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
   (c) Purple
   (b) Green
   (d) Orange or Green

2. Seed sample certificate colour is-
   (a) Blue
   (c) Purple
   (b) Orange
   (d) White

3. Difference between seed and grain is
   (a) Seed processing
   (c) Seed quality
   (b) Genetic purity
   (d) Cost

4. A sound seed certification programme requires
   (a) Direct participation of breeder
   (c) Classification of seed
   (b) Use of sophisticated equipment
   (d) Support of law

5. The seed which farms generally used are called
   (a) Breeder seed
   (c) Certified seed
   (b) Foundation seed
   (d) Nucleus seed

6. Seed drying is very important to maintain its
   (a) Viability and vigour
   (c) Oil content
   (b) Protein content
   (d) Chemical composition

7. The two most important factors influencing the life span of seeds under storage are:
   (a) Relative humidity and temperature
   (c) Climate and temperature
   (b) Rainfall and RH
   (d) Seed size and moisture content.

8. Development of embryo without fertilization is
   (a) Apomixis
   (c) Parthenocarpy
   (b) Antimixis
   (d) None of these

9. Male sterility is used to develop
   (a) Inbreds
   (c) Synthetics
   (b) Hybrids
   (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 homologus series’ is given by
    (a) Biffen  (b) Debary  (c) Darwin  (d) Vavilov

17. First man made cereal is
    (a) Triticale  (b) Raphanobrasica  (c) Tomato  (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) hillling 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. Silvipasture 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) Chlorypriphos           (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

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