato
 - (b) Tomato
 - (c) Cabbage
 - (d) Cauliflower
39. Seed production of early cauliflower can be done:
- (a) In Europe only
 - (b) In plains
 - (c) In hills only
 - (d) None
40. Quincunx system of planting is used in:
- (a) Fruit trees
 - (b) Flowers
 - (c) Potato
 - (d) Vegetable crops
41. Gladiolus is propagated through:
- (a) Suckers
 - (b) Budding
 - (c) Corms
 - (d) Cuttings
42. Root knot of vegetables is caused by:
- (a) Bacteria
 - (b) Nematodes
 - (c) Fungus
 - (d) None
43. Vegetables are regarded as protected food because generally they are rich in:
- (a) Fats
 - (b) Vitamins and minerals
 - (c) Proteins
 - (d) Sugars
44. Red rust is a disease of:
- (a) Litchi
 - (b) Apple
 - (c) Mango
 - (d) Guava
45. Citrus die-back is mainly caused by:
- (a) Virus
 - (b) Water stress
 - (c) Fungi and other factors
 - (d) Bacteria
46. Black tip of mango is caused by:
- (a) Virus
 - (b) Water stress
 - (c) Bacteria
 - (d) None of these
47. Which one of the following is a copper fungicide?
- (a) Dithane M-45
 - (b) Captan
 - (c) Streptocycline
 - (d) Blitox
48. Chrysanthemum is a:
- (a) Day neutral
 - (b) Long day plant
 - (c) Short day plant
 - (d) None of these
49. Powdery mildew of pea is caused by:
- (a) Virus
 - (b) Fungus
 - (c) Bacteria
 - (d) None

50. Ornamental value of *Bougainvillea* lies in:
- (a) Green foliage
 - (b) Seeds
 - (c) Colourful bracts
 - (d) Fruits
51. Betelvine is a:
- (a) Hermaphrodite
 - (b) Dioecious plant
 - (c) Andromonoecious
 - (d) Monoecious plant.
52. Modified Atmospheric Packaging (MAP) of fruits and vegetables prevents the build up of the following?
- (a) CO₂ and O₂
 - (b) CO₂ AND C₄H₄
 - (c) Sugars
 - (d) Proteins
53. Sulphites and SO₂ are added to preserve fruits and vegetables products to check:
- (a) Reduce acidity
 - (b) Microbial activity
 - (c) Ethylene production
 - (d) Methane production
54. Fruits and vegetables are generally rich in dietary fibre which protects from:
- (a) Fat deficiency
 - (b) Protein deficiency
 - (c) Colon cancer
 - (d) Carbohydrate deficiency
55. Which vegetable crop is known as vegetable of Twentieth century?
- (a) Winged bean
 - (b) Cluster bean
 - (c) Chekkurmanis
 - (d) Amaranthus
56. Marmalade is prepared from the fruits of
- (a) Citrus
 - (b) Apple
 - (c) Mango
 - (d) Guava
57. Ideal character of tree species for alley cropping is
- (a) Fix nitrogen
 - (b) Tolerant under abnormal conditions
 - (c) Deep rooted
 - (d) All of these
58. Silviculture is advantageous because,
- (a) Provides green fodder through tree loppings
 - (b) Improves soil fertility
 - (c) Controls run-off and erosion
 - (d) All of these
59. In North eastern hill region, the important horticultural crop for agri-horti system is
- (a) Mandarin orange
 - (b) Lemon
 - (c) Guava
 - (d) Apple
60. Damping off and leaf blights are very effectively checked by
- (a) Bordeaux mixture
 - (b) Burgundy mixture
 - (c) Thiram
 - (d) Copper oxychloride
61. Use of resistant varieties in the IPM of insect is an example of
- (a) Legal control
 - (b) Cultural control
 - (c) Chemical control
 - (d) Biological control
62. IPM relies heavily on
- (a) Economic threshold level
 - (b) Total loss of crops
 - (c) Resistant pest
 - (d) Susceptible pest

63. Which of the following is secondary pest of storage?
(a) Long headed flour beetle (b) Flat grain beetle
(c) Saw toothed grain beetle (d) All of these
64. In storage, grains can be mixed with
(a) Chlorpyrifos (b) Dichlorvos
(c) Malathion WP (d) Deltamethrin
65. Feed the soil not the plant is the watch word of
(a) Eco-farming (b) Conservation agriculture
(c) Natural farming (d) Precision agriculture
66. The most important microflora in decomposition of organic matter and plant nutrients availability in soil is
(a) Bacteria (b) Fungi
(c) actinomycetes (d) algae
67. Which is a symbiotic nitrogen fixer in soil?
(a) *Cyanobacteria* (b) *Azospirillum*
(c) *Nitrobacter* (d) *Rhizobia*
68. VAM improves mainly the uptake of
(a) Mo (b) P
(c) K (d) N
69. The use of synthetic chemicals is prohibited in
(a) Organic farming (b) Integrated farming
(c) Intensive farming (d) Conservation farming.
70. A neem product used as an insect repellent is:
(a) Rotenone (b) Parathion
(c) Endrin (d) Azadirachtin
71. On an average, the nitrogen content of well decomposed FYM in India is of the order of:
(a) 0.3 per cent (b) 0.5 per cent
(c) 0.7 per cent (d) 0.9 per cent
72. In conservation agriculture the percentage of crop residues that should remain in the soil at harvest of a crop is:
(a) 10 per cent (b) 20 per cent
(c) 30 per cent (d) 40 percent
73. Which of the following manure is considered as bio-fertilizer?
(a) Farm yard manure (b) Compost
(c) Green manure (d) Blue green algae
74. Agriculture mainly as 'Grow for eat' is classified as
(a) Specialized farming (b) Subsistence farming
(c) Diversified farming (d) State farming
75. *Azotobacter* can be used for
(a) Rice (b) Cotton
(c) Sugarcane (d) All of these