

## Post of Forest Apprentice in Tamil Nadu Forest Subordinate Service (Group-VI Services)

- Method of Hydroponics were first experimented by  
(A) Knop (B)  Sachs  
(C) Arnon (D) Hill  
(E) Answer not known
- Dietitians recommends \_\_\_\_\_g of vegetable per day  
(A) 150 (B) 200  
(C)  300 (D) 500  
(E) Answer not known
- The main commercial varieties of \_\_\_\_\_ crop is grown in protected conditions under vegetable forcing.  
(A)  Tomato (B) Bitter guard  
(C) Coriander (D) Brinjal  
(E) Answer not known
- The element which acts as catalyst in chlorophyll formation in Horticulture crops  
(A) Magnesium (B) Zinc  
(C)  Iron (D) Manganese  
(E) Answer not known
- Biennial bearing in horticultural crop means  
(A) Production of two crops in an year  
(B)  Production of crop at an alternate year  
(C) Production of crop through out the year  
(D) None of the above  
(E) Answer not known

6. In drip irrigation the water saving achieved is about  
(A) 5% (B) 10%  
(C) 20% (D)  30%  
(E) Answer not known
7. Tomato is a typical \_\_\_\_\_plant  
(A) Long day (B) Short day  
(C)  Day neutral (D) Photoinsensitive  
(E) Answer not known
8. The deciduous fruits produce new growth and flowers during  
(A) Summer (B) Winter  
(C) Autumn (D)  Spring  
(E) Answer not known
9. \_\_\_\_\_is a non climatic fruit  
(A)  Acid lime (B) Mango  
(C) Sapota (D) Papaya  
(E) Answer not known
10. In Cucurbits, short day conditions favours the production of \_\_\_\_\_  
flowers  
(A)  Female (B) Bisexual  
(C) Male (D) Hermaphrodite  
(E) Answer not known
11. The potential evapotranspiration rate in arid and semiarid zone is  
(A) 2 mm/day (B) 4 mm/day  
(C)  6 mm/day (D) 7 mm/day  
(E) Answer not known

12. The contribution of horticultural crops to national income is  
(A) 13% (B) 15%  
(C) 28% (D) 32%  
(E) Answer not known
13. \_\_\_\_\_ production of mango and round the year production of \_\_\_\_\_ is unique for Tamil Nadu.  
(A) Offseason, grapes (B) Round the year, mango  
(C) Twice, Banana (D) Cold season, Guava  
(E) Answer not known
14. \_\_\_\_\_ and \_\_\_\_\_ are the leading fruit crops in Tamil Nadu accounting for over 81% of the total fruit production  
(A) Grapes and Citrus (B) Mango and Banana  
(C) Sapota and Papaya (D) Guava and Orange  
(E) Answer not known
15. The centre of Excellence in Traditional flower crops \_\_\_\_\_ is established by Government of T.N. recently  
(A) Theni (B) Periyakulam  
(C) Dindigul (D) Madurai  
(E) Answer not known
16. Producing some special crops in relatively larger quantities for distant market is known as  
(A) Market garden (B) Truck garden  
(C) Kitchen garden (D) Vegetable forcing  
(E) Answer not known

17. Among the following fruits, which one is Vitamin 'C' rich fruit  
(A) Mango (B) Lime  
(C) Aonla (D) Grapes  
(E) Answer not known
18. The major importer of floriculture products from India  
(A) United Arab Emirates (B) USA  
(C) Russia (D) United Kingdom  
(E) Answer not known
19. \_\_\_\_\_country is known as land of spices  
(A) Africa (B) India  
(C) America (D) China  
(E) Answer not known
20. \_\_\_\_\_is the naturally available auxin in the plant system  
(A) IAA (B) IBA  
(C) NAA (D) 2,4-D  
(E) Answer not known
21. Ripening of Sapota can be enhanced by treating the matured fruits in \_\_\_\_\_ plant growth regulator.  
(A) Cytokinin @ 200 ppm (B) GA @ 400 ppm  
(C) NAA @ 800 ppm (D) Ethrel @ 5000 ppm  
(E) Answer not known

22. Dormancy in leguminous plants occur due to  
(A)  Impermeability of seed coat to water  
(B) Impermeability of seed coat to oxygen  
(C) Immature embryo  
(D) Immature cotyledons  
(E) Answer not known
23. Cardamom seeds when presoaked for 10 minutes in 50% \_\_\_\_\_ recorded improved germination  
(A) Citric acid  
(B) Sulphuric acid  
(C) Nitric acid  
(D)  Hydrochloric acid  
(E) Answer not known
24. \_\_\_\_\_ is very effective in reducing the drop of fruits in pome fruits  
(A) GA<sub>3</sub>  
(B)  NAA  
(C) Zeatin  
(D) Kinetin  
(E) Answer not known
25. The commonly known gibberellin is  
(A)  GA<sub>3</sub>  
(B) GA<sub>5</sub>  
(C) GA<sub>7</sub>  
(D) GA<sub>2</sub>  
(E) Answer not known
26. The timing of leaf abscission is regulated by the interaction of  
(A)  Ethylene and Auxin  
(B) Auxin and Cytokinin  
(C) Gibberellin and Auxin  
(D) Gibberellin and Cytokinin  
(E) Answer not known

27. Non-Lecurrent Abominis is common in  
 (A) *Solanum tuberosum* (B) *Solanum Xanthocarpum*  
 (C)  *Solanum nigrum* (D) *Solanum Melongena*  
 (E) Answer not known
28. Flowering dependent upon cold treatment is called  
 (A) Cryotrophy (B) Thermotrophy  
 (C) Cryscopy (D)  Vernalization  
 (E) Answer not known
29. The branch of botany in which, deals with ageing, senescence and abscission is  
 (A)  Phytoogerntology (B) Phytomorphology  
 (C) Phytosociology (D) Phytomorphogenesis  
 (E) Answer not known
30. The ability of the plants to mature fruit without the aid of pollen from some other flower (or) plants is known as  
 (A) Unfruitfulness (B) Self incompatibility  
 (C)  Self fruitfulness (D) Unfruitful  
 (E) Answer not known
31. In which crop fruit buds borne laterally unfolding to produce leafy shoots with flower clusters in the leaf axils  
 (A) Jack Fruit (B) Guava  
 (C) Grapes (D)  Avacado  
 (E) Answer not known

32. \_\_\_\_\_ is an active form of phytochrome
- (A) Phytochrome red (B) Phytochrome Green  
(C)  Phytochrome far Red (D) Phytochrome far Green  
(E) Answer not known
33. Identify the type of parthenocarpy present in banana
- (A) Stimulative parthenocarpy  
(B) Stenospermocarpy  
(C)  Vegetative parthenocarpy  
(D) Generative parthenocarpy  
(E) Answer not known
34. Apple, grape and strawberry are imparted the characteristic colours by the pigment
- (A) Carotenoids (B) Flavanoids  
(C) Lycopene (D)  Anthocyanins  
(E) Answer not known
35. Minute Pollengrains in flowers are pollinated by
- (A) Humans (B) Anthers  
(C)  Insects (D) Wind  
(E) Answer not known
36. In which crop upright position of stamens combined with the spreading of petals permit the bees to collect the nectar without touching the pistil or anther
- (A) Peach (B) Avocado  
(C) Pear (D)  Apple  
(E) Answer not known

37. During growth and development, if a plant, cannot produce flower, regardless of the environmental conditions imposed on it, then it is said to be in \_\_\_\_\_ phase
- (A) Dormancy (B) Apomixis  
 (C) Juvenile (D) Quiescence  
 (E) Answer not known
38. Which crop is small fruited deciduous woody plant?
- (A) West Indian cherry (B)  Raspberry  
 (C) Surinam cherry (D) Singapore cherry  
 (E) Answer not known
39. When the stamens mature first than the ovary in a plant, it is called as
- (A) Protogyny (B)  Protoandry  
 (C) Chasmogamy (D) Homogamy  
 (E) Answer not known
40. This is not commercially propagated through tissue culture
- (A) Orchids (B) Anthuriums  
 (C) Roses (D) Begonias  
 (E) Answer not known
41. The rooting of cuttings enhanced with mist chamber due to
- (A) Continuous mishing with high temperature  
 (B) Continuous mishing with low temperature  
 (C) Intermittent mist with high humidity and high temperature  
 (D) Intermittent mist with high humidity and low temperature  
 (E) Answer not known



42. Tubercles are produced in \_\_\_\_\_ crop
- (A)  Dioscorea bulbifera (B) Dioscorea alata  
 (C) Dioscorea rotundata (D) Dioscorea esculenta  
 (E) Answer not known
43. \_\_\_\_\_ is a Witt resistant rootstock of guava
- (A) Psidium guajava (B)  Psidium friedrichsthalianum  
 (C) Psidium Cattleianum (D) Psidium Fulvum  
 (E) Answer not known
44. The root cutting is commercially practiced in
- (A) Jack fruit (B)  Bread fruit  
 (C) Mandarin (D) Grapes  
 (E) Answer not known
45. Mound layering is otherwise called as
- (A) Compound layering (B)  Stooling  
 (C) Tip layering (D) Serpentine layering  
 (E) Answer not known
46. In guava varieties grafted on Chinese guava (Psidium friedrichsthalianum) are resistant to
- (A) Drought (B) Salinity  
 (C)  Wilt and nematodes (D) Nematodes  
 (E) Answer not known

47. In certain plants, the adventitious roots become thickened and they do have external and internal structure of roots but lack nodes and internodes are called as
- (A) Tuber  
(B)  Tuberous roots  
(C) Rhizome  
(D) Corm  
(E) Answer not known
48. Delayed incompatibility was observed when sapota was grafted on \_\_\_\_\_ stock
- (A) Pala  
(B) Wood apple  
(C)  Bassia longifolia  
(D) Bael  
(E) Answer not known
49. Dormancy in seed is not due to
- (A) Seed coat  
(B)  Dryness of seed  
(C) Chemical inhibitors  
(D) Rudimentary embryos  
(E) Answer not known
50. \_\_\_\_\_ is a type of reproduction in which sexual organs of related structures take part but seeds are formed without the union of gametes
- (A) Vivipary  
(B) Parthenocarpy  
(C) Parthenogenesis  
(D)  Apomixis  
(E) Answer not known
51. Choose the crop in which clonal root stock used for grafting
- (A) Orange  
(B)  Pear  
(C) Cashew  
(D) Sapota  
(E) Answer not known

52. The Nutrient essentiality for plants can be tested by  
(A)  Nutrient culture technique  
(B) Hydroponic culture technique  
(C) Hydrophobic culture technique  
(D) Aeroponic culture technique  
(E) Answer not known
53. Rudimentary embryos are found in \_\_\_\_\_ seed  
(A) Onion (B) Carrot  
(C)  Orchids (D) Mucuna  
(E) Answer not known
54. After fertilization, the seed has developed from  
(A) Ovary (B)  Ovule  
(C) Integuments (D) Polar nuclei  
(E) Answer not known
55. The term 'Thali' is nothing but  
(A) Plastic trays (B) Seed pan  
(C) Fibre pots (D)  Earthen pots  
(E) Answer not known
56. \_\_\_\_\_ is a chemical substance used for soil sterilization effective against pest and diseases  
(A) Ethylene (B) Acetylene  
(C)  Formaldehyde (D) Propane  
(E) Answer not known

57. This is not a method of heating system practiced in hot beds  
(A)  Mulching (B) Manure  
(C) Hot water (D) Electricity  
(E) Answer not known
58. \_\_\_\_\_ is used generally in mother bed and vegetative plant propagation media in nursery  
(A)  Sand (B) Soil  
(C) Sphagnum mass (D) Vermiculite  
(E) Answer not known
59. Carbon dioxide enrichment in green houses is done at  
(A) 500–550 ppm (B) 10–100 ppm  
(C)  1000–2400 pmm (D) 1–5 ppm  
(E) Answer not known
60. Fruit thinning plant growth regulator is  
(A)  NAA (B) BA  
(C) GA (D) CK  
(E) Answer not known
61. Identify the method of training in which the main stem is allowed to grow only upto a certain height and the leader stem is pruned to encourage scaffold branches  
(A) Head system (B) Modified leader  
(C)  Open centre (D) Central leader  
(E) Answer not known

62. Which of the following pairs are sets of an orchard crop and a good companion crop?

- (A) Mango and Pipalamool                      (B) Ber and Coffee  
(C) Sapota and Sugarcane                      (D)  Banana and Turmeric  
(E) Answer not known

63. The partial ringing of a branches below a dormant bud to increase the flowering shoots is

- (A)  Nicking    (B) Smudging  
(C) Bending    (D) Thinning  
(E) Answer not known

64. Match the following :

- |                                  |                          |
|----------------------------------|--------------------------|
| (a) Inflorescence without leaves | 1. Last week of November |
| (b) Flower cluster in leaf axil  | 2. Mango                 |
| (c) Flower buds on old trunk     | 3. Jack fruit            |
| (d) Pruning in Jasmine           | 4. Guava                 |

- |   | (a)              | (b) | (c) | (d) |
|---|------------------|-----|-----|-----|
| (A)                                     | 1                | 2   | 3   | 4   |
| (B) <input checked="" type="checkbox"/> | 2                | 4   | 3   | 1   |
| (C)                                     | 2                | 3   | 4   | 1   |
| (D)                                     | 1                | 3   | 4   | 2   |
| (E)                                     | Answer not known |     |     |     |

65. \_\_\_\_\_ is a fruit crop which is more sensitive to water logging

- (A)  Papaya    (B) Banana  
(C) Strawberry    (D) Ber  
(E) Answer not known

66. The way of keeping the orchard land always free from grasses (or) any other vegetation is known as
- (A) Clean culture
  - (B) Sod
  - (C) Sod culture
  - (D) Cover cropping
  - (E) Answer not known
67. Choose compatible fertilizer for fertigation
- (A) Urea and potassium nitrate
  - (B) Ammonium sulphate and Potassium chloride
  - (C) Calcium nitrate and Phosphates
  - (D) Phosphoric acid and ferrous sulphate
  - (E) Answer not known
68. Read the following statements and answer
- I. Basic slag is a by-product of steel factory
  - II. Rock phosphate is not suitable for reinforcing the farm yard manure
- (A) Both are correct
  - (B) Both are wrong
  - (C) I is wrong and II is correct
  - (D) I is correct and II is wrong
  - (E) Answer not known
69. Iron deficiency in plants is characterized by
- (A) Interveinal chlorosis of older leaves
  - (B) Little leaf
  - (C) Yellowing of new leaf
  - (D) Mottling of leaf
  - (E) Answer not known

70. In Banana cv Rasthali, disorder characterised by pinkish brown, firm pulp is known as
- (A)  Hard lump (B) Soft lump  
(C) Kottai vazhai (D) Neer vazhai  
(E) Answer not known
71. Choose the secondary nutrients from the following
- (A) Iron, Zinc, Manganese  
(B) Copper, Boron, Molybdenum  
(C) Nitrogen, Phosphorus, Potassium  
(D)  Calcium, Magnesium, Sulphur  
(E) Answer not known
72. Urea is the source of nitrogen and the nitrogen content of urea is 46%. In urea, nitrogen is present in the form of
- (A) Nitrate (B) Nitrite  
(C) Ammoniacal (D)  Amide  
(E) Answer not known

73. Match the temperature regime with its mean annual soil temperature in °C

Temperature regime	Mean annual soil temperature in °C
(a) Cryic	1. From 8°C to less than 15°C
(b) Hyperthermic	2. More than 0°C but less than 8°C
(c) Mesic	3. is less than 0°C
(d) Pergelie	4. is 22°C or more

- |   | (a)              | (b) | (c) | (d) |
|---|------------------|-----|-----|-----|
| (A)                                     | 3                | 2   | 4   | 1   |
| (B)                                     | 1                | 3   | 2   | 4   |
| (C)                                     | 4                | 1   | 2   | 3   |
| <input checked="" type="checkbox"/> (D) | 2                | 4   | 1   | 3   |
| (E)                                     | Answer not known |     |     |     |

74. The odorous component in poultry manure is

- |   |             |
|---|-------------|
| <input checked="" type="checkbox"/> (A) Ammonia | (B) Methane |
| (C) Propane                                     | (D) Butane  |
| (E) Answer not known                            |             |

75. Root growth of plant ceased when the oxygen diffusion rate (ODR) dropped to about \_\_\_\_\_g/cm<sup>2</sup>/min.

- |   |                      |
|---|----------------------|
| <input checked="" type="checkbox"/> (A) $20 \times 10^{-8}$ | (B) $20 \times 10^8$ |
| (C) $10 \times 10^{-8}$                                     | (D) $10 \times 10^8$ |
| (E) Answer not known  |                      |



76. Potassium containing mineral  
(A)  Sylvinite (B) Apatite  
(C) Tourmaline (D) None of these  
(E) Answer not known
77. The type of bonding between layers of 1:1 clay mineral  
(A)  Hydrogen bonding (B) Oxygen linkage  
(C) Potassium bonding (D) Magnesium linkage  
(E) Answer not known
78. Sodic soils  
(A)   $EC > 4 \text{ dsm}^{-1}$  and  $pH < 8.5$   
(B)  $EC > 4 \text{ dsm}^{-1}$  and  $pH > 8.5$   
(C)  $EC < 4 \text{ dsm}^{-1}$  and  $pH < 8.5$   
(D)  $EC < 4 \text{ dsm}^{-1}$  and  $pH > 8.5$   
(E) Answer not known
79. Wind breaks are planted in orchards towards  
(A) South-West (B)  North-West  
(C) East-South (D) North-East  
(E) Answer not known
80. The stenospermocarpy phenomenon is found \_\_\_\_\_ variety of grapes.  
(A) Sharad seedless (B) Flame seedless  
(C) Pusa seedless (D)  Thomson seedless  
(E) Answer not known

81. Granulation is a physiological disorder in  
(A) ✓ Citrus (B) Mango  
(C) Banana (D) Sapota  
(E) Answer not known
82. Growth regulator used for induction of seedlessness in fruits is  
(A) ✓ GA-100 – 200 ppm (B) MH – 1000 ppm  
(C) NAA – 100 ppm (D) Planofix – 450 ppm  
(E) Answer not known
83. Bitter pit of apple is due to the deficiency of  
(A) ✓ Calcium (B) Sulphur  
(C) Iron (D) Zinc  
(E) Answer not known
84. Protandry occurs in  
(A) ✓ Custard apple (B) Pomegranate  
(C) Almond (D) Coconut  
(E) Answer not known
85. Which of the following is the off-season bearing mango variety?  
(A) Rumani (B) ✓ Niranjan  
(C) Langra (D) Alphonso  
(E) Answer not known
86. Botanical name of seedless lime is  
(A) Citrus limon (B) ✓ Citrus latifolia  
(C) Citrus reticulata (D) Citrus aurantium  
(E) Answer not known

87. Aonla or Indian gooseberry variety kanchan developed by \_\_\_\_\_  
University
- (A) Nausari Agricultural University
  - (B) Indian Institute of Agricultural Research
  - (C) Narendra Deva Agricultural University
  - (D) Anand Agricultural University
  - (E) Answer not known
88. 'Hass' is a variety in
- (A) Fig
  - (B) Avocado
  - (C) Apple
  - (D) Durian
  - (E) Answer not known
89. Which is the vertical row planting pattern among the following?
- (A) Triangular system
  - (B) Cluster system
  - (C) Contour system
  - (D) Quincunx system
  - (E) Answer not known
90. In deciduous fruits, the rest period is coinciding with
- (A) Autumn
  - (B) Winter
  - (C) Summer
  - (D) Spring
  - (E) Answer not known
91. Which of the following is not the polyembryonic variety of mango?
- (A) Alphonso
  - (B) Chandrakaran
  - (C) Goa
  - (D) Olour
  - (E) Answer not known

92. What is the botanical name of Brazilian guava?  
 (A)  Psidium Guinense  
 (B) Psidium Cattleianum  
 (C) Psidium Friedrichsthalianum  
 (D) Psidium guajava  
 (E) Answer not known
93. The annual mean temperature ranging from \_\_\_\_\_ is ideal for successful mango cultivation.  
 (A) 14 – 20°C  
 (B)  21 – 27°C  
 (C) 30 – 36°C  
 (D) 8 – 14°C  
 (E) Answer not known
94. Which mango variety produce polyembryony seedlings?  
 (A) Peter  
 (B) Chausa  
 (C) Langra  
 (D)  Bapakkai  
 (E) Answer not known
95. Kinnow mandarin is a hybrid of \_\_\_\_\_ × \_\_\_\_\_  
 (A) Trifoliate orange × mandarins  
 (B)  King × willow leaf  
 (C) Trifoliate orange × e.sinensis  
 (D) King × Dancy  
 (E) Answer not known
96. Avocado belongs to the family  
 (A) Myrtaceae  
 (B)  Lauraceae  
 (C) Rutaceae  
 (D) Guttiferae  
 (E) Answer not known

97. Ber belongs to the family  
(A) Lauraceae (B) Guttiferae  
(C)  Rhamnaceae (D) Moraceae  
(E) Answer not known
98. Which of the following root stock of citrus is tolerant to tristeza?  
(A) Sons orange (B) Trifoliate orange  
(C) Citron (D)  Cleopatra Mandarin  
(E) Answer not known
99. Pine apple belongs to the family  
(A) Pinaceae (B)  Bromeliaceae  
(C) Lauraceae (D) Musaceae  
(E) Answer not known
100. \_\_\_\_\_ is a non-climacteric fruit.  
(A) Mango (B)  Acid lime  
(C) Sapota (D) Pineapple  
(E) Answer not known
101. Brinjal cultivars resistant to phomopsis fruit rot  
(A)  Pusa Bhairav (B) Pusa Upkar  
(C) Pusa Bindu (D) Pusa Uttam  
(E) Answer not known

102. CO<sub>2</sub> enrichment in green house is done to enhance
- (A) Transpiration (B) Respiration  
 (C)  Photosynthesis (D) Oxidation  
 (E) Answer not known

103. Bolting is defined as \_\_\_\_\_ in Cabbage.
- (A) Splitting of calyx  
 (B) Fruit splitting  
 (C)  Premature seed stalk formation  
 (D) Rooting of tubers  
 (E) Answer not known

104. Match the following :
- |                 |             |
|-----------------|-------------|
| (a) Tomato      | 1. Greening |
| (b) Potato      | 2. Cat face |
| (c) Cauliflower | 3. Whiptail |
| (d) Carrot      | 4. Forking  |

- |   | (a) | (b) | (c) | (d) |
|---|-----|-----|-----|-----|
| (A)                                     | 3   | 2   | 4   | 1   |
| (B)                                     | 2   | 4   | 3   | 1   |
| (C) <input checked="" type="checkbox"/> | 2   | 1   | 3   | 4   |
| (D)                                     | 4   | 1   | 3   | 2   |
- (E) Answer not known

105. Blossom end rot in tomato may be corrected by the application of
- (A) Foliar spray of NAA 60 ppm
  - (B) Application of triacontanol @ 1 ml per lit
  - (C) Foliar spray of 0.5% calcium chloride
  - (D) Application of Ammonium molybdate 0.1%
  - (E) Answer not known
106. Growth inhibitor involved in dormancy process in onion is produced in the \_\_\_\_\_ parts of the plant.
- (A) Leaves
  - (B) Bulks
  - (C) Roots
  - (D) Flowers
  - (E) Answer not known
107. Pinking disorder in Cauliflower is due to the formation of \_\_\_\_\_ pigment.
- (A) Lycopene
  - (B) Xanthophyll
  - (C) Anthocyanin
  - (D) Carotene
  - (E) Answer not known
108. In potato, 'A' grade is given to tubers having the weight of \_\_\_\_\_ gram.
- (A) less than 25
  - (B) 25-50
  - (C) 50-100
  - (D) more than 100
  - (E) Answer not known

109. Brinjal is a \_\_\_\_\_ plant.
- (A) short day plant
  - (B) long day plant
  - (C) day neutral plant
  - (D) intermediate between short day and long day
  - (E) Answer not known
110. The parentage of K<sub>2</sub> chilli
- (A) CO<sub>1</sub> × Sattur Samba
  - (B) Sattur Samba × K<sub>1</sub>
  - (C) K<sub>1</sub> × Sattur Samba
  - (D) Sattur Samba × CO<sub>1</sub>
  - (E) Answer not known
111. Cross pollination in onion is due to
- (A) Protandry
  - (B) Protogyny
  - (C) Dichogamy
  - (D) Heterostyle
  - (E) Answer not known
112. Guar gum is obtained from
- (A) Cow Pea
  - (B) French bean
  - (C) Butter bean
  - (D) Cluster bean
  - (E) Answer not known
113. \_\_\_\_\_ is the early variety (matures in 6 months) of lassava.
- (A) Sree Harsha
  - (B) COTP 4
  - (C) Sree Jaya
  - (D) Sree Visakham
  - (E) Answer not known



114. Shelling percent in pear is
- (A) 10-20% (B)  35-50%  
(C) 7-10% (D) 75-80%  
(E) Answer not known
115. Short day conditions induces more female flowers in
- (A) Tomato (B) Bhendi  
(C) Onion (D)  Bitter gourd  
(E) Answer not known
116. \_\_\_\_\_ is a photo insensitive cultivar of cowpea.
- (A) Arka Garima (B) Pusa Phalguni  
(C)  Pusa Komal (D) Pusa Barsati  
(E) Answer not known
117. The common name of Brassica Oleracea var. italica is
- (A)  Broccoli  
(B) Knol Khol  
(C) Brussels sprouts  
(D) Chinese cabbage  
(E) Answer not known
118. \_\_\_\_\_ crop is the source of iodine content, good for the control of goiter.
- (A) Tomato (B) Chilli  
(C)  Bhendi (D) Onion  
(E) Answer not known

119. Rich source of calcium is
- (A)  Curry leaves
  - (B) Fenugreek leaves
  - (C) Drumstick leaves
  - (D) Amaranthus leaves
  - (E) Answer not known
120. Among the fresh vegetables exported the top most is
- (A) Gherkin
  - (B)  Onion
  - (C) Potato
  - (D) Chilli
  - (E) Answer not known
121. Which of the following statement about British Garden is incorrect?
- (A) Garden style was informal
  - (B) Smooth curvaceous lines were formed
  - (C) Plan is asymmetric
  - (D)  Element of surprise was missing
  - (E) Answer not known
122. The serially connected arches are called
- (A) Trellis
  - (B)  Pergolas
  - (C) Arbour
  - (D) Pillars
  - (E) Answer not known

123. Which of the following statement is incorrect?

- (A) Ficus repens is a foliage climber
- (B) Inachelospermum jasminoides is a climber with scented flowers
- (C) Pothos prefers open sun
- (D) Hedera helix prefers partial shade
- (E) Answer not known

124. 'Fairy ring' problem in lawn is caused by

- (A) Fungus
- (B) Bacteria
- (C) Insects
- (D) Reptiles
- (E) Answer not known

125. Match the following :

- |                              |    |                             |
|------------------------------|----|-----------------------------|
| (a) <u>Ficus repens</u>      | 1. | Pure white scented flowers  |
| (b) Clematis                 | 2. | Heavy climber               |
| (c) Thunbergia               | 3. | Cool dry places             |
| (d) <u>Wisteria Sinensis</u> | 4. | Cover the surface it climbs |

- |                                      | (a)              | (b) | (c) | (d) |
|--------------------------------------|------------------|-----|-----|-----|
| <input checked="" type="radio"/> (A) | 4                | 1   | 2   | 3   |
| (B)                                  | 1                | 2   | 3   | 4   |
| (C)                                  | 2                | 3   | 4   | 1   |
| (D)                                  | 3                | 4   | 1   | 2   |
| (E)                                  | Answer not known |     |     |     |

126. The lawn grass which is suitable for saline soil conditions is
- (A) cyanodon intermedius
  - (B) stenotaphrum secundatum
  - (C) sporobolus tremulus
  - (D) poa annua
  - (E) Answer not known
127. Gazania splendens is classified in to which of the following groups?
- (A) Annuals
  - (B) Biennials
  - (C) Herbaceous Perennials
  - (D) Climbers and Creepers
  - (E) Answer not known
128. The arrangement of potted plants around a tree or any central object such as statue is known as
- (A) Topiary
  - (B) Rockery
  - (C) Trophy
  - (D) Shrubbery
  - (E) Answer not known
129. Running water is the life and soul of \_\_\_\_\_ garden.
- (A) Mughul
  - (B) English
  - (C) Japanese
  - (D) Persian
  - (E) Answer not known

130. 'Kakada' jasmine is botanically known as
- (A) Jasminum sambac
  - (B) Jasminum grandiflorum
  - (C) Jasminum auriculatum
  - (D) Jasminum multiflorum
  - (E) Answer not known
131. Flowering period in marigold is prolonged by
- (A) Ethrel at 500 ppm
  - (B)  CCC at 3000 ppm
  - (C) GA<sub>3</sub> at 1000 ppm
  - (D) NAA at 1000 ppm
  - (E) Answer not known
132. Origin of African marigold is
- (A) Mexico
  - (B) Africa
  - (C) France
  - (D) America
  - (E) Answer not known
133. \_\_\_\_\_ is a wax like substance containing the natural flower perfume together with plant waxes and pigments.
- (A) Concrete
  - (B) Absolute
  - (C) Oil
  - (D) Essential oil
  - (E) Answer not known

134. The solvent used for the extraction of Jasmine concrete is
- (A) Sodium benzoate
  - (B) Food grade Hexane
  - (C) Ascorbic acid
  - (D) Silver nitrate
  - (E) Answer not known
135. The which of the following statement carnation differed from chrysanthemum
- (A) Produces cut flowers
  - (B) Requires pinching
  - (C) Long day plant
  - (D) Commercially cultivated in India
  - (E) Answer not known
136. Tuberose variety tolerant to Meloidogyne incognita nematode is
- (A) Prajwal
  - (B) Shrinagar
  - (C) Rajat Rekha
  - (D) Vaibhav
  - (E) Answer not known
137. The concrete recovery percent from jasminum auriculatum is
- |   |                   |
|---|-------------------|
| <input checked="" type="checkbox"/> (A) 0.33 per cent | (B) 0.27 per cent |
| (C) 0.19 per cent                                     | (D) 0.15 per cent |
| (E) Answer not known                                  |                   |

138. The optimum spacing recommended for Mullai is
- (A) ✓  $1.5 \times 1.5$  sq.meters
  - (B)  $1.25 \times 1.25$  sq.meters
  - (C)  $2.0 \times 1.5$  sq.meters
  - (D)  $2.0 \times 2.0$  sq.meters
  - (E) Answer not known
139. Crossandra (Crossandra Infundibuliformis) is belong to the family
- (A) Asteraceae
  - (B) ✓ Acanthaceae
  - (C) Malvaceae
  - (D) Iridaceae
  - (E) Answer not known
140. The tuberoses cultivation is concentrated in the districts of \_\_\_\_\_  
Tamil Nadu.
- (A) Salem and Erode
  - (B) Dharmapuri and Krishnagiri
  - (C) Virudhunagar and Sivagangai
  - (B) ✓ Madurai and Coimbatore
  - (E) Answer not known
141. Write the correct statement from the following
- (A) Pea berry in coffee refers to the whole bean dried along with pulp
  - (B) Elephant bean is due to incomplete fertilization
  - (C) ✓ Abnormal, defective and broken bits of coffee are known as triage
  - (D) Cherry coffee obtained after complete removal of pulp and musilage
  - (E) Answer not known

142. In spices crops oleoresin is obtained by extraction of dry ground spices with the use of
- (A) Distilled water
  - (B) Hexane
  - (C) Petroleum ether
  - (D) Hydrochloric acid
  - (E) Answer not known
143. \_\_\_\_\_ is responsible for the colour of the made tea
- (A) Theaflavins and thearubigens
  - (B) Caffeine
  - (C) Glycosides
  - (D) Coumarines
  - (E) Answer not known
144. To reduce the moisture content of tea leaves by spreading them in troughs are called
- (A) Withering
  - (B) Rolling
  - (C) Grading
  - (D) Fermentation
  - (E) Answer not known



145. Which of the following statements regarding Cocoa type Criollo are correct?
- I. Pod colour – Dark red
  - II. Flavour – Bland
  - III. Pod surface – Smooth
  - IV. Duration for fermentation 6 days
- (A) I, II and III are correct  
(B)  I and II are correct  
(C) III and IV are correct  
(D) All are correct  
(E) Answer not known
146. Tapping has to be done on a slope of \_\_\_\_\_ to the horizontal zone in the case of seedlings of rubber.
- (A) 40° (B)  25°  
(C) 30° (D) 35°  
(E) Answer not known
147. The origin of Palmyrah is
- (A)  Tropical Africa (B) Asia  
(C) Rica (D) Madagascar  
(E) Answer not known
148. The tapping system followed by small growers of rubber with 200% intensity
- (A)  S<sub>2</sub> d<sub>1</sub> (B) S<sub>2</sub> d<sub>2</sub>  
(C) S<sub>2</sub> d<sub>3</sub> (D) S<sub>2</sub> d<sub>4</sub>  
(E) Answer not known

149. The bearing habit of cocoa is
- (A) Terminal
  - (B) Lateral
  - (C) Adventitiously on the trunk
  - (D) Both terminal and lateral
  - (E) Answer not known
150. The seed rate for coriander is \_\_\_\_\_ kg/ha.
- (A) 1-2
  - (B) 5-8
  - (C) 10-15
  - (D) 20-25
  - (E) Answer not known
151. The 'curcumin' content of turmeric ranges from
- (A) 7.5 to 9.5 percent
  - (B) 0.5 to 1.5 percent
  - (C) 10 to 15 percent
  - (D) 1.8 to 5.4 percent
  - (E) Answer not known
152. Collection of dropped fruits of coffee during harvest is
- (A) Gleaning
  - (B) Picking
  - (C) Stripping
  - (D) Cleaning
  - (E) Answer not known
153. Improved selection made in Tamarind from TNAU and is cultivated in many parts of India is
- (A) DTS 1
  - (B) PKM 1
  - (C) Urigam
  - (D) Yogeswari
  - (E) Answer not known

154. Tea can be grown in which one of the following soil types?
- (A) Red sandy loam (B) Clay soil  
(C)  Peat soil (D) Sandy soil  
(E) Answer not known
155. In coconut primordia of inflorescences begin to form in the leaf axil about \_\_\_\_\_ before the opening of spathe.
- (A) 24 months (B)  32 months  
(C) 30 months (D) 18 months  
(E) Answer not known
156. Under Tamil Nadu conditions, in cashew a spacing of accommodating  $\frac{500}{4DP}$  plants/ha is recommended under
- (A) 7 × 7 m  
(B)  5 × 4 m  
(C) 7 × 5 m  
(D) 5 × 5 m  
(E) Answer not known
157. What is the commercial method of propagation in cashew?
- (A) Seed  
(B) Layering  
(C)  Epicotyl grafting  
(D) Budding  
(E) Answer not known

158. Match the following :

- |              |          |
|--------------|----------|
| (a) Arecanut | 1. Pekoe |
| (b) Tea      | 2. EPC2X |
| (c) Palmyrah | 3. Chali |
| (d) Rubber   | 4. Neera |

- |   | (a)              | (b) | (c) | (d) |
|---|------------------|-----|-----|-----|
| (A)                                     | 1                | 2   | 3   | 4   |
| (B)                                     | 2                | 4   | 3   | 1   |
| (C)                                     | 4                | 2   | 3   | 1   |
| <input checked="" type="checkbox"/> (D) | 3                | 1   | 4   | 2   |
| (E)                                     | Answer not known |     |     |     |

159. Which is the herbal spice classified as hardy annual?

- |   |           |
|---|-----------|
| (A) Marjoram                                    | (B) Mint  |
| <input checked="" type="checkbox"/> (C) Parsely | (D) Thyme |
| (E) Answer not known                            |           |

160. Alleppey green, coorg green, bleached white are the grades of

- |  |            |
|--|------------|
| <input checked="" type="checkbox"/> (A) Cardamom | (B) Ginger |
| (C) Clove  | (D) Pepper |
| (E) Answer not known                             |            |

161. The chief constituent of cumin seed is

- (A)  $\beta$ -carophyllene  
(B) Cineole  
(C) Linalool  
 (D) Cuminaldehyde  
(E) Answer not known

162. The Central Coffee Research Institute is situated at
- (A) Coorg, Karnataka
  - (B) Mysuru, Karnataka
  - (C)  Balahanur, Karnataka
  - (D) Thadiyankudisai, Tamilnadu
  - (E) Answer not known
163. "Cochin oil" is extracted from the leaves of
- (A)  Lenpn grass
  - (B) Palmarosa grass
  - (C) Vettiver
  - (D) Geranium
  - (E) Answer not known
164. The Nirmal variety of periwinkle is resistant to
- (A) Leaf spot
  - (B) Leaf miner
  - (C)  Collor rot and root rot
  - (D) Leaf mosaic
  - (E) Answer not known
165. What is the major fraction of essential oil of Ocimum gratissium?
- (A)  Methyl Eugenol
  - (B) Glycosides
  - (C) Linalool
  - (D) Linalyl acetate
  - (E) Answer not known

166. How much oil yield can be obtained from patchouli grown in a hectare
- (A) 10-20 kg/ha/year                       (B) 30-40 kg oil/ha/year  
(C) 60-70 kg/ha/year                      (D) 80-100 kg/ha/year  
(E) Answer not known
167. Palmarosa variety, Jawahar Rosa 68 contains \_\_\_\_\_% of geraniol.
- (A) 85.6%                                      (B) 89.2%  
(C)  91.7%                                      (D) 90.3%  
(E) Answer not known
168. Where geranium can be grown commercially
- (A) 500-700 m above MSL altitude regions  
(B) 700-800 m above MSL altitude regions  
(C)  1000-1500 m above MSL altitude regions  
(D) 2000-3500 m above MSL altitude regions  
(E) Answer not known
169. What is the total Recommended quantity of NPK for medicinal solanum
- (A) 100 : 80 : 80 kg/ha  
(B) 80 : 80 : 60 kg/ha  
(C) 60 : 80 : 80 kg/ha  
(D)  50 : 40 : 40 kg/ha  
(E) Answer not known

170. The periwinkle variety 'Nirmal' is resistant to which biotic stress
- (A) Resistant to leaf spot
  - (B) Resistant to leaf minor
  - (C) Resistant to dieback
  - (D) Resistant to collar rot and root rot
  - (E) Answer not known
171. High yielding variety of aswagandha released by CIMAP is
- (A) Jawahar Asgandh-20
  - (B) Nagori
  - (C) Poshita
  - (D) Jawahar Asgandh-134
  - (E) Answer not known
172. The economic part of medicinal solanum is
- (A) Leaves
  - (B) Root
  - (C) Fruit
  - (D) Whole Plant
  - (E) Answer not known
173. 'Tushar' is variety of which mint crop
- (A) Japanese mint
  - (B) Spear mint
  - (C) Bergamot mint
  - (D) Pepper mint
  - (E) Answer not known

174. Choose the best planting material for commercial cultivation of vetiver?
- (A) Seeds
  - (B) Seedlings
  - (C) Slips
  - (D) Cuttings
  - (E) Answer not known
175. Pepper mint is botanically called as
- (A) Mentha arvensis L
  - (B) Mentha Piperata L
  - (C) Mentha spicata L
  - (D) Mentha Citrata L
  - (E) Answer not known
176. The origin of Solanum Kharianum is
- (A) India
  - (B) Madagascar
  - (C) Mexico
  - (D) Africa
  - (E) Answer not known



177. Match the following :

- |                |              |
|----------------|--------------|
| (a) Palmarosa  | 1. Johore    |
| (b) Patchouli  | 2. Krishna   |
| (c) Citronella | 3. Vaishnavi |
| (d) Lemongrass | 4. Mandakini |

- |   | (a)              | (b) | (c) | (d) |
|---|------------------|-----|-----|-----|
| (A)                                     | 4                | 3   | 1   | 2   |
| <input checked="" type="checkbox"/> (B) | 3                | 1   | 4   | 2   |
| (C)                                     | 2                | 4   | 1   | 3   |
| (D)                                     | 2                | 4   | 3   | 1   |
| (E)                                     | Answer not known |     |     |     |

178. What is the commercial method of propagation of medicinal coleus?

- (A) Terminal cuttings  
(B) Seeds  
(C) Suckers  
(D) Divisions  
(E) Answer not known

179. The chief constituent of lemon grass oil is

- (A) Geraniol  
(B)  Citral  
(C) Citranellal  
(D) Linalool  
(E) Answer not known

180. India holds monopoly in production and export of which one of the medicinal plants?

- (A) Medicinal coleus  
(B)  Senna  
(C) Aloe Vera  
(D) Aswagandha  
(E) Answer not known

181. What is the share of traditional medicine in the total pharmaceutical products at world level?
- (A) 60% (B) 50%  
(C) 30% (D)  40%  
(E) Answer not known
182. Linalool is a aromatic compound present in the essential oil of
- (A) Lemon grass (B) Lavender  
(C)  Bergamot mint (D) Geranium  
(E) Answer not known
183. \_\_\_\_\_ is used as a preservative is colored fruit juice.
- (A) Potassium metabisulphite  
(B) Acetic acid  
(C) Citric acid  
(D)  Sodium benzoate  
(E) Answer not known
184. The minimum prescribed level of sugar and acidity in chutney is
- (A) 68 percent TSS and 1% acidity  
(B) 50 percent TSS and 5% acidity  
(C) 68 percent TSS and 5% acidity  
(D)  50 percent TSS and 1% acidity  
(E) Answer not known

185. Potassium metabisulphite (KMS) when added as preservative, liberates \_\_\_\_\_ which reacts with water to form sulphurous acid.
- (A) CO<sub>2</sub> (carbon di oxide)
  - (B) SO<sub>2</sub> (sulphur di oxide)
  - (C) O<sub>2</sub> (oxygen)
  - (D) C<sub>2</sub>H<sub>4</sub> (Ethylene)
  - (E) Answer not known
186. The important enzyme involved in climacteric rise of CO<sub>2</sub> is
- (A) Pyruvic carboxylase
  - (B) Amylase
  - (C) Pectinase
  - (D) Cellulase
  - (E) Answer not known
187. The TSS content in pomegranate towards maturity is
- (A) 15-17%
  - (B) 11-13%
  - (C) 8-10%
  - (D) 5-7%
  - (E) Answer not known
188. In the beginning of modern packaging \_\_\_\_\_ container was used as packaging material for food preservation.
- (A) Corrugated fibre board
  - (B) Tin plates
  - (C) Airtight glass bottle
  - (D) Plastics
  - (E) Answer not known

189. \_\_\_\_\_ is the commonly used packing container for fresh fruits and vegetables so as to have easy handling and stacking.
- (A) ✓ Corrugated fibre board
  - (B) Baskets
  - (C) Stretch wraps
  - (D) Shrink film wraps
  - (E) Answer not known
190. The storability of pomegranate at 4.5°C with 80% RH is
- (A) 5-6 weeks
  - (B) 10-12 weeks
  - (C) ✓ 5-6 months
  - (D) 9-12 months
  - (E) Answer not known
191. The following statement and answer :
- I. In controlled atmospheric storage, biological activity of the produce is slowed down.
  - II. The objective of storage is to increase the growth of microorganisms.
- (A) ✓ I is true and II is false
  - (B) I is true and II is also true
  - (C) I and II are false
  - (D) I is false and II is true
  - (E) Answer not known
192. In pineapple when the fruits are not shaded by leaves especially in ratoon crops, it will result in
- (A) Bruising
  - (B) Chilling injury
  - (C) ✓ Sunburn
  - (D) Malformations
  - (E) Answer not known

193. Skin coating in fruits and vegetables is
- (A) Very thin film of preservative
  - (B) Very thin film of wax
  - (C) Very thin film of pesticide
  - (D) Very thin film of fungicide
  - (E) Answer not known
194. Among the fruits \_\_\_\_\_ can be waived and among the vegetables \_\_\_\_\_ can be waived to reduce transpiration loss.
- (A) Apple and pumpkin
  - (B) Banana and string beans
  - (C) Guava and Cabbage
  - (D) Grapes and Carrot
  - (E) Answer not known
195. The term used for placing the cut flower in water is
- (A) Impregnation
  - (B) Pulsing
  - (C) Bad opening
  - (D) Conditioning
  - (E) Answer not known
196. Which of the following statement is true?
- (A) Colour development is the index of maturity in sapota
  - (B) Disappearance of angularity is the maturity index of custard apple
  - (C) Abscission of pod is the maturity index of peas
  - (D) Oil content is the maturity index of Avocado
  - (E) Answer not known

197. Dry brushing is the type of cleaning done in
- (A) Apple
  - (B) Citrus
  - (C) Sapota
  - (D) Kiwifruits
  - (E) Answer not known
198. Principal causes of postharvest losses and poor quality in onion is due to
- (A) Sprouting and rooting
  - (B) Chilling injury
  - (C) High respiration rate
  - (D) Compositional changes
  - (E) Answer not known
199. Maturity indices for cabbage
- (A) Compact flower head
  - (B) Spear length
  - (C) Head size
  - (D) Head solidity
  - (E) Answer not known
200. Read the following statement and answer :
- I. Arils of pomegranate are stored well under controlled atmosphere with 0-5°C temperature and 15–20% CO<sub>2</sub>
  - II. Shredded carrots can be stored under controlled atmosphere with 0-5°C temperature, 5% O<sub>2</sub> and 5% CO<sub>2</sub>
- (A) Both are true
  - (B) Both are false
  - (C) I is true and II is false
  - (D) I is false and II is true
  - (E) Answer not known