

MIZORAM PUBLIC SERVICE COMMISSION

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

HORTICULTURE PAPER - II

Time Allowed : 2 hours

Full Marks : 150

All questions carry equal marks of 2 each.

Attempt all questions.

- The term Horticulture is derived from two words 'hortus' and 'colere' which is a-
 - Latin
 - Greek
 - Both (a) & (b)
 - None of these
- High Density Planting is achieved by-
 - Adoption of Dwarf Scion Varieties / Dwarf Rootstock
 - Proper Training and Pruning
 - Suitable crop management practices
 - All of these
- Thinning out is
 - Apical removal of bud
 - Complete removal of few branches
 - Tip removal of few branches
 - 1/3rd removal of lateral branches
- Sterilization of media, water, glassware instrument in tissue culture laboratory is achieved by autoclaving at
 - 120°C and 15 psi for 15-20 minutes
 - 121°C and 15 psi for 15-20 minutes
 - 120°C and 10 psi for 15-20 minutes
 - 121°C and 10 psi for 15-20 minutes
- Laminar Air Flow employed HEPA Filters which remove 99.97% of 0.3µm particles. Full form of HEPA is
 - High Efficiency Particulate Air
 - Highly Equivalent Particle Air
 - Highly Equivalent Particle Aeration
 - High Efficient Particulate Aeration
- Water soluble vitamins are
 - A and D
 - E and K
 - B and C
 - All of these
- Generally, two rows of windbreaks are planted in north-western side of an orchard at an interval of
 - 3 meters
 - 5 meters
 - 7 meters
 - 2.5 meters
- In an orchard layout/ system of planting, 15% more plants than square system can be accommodated in
 - Rectangular System
 - Quincunx System
 - Hexagonal System
 - Contour System

9. Cultivation of plants in water without soil is called-
- (a) Precision Farming (b) Hydroponics
(c) Fertigation (d) Aeroponics
10. *Avena* coleoptile curvature test is the bioassay associated with which one of the following plant growth hormone
- (a) Ethylene (b) Cytokinin
(c) Gibberellic acid (d) Auxin
11. The term vitamin (originally vitamine) was coined by
- (a) F. W. Went (b) Funk
(c) Miller (d) R. Gane
12. Making a notch below a bud by removing a wedge shaped piece of bark to ensure accumulation of carbohydrates from the leaves to the bud and may results in formation of fruit bud is known as
- (a) Notching (b) Nicking
(c) Lopping (d) All of these
13. Horticulture maturity and physiological maturity are
- (a) Different (b) Similar
(c) Complementary to each other (d) All of these
14. The broad principle(s) of prevention of spoilage of horticultural produces-
- (a) Prevention or delay of microbial decomposition
(b) Prevention or delay of self-decomposition of food
(c) Prevention or minimizing damage by insect-pests and diseases
(d) All of these
15. Which is Organic Chemical fertilizer
- (a) Calcium Ammonium Nitrate (b) Ammonium Phosphate
(c) Urea (d) Murate of Potash
16. Nitrogen content in Urea is 46%, whereas in DAP it is
- (a) 18% (b) 16%
(c) 20% (d) 60%
17. Dormancy in temperate fruits is due to the presence of
- (a) Cytokinin (b) ABA
(c) Giberellins (d) Auxin
18. Important operation (s) in Pineapple cultivation
- (a) Earthing up (b) Desuckering
(c) Weeding (d) All of these
19. Thomas Andrew Knight produce the first cultivar of-
- (a) Apple (b) Apricot
(c) Plum (d) Pear
20. Which one of the following does not belong to Rosaceae family
- (a) Peach (b) Plum
(c) Both (a) & (b) (d) None of these

21. Choke Throat is physiological disorder which occur due to low temperature at the time of flowering in
- (a) Banana (b) Apple
(c) Pineapple (d) Custard Apple
22. According to Storey (1958), sex forms in Papaya flowers is
- (a) Three (3) (b) Eight (8)
(c) Six (6) (d) Twelve (12)
23. Spongy Tissue in Mango is due to
- (a) Inactivation of ripening enzyme due to high temperature
(b) Convective Heat
(c) Post harvest Exposure to intense sunlight
(d) All of these
24. Mutant variety of Mango
- (a) Carabao (b) Himsagar
(c) Alphonso (d) Rosica
25. Pineapple is a variety of
- (a) Sweet Orange (b) Mandarin Orange
(c) Pineapple (d) Pummelo
26. Queen of Spice
- (a) Small Cardamom (b) Large Cardamom
(c) Onion (d) Black Pepper
27. Cinnamon belong to the family
- (a) Iridaceae (b) Lauraceae
(c) Fabaceae (d) Araceae
28. Among the following which is a seed spice-
- a. Dill b. Aniseed c. Caraway d. Cumin
- (a) a & b (b) b & c
(c) None of these (d) All of these
29. Mace of Nutmeg is
- (a) Flower (b) Seed
(c) Dried Aril (d) Dried Kernel
30. Chemical present in turmeric is
- (a) Cucurmin (b) Curcumin
(c) Zingiberine (d) Linalool
31. Which of the following seed contains diosgenin- used for preparation of contraceptive pills
- (a) Cumin (b) All Spice
(c) Fennel (d) Fenugreek
32. Of the following, which is a flower spice
- (a) Star Anise (b) Saffron
(c) Clove (d) Coriander

33. Which of the following is known as “food of god”
(a) Tea (b) Cashew
(c) Coffee (d) Cocoa
34. Tea is commercially propagated by
(a) single node cutting (b) seed
(c) layering (d) two nodes cutting
35. The Central Institution for researches in Oil Palm is
(a) NRCOP (b) NRCP
(c) CTCRI (d) CPCTRI
36. Best planting material type used in Oil Palm
(a) Dura (b) Pisifera
(c) Tenera (d) All of these
37. Kottapak and Kalipak are important processed products of
(a) Coffee (b) Arecanut
(c) Cashewnut (d) Cocoa
38. Which of the following is called as Kalpavriksha ie., Tree of Heaven
(a) Coconut (b) Cocoa
(c) Cashewnut (d) Arecanut
39. Which statement is incorrect
(a) *Coffea liberica* is large tree bearing big broad, dark green and leathery leaves
(b) *Coffea liberica* is smaller than *Coffea arabica* with broad, dark green and leathery leaves
(c) *Coffea arabica* is a small tree with dark green leaves
(d) *Coffea canephora* is bigger than *Coffea arabica* with broader, larger and pale green leaves
40. Neera and Toddy are prepared from
(a) Palmyrah Palm (b) Oil Palm
(c) Cashewnut (d) Coconut
41. Slope of Tapping cut in Rubber respectively of Budded trees and Seedlings are
(a) 30° and 25° (b) 25° and 30°
(c) 30° and 20° (d) 35° and 25°
42. Sweet Banana is a variety of
(a) Capsicum (b) Banana
(c) Brinjal (d) Cucumber
43. Which is not perennial vegetable
(a) Tomato (b) Asparagus
(c) Chow-Chow (d) Drumstick
44. Forms of Tomato
(a) Pear Tomato (b) Potato Leaf type
(c) Both (a) & (b) (d) None of these
45. Which of the following bean is used to prepare wine
(a) French Bean (b) Cluster Bean
(c) Lima Bean (d) Dolichos Bean

46. Vegetable having single seed
(a) Chayote (b) Bread fruit
(c) Asparagus (d) Globe artichoke
47. Cucurbit with longest storage life
(a) Ash Gourd (b) Pumpkin
(c) Sponge Gourd (d) Pointed Gourd
48. Sauerkraut is value added product prepared from
(a) Radish (b) Cauliflower
(c) Cabbage (d) Spinach
49. Chekurmanis belong to the family
(a) Labitae (b) Leguminoceae
(c) Euphorbiaceae (d) Malvaceae
50. Fruit of rose rich in Vitamin 'C' is known as
(a) Hip (b) Nut
(c) Berry (d) Seed
51. Pinching in chrysanthemum is done to
(a) Encourages side branches for cut flowers (b) Encourage dwarf stature
(c) Encourage single crown branch (d) All of these
52. Shade percentage ideal for healthy growth of Anthurium
(a) 85 % (b) 80 %
(c) 70 % (d) 75 %
53. Which of the following is Tree Jasmine
(a) *Jasminum sambac* (b) *Jasminum auriculatum*
(c) *Jasminum arborescence* (d) *Jasminum grandiflorum*
54. Botanical Name of African Marigold is
(a) *Tagetes patula* (b) *Tagetes erecta*
(c) *Tagetes minuta* (d) *Tagetes lucida*
55. Foxglove is native of
(a) Tropical America (b) Asia
(c) Indo-China (d) Europe
56. *Cassia angustifolia* is the Botanical Name of
(a) Senna (b) Foxglove
(c) Periwinkle (d) None of these
57. Plants which are rich in secondary metabolites and are potential source for drugs are known as
(a) Aromatic plants (b) Spices
(c) Medicinal Plants (d) All of these
58. Periwinkle contain maximum vincristine alkaloids in the
(a) Leaves (b) Mature stem
(c) Flowers (d) Roots

59. Which statement is correct
- (a) Senna is legume and produces nodules for fixing atmospheric Nitrogen
 - (b) Senna is not a legume but fix atmospheric Nitrogen
 - (c) Senna is legume and produces no nodules for fixing atmospheric Nitrogen
 - (d) None of these
60. Distribution of Pyrethrin i.e., chemical constituents of Pyrethrum is highest in
- (a) Achenes
 - (b) Receptacles
 - (c) Disc florets
 - (d) Ray Florets
61. Father of Pharmacognosy
- (a) Hippocrates
 - (b) Theophrastus
 - (c) Miller
 - (d) Haberlandt
62. National Aromatic and Medicinal Plant Board is situated at
- (a) Lucknow
 - (b) New Delhi
 - (c) Anand, Gujarat
 - (d) Kerala
63. Extraction of essential oils are achieved by
- (a) Distillation
 - (b) Enfleurage
 - (c) Expression
 - (d) All of these
64. Japanese mint belong to the family
- (a) Lamiaceae
 - (b) Labiatae
 - (c) Apiaceae
 - (d) Apocyanaceae
62. Patchouli has the property of
- (a) Sedative
 - (b) Stomachic
 - (c) Laxative
 - (d) Fixative
65. *Cymbopogon winterianus* is the Botanical Name of
- (a) Palmarosa grass
 - (b) Lemon grass
 - (c) Java citronella grass
 - (d) Vetiver grass
66. Highest number of medicinal species are under the family
- (a) Rosaceae
 - (b) Asteraceae
 - (c) Leguminaceae
 - (d) Apocyanaceae
67. Which part of lemon grass is used to extract oil
- (a) Root
 - (b) Flower
 - (c) Fruit
 - (d) Leaves
68. Ikebana is-
- (a) Flower arrangement
 - (b) Soil Culture
 - (c) Bonsai culture
 - (d) All of these
69. Which of the following is not an element of landscaping
- (a) Colour
 - (b) Texture
 - (c) Rhythm
 - (d) Line
70. Art of training plants into shapes of different statues, birds, animals is known as
- (a) Edge
 - (b) Topiary
 - (c) Hedge
 - (d) All of these

71. Maximum consumption of cut roses is during which of the following event
(a) Mother's Day (b) Easter
(c) Christmas Day (d) Valentine's Day
72. Lithops belongs to the family of
(a) Aizoaceae (b) Cactaceae
(c) Portulacaceae (d) Amaryllidaceae
73. Respiration which occur in the presence of oxygen is called
(a) Aerobic respiration (b) Anaerobic respiration
(c) Fermentation (d) None of these
74. Orchids species which grows on moss covered rocks are known as
(a) Epiphyte (b) Terrestrial
(c) Lithophyte (d) None of these
75. National flower of India belong to the family
(a) Compositae (b) Rosaceae
(c) Nymphaeaceae (d) Lotaceae

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