

MIZORAM PUBLIC SERVICE COMMISSION

TECHNICAL COMPETITIVE EXAMINATIONS FOR RECRUITMENT TO THE POST OF GRADE-V OF MIZORAM HORTICULTURE SERVICE UNDER HORTICULTURE DEPARTMENT, GOVERNMENT OF MIZORAM NOVEMBER, 2017

TECHNICAL PAPER - II

Time Allowed : 2 hours

Full Marks : 200

All questions carry equal marks of 2 each.

Attempt all questions.

1. The pungency of Onion is due to
 - (a) Allyl Propyl Disulphide
 - (b) Diallyl Disulphide
 - (c) Ca oxalate
 - (d) None of these
2. As per ICMR, an average man with vegetarian or non-vegetarian food habit should consume leafy vegetables per day
 - (a) 300 g
 - (b) 100 g
 - (c) 125 g
 - (d) 75 g
3. The bioflavonoides present in garlic which can give protection against cancer and heart disease is
 - (a) Catchins
 - (b) Naringins
 - (c) Quercetin
 - (d) Ellagic acid
4. The tomato cultivar developed at IARI, resistant to nematode is
 - (a) Pusa Sheetal
 - (b) Pusa early Dwarf
 - (c) Sel-120
 - (d) Sel-32
5. Which of the following cultivar of tomato is resistant to Cracking
 - (a) Punjab Chhuhara
 - (b) Soiux
 - (c) Avinash-2
 - (d) Pusa Gaurav
6. The family of curry leaf is
 - (a) *Rutaceae*
 - (b) *Moringaceae*
 - (c) *Martynaceae*
 - (d) *Tillaceae*
7. Scientific name of Lima bean is
 - (a) *Phaseolus vulgaris*
 - (b) *P. coccineus*
 - (c) *P. lanatus*
 - (d) *P. aculifolius*
8. Phule Green is a high yielding cultivar of
 - (a) Bottle gourd
 - (b) Water melon
 - (c) Bitter gourd
 - (d) Musk melon

9. The recommended seed rate for water melon is
(a) 1.5-2.5 kg (b) 2.5-3.5 kg
(c) 3.5-5 kg (d) 5-10 kg
10. Cucumber variety Japanese Long Green has introduced through
(a) Introduction (b) Selection
(c) Hybridization (d) Heterosis Breeding
11. Musk melon variety Pusa Sharbati has been developed as a cross between
(a) Monoecious 3 x Durgapura Madhu (b) Hara madhu x Edisto
(c) WMR 29 x Hara Madhu (d) Kutana x Resistant No. 6
12. The scientific name of summer squash is
(a) *Cucurbita moschata* (b) *Cucurbita pepo*
(c) *Cucurbita maxima* (d) *Cucurbita ficifolia*
13. Which of the cultivar contains richest source of carotene (3331 IU/100g)
(a) Arka Suryamukhi (b) Arka Chandan
(c) CO-1 (d) PusaVikas
14. The seed rate of early season pea is
(a) 60-70 kg (b) 80-90 kg
(c) 100-120 kg (d) 120-150 kg
15. Which of the following species of Bean is used as a source of Guar gum
(a) *Cyanopsis tetragonoloba* (b) *Dolichos purpureus*
(c) *Psophocarpus tetragonoloba* (d) *Phaseolus lunatus*
16. Yellow vein disease of Okra is transmitted by
(a) Aphids (b) White fly
(c) Leaf hopper (d) All of these
17. The radish roots develop best flavor, texture and size at a temperature range of
(a) 5-10° C (b) 10-15° C
(c) 15-20° C (d) 20-25° C
18. Leaf spot of beet root can be controlled by
(a) COC 0.1% (b) Indofil Z-78 0.3%
(c) Thiram 0.2% (d) Captaf 0.25%
19. The sowing time for late cultivars of cauliflower is
(a) July-August (b) August-September
(c) September-October (d) October-November
20. Cabbage cultivar resistant to Black rot is
(a) Golden Acre (b) Pride of India
(c) Pusa Mukta (d) Pusa Drum Head
21. The recommended seed rate for Knolkhol is
(a) 200-300 g (b) 400-500 g
(c) 600-700 g (d) 800-1000 g

22. The place of origin of Sweet potato is
(a) North America (b) South America
(c) Central America (d) Mediterranean region
23. Potato is a
(a) Self pollinated (b) Cross pollinated
(c) Often self pollinated (d) None of these
24. In potato grading, the size of tubers which is in the large group is
(a) 25-50 g (b) 50-75 g
(c) 75-100 g (d) None of these
25. The type of gardens which is usually established in rural areas for supplying a few specialized vegetable crops to a distant market is
(a) Kitchen garden (b) Market garden
(c) Truck garden (d) Vegetable garden for seed production
26. The cowpea variety insensitive to day length is
(a) Pusa dofasli (b) Pusa phaguni
(c) Punjab Barsati (d) None of the above
27. Whiptail in cauliflower is caused by
(a) Deficiency of molybdenum (b) Excess boron
(c) Excess molybdenum (d) Deficiency of boron
28. The world leading producer of cut flower is
(a) Singapore (b) Bangkok
(c) Japan (d) Netherlands
29. Buddha Jayanti Park is located at
(a) Ludhiana (b) Chandigarh
(c) New Delhi (d) Bangalore
30. Floribundas roses have been produced by crossing
(a) Hybrid Tea x Dwarf Polyantha (b) Hybrid Tea x Climbers
(c) Hybrid Tea x miniature (d) Dwarf Polyantha x miniature
31. The widely cultivated tropical Orchid is
(a) Cymbidium (b) Dendrobium
(c) Vanda (d) Arachnis
32. American Beauty is a cultivar of
(a) Rose (b) Chrysanthemum
(c) Birds of paradise (d) Gladiolus
33. Calyx splitting of Carnation is due to
(a) Low temperature (b) Low nitrogen
(c) Low B (d) All of these
34. In Anthurium, the fading of the spathe colour is due to the deficiency of
(a) B (b) Ca
(c) N (d) K

35. Which of the following is not a method of planting of lawns
(a) Dibbling (b) Puddling
(c) Turfing (d) Bricking
36. Which of the following is not a Tribe of cactus
(a) Pereskieae (b) Opuntieae
(c) Cereae (d) Cereanae
37. Which of the following is a rootstock used in Rose budding
(a) *Rosa bourboniana* (b) *Rosa multiflora*
(c) *Rosa indica* var. *odorata* (d) All of these
38. Example of Sympodial orchid is
(a) *Cymbidium* (b) *Angaecum*
(c) *Polyrhiza* (d) *Vanda*
39. 'Sen rin tsukuri' is a Japanese style of flower culture associated with
(a) Rose (b) *Chrysanthemum*
(c) Bonsai (d) *Gladiolus*
40. The optimum stage of harvesting of Bird of Paradise is
(a) When first floret is fully open (b) When lower 3 florets have fully opened
(c) When upper 3 florets have fully opened (d) None of these
41. Which of the following plant cannot be used for Bonsai development
(a) *Ficus religiosa* (b) *Erythrina indica*
(c) *Antirrhinum majus* (d) *Ficus benghalensis*
42. Where the technique of Bonsai evolved
(a) China (b) Japan
(c) England (d) India
43. Which of the following is an example of cactus
(a) *Apetina cordifolia* (b) *Aloe fosteri*
(c) *Euphorbia pendula* (d) *Opuntia cylindrica*
44. Tea gardens are types of
(a) English garden (b) Japanese garden
(c) Mughal garden (d) None of these
45. In India, national registration Authority of Roses is located at which of the following Institute
(a) IARI (b) NBPGR
(c) NBRI (d) IIHR
46. *Gladiolus* can be propagated through
(a) Corms and cormells (b) Seeds
(c) Tissue culture (d) All of these
47. Which of the following is not a propagating means of *Anthurium*
(a) Seed (b) Sucker
(c) Axillary Bud (d) Stem cutting

48. Sam's pride and Red Corso are the cultivars of
(a) Chrysanthemum (b) Rose
(c) Anthurium (d) Carnation
49. The types of orchids which lack green leaves and possess a fleshy underground rhizome with or without roots is called
(a) Epiphytes (b) Terrestrial
(c) Lithophytes (d) Saprophytes
50. Preconditioning of carnation cut flowers in which of the following solution is done to increase shelf life
(a) Potassium Meta Bisulphide (b) Sodium Bicarbonate
(c) Silver Thiosulphate (d) Silver Nitrate
51. Gladiolus belongs to the family
(a) *Iridaceae* (b) *Oleaceae*
(c) *Caryophyllaceae* (d) *Amaryllidaceae*
52. The scientific name of citronella is
(a) *Cymbopogon winterianus* (b) *Cymbopogon flexuosus*
(c) *Pogostemon cablin* (d) None of these
53. Sarpagandha belongs to the family
(a) *Asteraceae* (b) *Poaceae*
(c) *Araceae* (d) *Apocynaceae*
54. Which of the following medicinal plants is used as memory tonic
(a) *Withania somnifera* (b) *Tinospora cordifolia*
(c) *Bacopa monnieri* (d) *Rauwolfia serpentina*
55. Pyrethroides, an important insecticide is obtained from which of the following medicinal plants
(a) *Chrysanthemum cinerariaefolium* (b) *Cassia angustifolia*
(c) *Plantago ovate* (d) *Catharanthus roseus*
56. The recommended spacing for Opium poppy is
(a) 30×30 cm (b) 60×60 cm
(c) 90×90 cm (d) 150×150 cm
57. Senna belongs to the family
(a) *Leguminosae* (b) *Plantaginaceae*
(c) *Solanaceae* (d) *Apocynaceae*
58. Alkaloid Vinblastin and Vincristine, which form the constituents of cancer drugs are present in
(a) *Isubgal* (b) *Sarpagandha*
(c) *Aswagandha* (d) *Periwinkle*
59. The lemon grass is generally propagated by
(a) Suckers (b) Seeds
(c) Root slips (d) Rhizome
60. Rusa or Rusha, the popular essential oil is obtained from
(a) Vetiver (b) Palmarosa
(c) Lemon grass (d) Citronella

61. In geranium, the first cuttings of leaves is done at
(a) 8 months after planting (b) 12 months after planting
(c) 16 months after planting (d) 20 months after planting
62. The recommended spacing for *Ocimum spp.* is
(a) 45×45 cm (b) 60×60 cm
(c) 75×75 cm (d) 90×90 cm
63. Patchouli is propagated by
(a) Seeds (b) Suckers
(c) Cuttings (d) Root suckers
64. The scientific name of Bergamot mint is
(a) *Mentha piperita* (b) *Mentha spicata*
(c) *Mentha arvensis var. piperascens* (d) *Mentha citrata*
65. Which of the following is the best planting materials for vetiver
(a) Slips (b) Tillers
(c) Cuttings (d) Seeds
66. Which of the following is used as anti-diarrhoea and anti-dysentric drug
(a) Senna (b) Sarpagandha
(c) Isubgol (d) Pyrethrum
67. Arka Upkar is a high yielding clone of
(a) Medicinal yam (b) Sarpagandha
(c) Ashwagandha (d) Fox-glove
68. In Agar plantation, the aroma comes due to infection of fungi which generally occurs due to stem injured by the larvae of a stem borer named
(a) *Heortia vitessoides* (b) *Zewzera conferta*
(c) *Odioporus longicollis* (d) *Anoplophora versteegi*
69. The biting taste of Black pepper is due to
(a) Piperine (b) Piperol
(c) Piperoresin (d) None of these
70. The pungency of Ginger is due to
(a) Gingerol (b) Gingerine
(c) Gingiberine (d) None of these
71. The pungent aromatic flavor of turmeric is due to
(a) Curcumin (b) Tumerol
(c) Both (a) & (b) (d) None of these
72. Ramsey and Swaney are important cultivars of
(a) Small cardamom (b) Large Cardamom
(c) Cinnamom (d) Vanilla

73. The costliest spice in the spice Horizon is
(a) Vanilla (b) Small cardamom
(c) Black pepper (d) Saffron
74. Coriander belongs to the family
(a) *Fabaceae* (b) *Polygonaceae*
(c) *Compositae* (d) *Apiaceae*
75. Trigonellin, an important constituent of which of the following spice, for which it is valued for medicinal use
(a) Coriander (b) Cumin
(c) Fennel (d) Fenugreek
76. Fennel is generally harvested at an age of
(a) 90-120 days (b) 120-150 days
(c) 150-170 days (d) 170-180 days
77. Small cardamom yields an average yield of dried capsule of
(a) 100-200 kg (b) 200-500 kg
(c) 500-1000 kg (d) 1000-2000 kg
78. Stem gall is an important disease of
(a) Coriander (b) Cumin
(c) Fenugreek (d) Black pepper
79. RZ 209 is an important cultivar of
(a) Coriander (b) Cumin
(c) Azwain (d) Ginger
80. The scientific name of clove is
(a) *Syzigium aromaticum* (b) *Myristica fragrans*
(c) *Cinnamomum verum* (d) *Pimenta dioica*
81. Allspice belongs to the family
(a) *Lauraceae* (b) *Myrtaceae*
(c) *Myristicaceae* (d) *Caesalpinaceae*
82. Rhizome rot of Ginger is due to
(a) *Pythium aphanidermatum* (b) *Ralstonia solanacearum*
(c) *Phylosticta zingiberi* (d) *Fusarium oxysporum*
83. The recommended seed rate of turmeric is
(a) 25 kg/ha (b) 250 kg/ha
(c) 2500 kg/ha (d) None of these
84. In India, among all the spices, the largest seed spice is
(a) Fenugreek (b) Coriander
(c) Cumin (d) Fennel

85. In terms of quality, among the all types of vanilla, the best vanilla is
(a) Bourbon vanilla (b) Java vanilla
(c) Bourbon like vanilla (d) Mexican vanilla
86. The type of Green house whose roof is semi round in shape is
(a) Ridge and Furrow type (b) Quonset type
(c) Tunnel type (d) Even span type
87. The tomato cultivars for green house cultivation should be
(a) Determinate (b) Semi determinate
(c) Indeterminate (d) All of these
88. Which of the following is not true for glass house cultivation of flowers
(a) Long life span (b) Least affected by weathering
(c) Non combustible (d) Not resistant to UV rays
89. Greenhouse cooling can be achieved by which of the following
(a) Roof shading (b) Ventilation
(c) Evaporative cooling (d) All of these
90. Greenhouse is based on the principles of
(a) Evaporative cooling (b) Greenhouse cooling
(c) Greenhouse heating (d) Greenhouse effect
91. The direction in which Greenhouse should be constructed for its maximum efficiency
(a) East -West (b) North-South
(c) East-South (d) North-West
92. The thickness of polythene used in greenhouse construction is
(a) 0.10-0.15 mm (b) 1-1.5 mm
(c) 10-15 mm (d) 100-150 mm
93. The country which is number one in Greenhouse vegetable production is
(a) Japan (b) USA
(c) Netherlands (d) Canada
94. The type of greenhouse which is only about 2 m in height and constructed by bending bamboo and steel is
(a) Gable type (b) Ground to Ground type
(c) Tunnel type (d) Polyhouse
95. Out of the total mushroom production in India, which of the following spp. comprises more than 90% production
(a) *Agaricus spp.* (b) *Pleurotus spp.*
(c) *Volvariella spp.* (d) *Auricularia spp.*
96. The first edible mushroom cultivated in India is
(a) Paddy straw mushroom (b) Oyster mushroom
(c) Shiitake mushroom (d) White button mushroom

97. Among the various oyster mushrooms cultivated in India, the most popular and well adapted species is
- (a) *Pleurotus sajor caju* (b) *P. flabellatus*
(c) *P. ostreatus* (d) *P. florida*
98. Which of the following Paddy straw mushroom is cultivated commercially in India
- (a) *Volvariella volvacea* (b) *V. diplasia*
(c) *V. esculenta* (d) All of these
99. The scientific name of milky mushrooms
- (a) *Colocybe indica* (b) *Auricularia polytricha*
(c) *Stropharia rugoso-annulata* (d) *Lentinula edodes*
100. In global level, the mushroom which ranked second after button mushroom is
- (a) Oyster mushrooms (b) Paddy straw mushrooms
(c) Shitake mushrooms (d) Giant mushrooms

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