

Sl. No. : 80001001

ACFHO

Register
Number

--	--	--	--	--	--	--	--	--	--

2014
HORTICULTURE

Time Allowed : 3 Hours]

[Maximum Marks : 300

Read the following instructions carefully before you begin to answer the questions.

IMPORTANT INSTRUCTIONS

1. This Booklet has a cover (this page) which should not be opened till the invigilator gives signal to open it at the commencement of the examination. As soon as the signal is received you should tear the right side of the booklet cover carefully to open the booklet. Then proceed to answer the questions.
2. This Question Booklet contains 200 questions. Prior to attempting to answer the candidates are requested to check whether all the questions are there in series without any omission and ensure there are no blank pages in the question booklet. In case any defect in the Question Paper is noticed it shall be reported to the Invigilator within first 10 minutes.
3. Answer all questions. All questions carry equal marks.
4. You must write your Register Number in the space provided on the top right side of this page. Do not write anything else on the Question Booklet.
5. An answer sheet will be supplied to you separately by the invigilator to mark the answers.
6. You will also encode your Register Number, Subject Code, Question Booklet Sl. No. etc. with Blue or Black ink Ball point pen in the space provided on the side 2 of the Answer Sheet. If you do not encode properly or fail to encode the above information, action will be taken as per commission's notification.
7. Each question comprises *four* responses (A), (B), (C) and (D). You are to select **ONLY ONE** correct response and mark in your Answer Sheet. In case you feel that there are more than one correct response, mark the response which you consider the best. In any case, choose **ONLY ONE** response for each question. Your total marks will depend on the number of correct responses marked by you in the Answer Sheet.
8. In the Answer Sheet there are **four** circles (A), (B), (C) and (D) against each question. To answer the questions you are to mark with Blue or Black ink Ball point pen **ONLY ONE** circle of your choice for each question. Select one response for each question in the Question Booklet and mark in the Answer Sheet. If you mark more than one answer for one question, the answer will be treated as wrong. *e.g.* If for any item, (B) is the correct answer, you have to mark as follows :

(A) ● (C) (D)
9. You should not remove or tear off any sheet from this Question Booklet. You are not allowed to take this Question Booklet and the Answer Sheet out of the Examination Hall during the examination. After the examination is concluded, you must hand over your Answer Sheet to the Invigilator. You are allowed to take the Question Booklet with you only after the Examination is over.
10. The sheet before the last page of the Question Booklet can be used for Rough Work.
11. Failure to comply with any of the above instructions will render you liable to such action or penalty as the Commission may decide at their discretion.
12. In all matters and in cases of doubt, the English Version is final.
13. Do not tick-mark or mark the answers in the Question booklet.

SEAL

SPACE FOR ROUGH WORK

00010008

1. Splitting of root is a physiological disorder in carrot caused by
(A) High temperature (B) Very low temperature
(C) Sudden increase in moisture level (D) High salinity
2. Which of the following is called 'mini cabbage'?
(A) Broccoli (B) Brussels sprout
(C) Red cabbage (D) Rhubarb
3. Which of the following is not correct?
(A) Chekkurmanis – *Sauropus androgynus*
(B) Celery – *Apium graveolens*
(C) Globe artichoke – *Cyanara scolymus*
(D) Leek – *Lactuca sativa*
4. Ratooning is practiced in
(A) Annual moringa (B) Brinjal
(C) Bhendi (D) Chilli
5. 'Guar gum' is obtained from
(A) Couper (B) Cluster bean
(C) Garlic (D) French bean
6. Gherkins are commercially used for making
(A) Salad (B) Pickles
(C) Chips (D) Sauerkraut
7. The species of pumpkin tolerant to high temperature is
(A) Cucurbita maxima (B) Cucurbita pepo
(C) Cucumis sativus (D) Cucumis anguina
8. The nursery area required to plant five hectares of brinjal is
(A) 800 m² (B) 4 cents
(C) 500 m² (D) 25 cents
9. Evaporative cooling system will work efficiently in places having
(A) Low temperature (B) High relative humidity
(C) Low relative humidity (D) High temperature

10. Which one of the following is not correct?
 (A) Chillies – Capsaicin (B) Bittergourd – Mornordicin
 (C) Garlic – Allicin (D) Tomato – Solasodine
11. The seedlings produced in modular trays are called
 (A) Stump (B) Micro liners
 (C) Plug (D) Sett
12. 'Gajendra' is a variety of
 (A) Taro (B) Sweet potato
 (C) Elephant foot yam (D) Greater yam
13. Among the solanaceous vegetables the seed rate is high for
 (A) Tomato (B) Brinjal
 (C) Chillies (D) Tomato and Brinjal
14. Seed balls containing one or many seeds are found in
 (A) Coriander (B) Carrot
 (C) Beetroot (D) Turnip
15. Best grades of gherkins are produced when it is harvested _____ days after anthesis
 (A) 4th and 5th day (B) 6th and 7th day
 (C) 8th and 9th day (D) 10th and 11th day
16. The only seed setting variety of aggregate onion is
 (A) Co-1 (B) Co-2
 (C) Co-4 (D) Co-5
17. Which one of the following is not a perennial vegetable?
 (A) Chekkurmanis (B) Asparagus
 (C) Artichoke (D) Cabbage

18. Most of the cultivars of big onion are long day plants and long days
- (A) Hasten bulb formation (B) Increase vegetative growth
(C) Induce flowering (D) Induce seed setting
19. Among the following vegetables which is normally planted on both the sides of ridges?
- (A) Potato (B) Onion
(C) Bhendi (D) Carrot
20. The present production of vegetable crops in India is about
- (A) 102 million tonnes (B) 132 million tonnes
(C) 162 million tonnes (D) 182 million tonnes

21. Match List 1 with List 2 and select the correct answer using the code given below the lists

List 1		List 2	
(a)	Kottaivazhai	1.	MH
(b)	Blossom thinning	2.	2,4 D
(c)	Fruit ripening	3.	NAA
(d)	Dormancy	4.	Ethrel

Code :

	(a)	(b)	(c)	(d)
(A)	3	2	4	1
(B)	2	3	1	4
(C)	2	3	4	1
(D)	3	2	1	4

22. Match List 1 with List 2 and select the correct answer using the code given below the lists

List 1		List 2	
(a)	Smudging	1.	Silver oak
(b)	Coppicing	2.	Fig
(c)	Pollarding	3.	Mango
(d)	Notching	4.	Eucalyptus

Code :

	(a)	(b)	(c)	(d)
(A)	4	3	2	1
(B)	3	4	1	2
(C)	3	4	2	1
(D)	4	1	3	2

23. Match List 1 with List 2 and select the correct answer using the code given below the lists

- | List 1 | | List 2 | |
|--------|--------------|--------|----------------------|
| (a) | Lawn | 1. | Drip irrigation |
| (b) | Bottle gourd | 2. | Misting |
| (c) | Carnation | 3. | Sprinkler irrigation |
| (d) | Coconut | 4. | Furrow irrigation |

Code :

- | | (a) | (b) | (c) | (d) |
|-----|-----|-----|-----|-----|
| (A) | 3 | 4 | 2 | 1 |
| (B) | 3 | 2 | 4 | 1 |
| (C) | 3 | 1 | 2 | 4 |
| (D) | 2 | 3 | 1 | 4 |

24. Match List 1 with List 2 and select the correct answer using the code given below the lists

- | List 1 | | List 2 | |
|--------|-------------|--------|------------|
| (a) | Isabgol | 1. | Colchicine |
| (b) | Gloriosa | 2. | Roots |
| (c) | Senna | 3. | Husk |
| (d) | Sarpagandha | 4. | Leaves |

Code :

- | | (a) | (b) | (c) | (d) |
|-----|-----|-----|-----|-----|
| (A) | 4 | 1 | 2 | 3 |
| (B) | 3 | 1 | 2 | 4 |
| (C) | 3 | 1 | 4 | 2 |
| (D) | 4 | 2 | 3 | 1 |

25. The seeds of seedless watermelon are produced by crossing a tetraploid with a deploid

- (A) Not correct
- (B) Not possible
- (C) Correct
- (D) Will be a failure

26. ● Assertion (A) : Mulching in Turmeric is done six months after planting
Reason (R) : Mulching can be done with green leaves or banana pseudostem or sugarcane trash
- (A) A is true and R is false
(B) Both A and R are true
(C) Both A and R are false
 (D) R is true and A is false
27. Assertion (A) : Bitter pit in Apple is due to Calcium deficiency
Reason (R) : Bitter pit causes colour change in fruits and develops cracks
- (A) Both A and R are true
(B) Both A and R are false
(C) A is true but R is false
(D) R is true and A is false
28. Assertion (A) : Edible bananas are parthenocarpic
Reason (R) : Edible bananas develop fruits without pollination
- (A) Both A and R are true
(B) A is true but R is false
(C) Both A and R are false
(D) A is false but R is true
29. Consider the statements
- I Propping is done in banana
II Denaveling is practised in grapes
III Desuckering is followed in citrus
IV Notching is done in mango
- (A) I alone is correct (B) I and II are correct
(C) I, II and III are correct (D) I and IV are correct
30. Consider the statements
- I Multitier cropping involves intercropping and mixed cropping
II In multitier cropping land is effectively used
III In multitier water is effectively used
IV In multitier sun light is not effectively used
- (A) I alone is correct (B) II and III are correct
 (C) I, II and III are correct (D) I, III and IV are correct

31. Consider the statements
- I Notching is a partial ringing of a branch above a dormant lateral bud
 II Notching produces a strong shoot
 III Notching reduces the supply of water from below through the xylem
 IV Notching is otherwise called as ringing
- (A) I and II are correct (B) I, II and III are correct
 (C) III and IV are correct (D) II and IV are correct
32. The vegetable which does not belong to cucurbitaceae is
- (A) Gherkin (B) Tinda
 (C) Knol-khol (D) Pointed gourd
33. _____ can be economically grown under rain fed conditions
- (A) Gloriosa (B) Coleus
 (C) Senna (D) Brahmi
34. Centering is the practice followed in
- (A) Cashew (B) Coffee
 (C) Areca nut (D) Tea
35. The nitrogen content in FYM is
- (A) 1.0 – 1.5% (B) 0.05 – 0.07%
 (C) 2.0 – 2.5% (D) 0.5 – 0.7%
36. Which one of the following growth regulators is used to increase latex flow in rubber?
- (A) GA₃ (B) BA
 (C) IAA (D) Ethrel
37. Sod culture reduces the incidence of _____ in mango
- (A) Malformation (B) Black-tip
 (C) Fruit drop (D) Spongy tissue
38. Quincunx system of planting is otherwise called as
- (A) Triangular system (B) Diagonal system
 (C) Hexagonal system (D) Square system

39. _____ are quick growing fruit crops which are grown as intercrops in fruit orchards

- (A) Fillers (B) Cover crops
 (C) Trap crops (D) Tier crops

40. Leaf mould is rich in

- (A) Humus (B) Potash
 (C) Phosphoric acid (D) Phosphorus

41. Match the following

Name of the crops	Presence of esters
(a) Grapes	1. Pentyl valerate
(b) Apple	2. Ethyle butyrate
(c) Orange	3. Methyle salicylate
(d) Strawberry	4. Octyl acetate

Code :

	(a)	(b)	(c)	(d)
(A)	3	1	2	4
(B)	3	2	1	4
(C)	1	3	2	4
<input checked="" type="checkbox"/> (D)	3	1	4	2

42. Which of the following is resistant to cold injury?

- (A) Cucumber (B) Chilli
 (C) Asparagus (D) Musk melon

43. National Research Centre for orchids is located at

- (A) Solan, Himachal (B) Bhubaneshwar, Orisa
 (C) Pakyong, Sikkim (D) Medziphema, Nagaland

44. Which form of sugar is predominantly present in grapes at ripening?

- (A) Lactose (B) Glucose
 (C) Maltose (D) Hemi cellulose

45. WTO is located at

- (A) Berlin, Germany (B) Geneva, Switzerland
 (C) Paris, France (D) Rome, Italy

46. Name the fruit crop having the highest fat content
(A) Date palm (B) Avocado
(C) Custard apple (D) Litchi
47. Around 70 percent of potato was exported from India during 2012-13 to
(A) United Arab Emirates (B) Nepal
(C) Malaysia (D) Bangladesh
48. Name the country importing 60 percent of the mango from India during 2012-13
(A) Bangladesh (B) United Arab emirates
(C) United kingdom (D) Malaysia
49. The leading tapioca producing state in India during 2012-13 was
(A) Kerala (B) Tamil Nadu
(C) Madhya Pradesh (D) Andra Pradesh
50. Name the state standing first in mango production in India during 2012-13
(A) Gujarath (B) Karnataka
(C) Uttar Pradesh (D) Andhra Pradesh
51. Among the several states, the top four states of India, producing fruits are as follows as per 2012-13 figure
(A) Andhra > Maharashtra > Gujarath > Tamil Nadu
(B) Tamil Nadu > Gujarath > Andhra > Maharashtra
(C) Gujarath > Tamil Nadu > Andhra > Maharashtra
(D) Maharashtra > Tamil Nadu > Andhra > Gujarath
52. Among the vegetables, which was the one cultivated in the maximum area in India during 2012-13
(A) Onion (B) Tomato
(C) Potato (D) Brinjal

53. ● Average productivity of horticultural crops in India during 2007-08 was
(A) 9.3 tonnes per hectare (B) 11.3 tonnes per hectare
(C) 13.3 tonnes per hectare (D) 17.3 tonnes per hectare
54. Total geographical area in India is
(A) 629 million hectare (B) 529 million hectare
(C) 429 million hectare (D) 329 million hectare
55. National Bureau of Plant Genetics resources is located at
(A) Bangalore (B) Nagpur
(C) New Delhi (D) Karnal
56. National Research Centre for pomegranate is located at
(A) Solapur, Maharashtra (B) Bijapur, Karnataka
(C) Anantapur, Andhra Pradesh (D) Jagdalpur, Chattisgarh
57. Central Institute of Arid Horticulture is located at
(A) Rajah mundry, Andra Pradesh (B) Nagpur, Maharashtra
(C) Kanpur, Uttar Pradesh (D) Bikaner, Rajasthan
58. The Science of growing and caring of ornamental trees is called
(A) Viticulture (B) Pomology
(C) Olericulture (D) Arboriculture
59. Hydroponics is an art of growing plants
(A) Without soil and nutrients (B) Without soil alone
(C) Without nutrients and chemicals (D) Without nutrients alone
60. Among the following, the maximum content of carbohydrate is found in
(A) Banana fruit (B) Sweet potato tuber
(C) Dates (D) Avocado fruits

61. Japanese art of growing miniature trees and shrubs is called as
 (A) Terrarium (B) Arboratium
 (C) Bonsai (D) Pot Pourri
62. Example for a foliage tree is
 (A) Cassia fistula (B) Polyalthia longifolia
 (C) Delonix regia (D) Bauhinia purpurea
63. Example for herbaceous perennial is
 (A) Golden red (B) Zinnia
 (C) Cosmos (D) Balsam
64. A non-flowering climber with attractive foliage is
 (A) Quisqualis indica (B) Allamanda grandiflora
 (C) Petrea volubilis (D) Hedera helix
65. Suitable irrigation system for lawn is
 (A) Drip irrigation (B) Flood irrigation
 (C) Pitcher irrigation (D) Sprinkler irrigation
66. Botanical name for bermuda grass is
 (A) Cyprus rotundus (B) Cyprus deformis
 (C) Cynodon dactylon (D) Lolium multiflorum
67. Plant suitable for boundary/tall hedge is
 (A) Gerbera (B) Coleus
 (C) Iresine (D) Bougainvillea
68. Yellow coloured flowering annual is
 (A) Rose (B) Tuberose
 (C) Marigold (D) Bougainvillea

69. Hill garden, tea garden and flat garden are components of
- (A) Japanese garden (B) Moghul garden
(C) English garden (D) Italian garden
70. Art of training plants into different shapes is called as
- (A) Trophy (B) Carpet bed
(C) Terrarium (D) Topiary
71. Fragrant oil can be extracted from
- (A) Crossandra (B) Gomphrena
(C) Zinnia (D) Jasmine
72. Friendship is a variety of
- (A) Jasmine (B) Carnation
(C) Gerbera (D) Gladiolus
73. The variety of tomato recommended for rainfed cultivation is
- (A) Arka Meghali (B) CO-3
(C) PKM-1 (D) Paiyur - 1
74. Botanical name of African marigold is
- (A) Tagetes erecta (B) Tagetes patula
(C) Petunia hybrida (D) Helianthus annuus
75. Miniature roses are ideally suited for
- (A) Water garden (B) Pots
(C) Terrarium (D) Edges
76. Tuberose is propagated by
- (A) Rhizomes (B) Runners
(C) Bulbs (D) Tubers

77. Ornamental palms can be propagated by
 (A) Seeds (B) Grafting
 (C) Bulbs (D) Budding
78. Chrysanthemum is a _____ plant
 (A) Long day (B) Day neutral
 (C) Short day (D) Photo insensitive
79. Optimum spacing for Jasminum sambac is
 (A) 90 × 60 cm (B) 1.0 × 0.5 m
 (C) 1.25 × 1.25 m (D) 2.0 × 0.9 m
80. Jasmine belongs to the family
 (A) Acanthaceae (B) Apocynaceae
 (C) Oleaceae (D) Malvaceae
81. Botanically, pineapple fruit is a
 (A) Syconium (B) Sorosis
 (C) Berry (D) Balusta
82. Pomegranate is commercially propagated through
 (A) Soft wood cuttings (B) Grafting
 (C) Hard wood cuttings (D) Suckers
83. For flowering, the chilling temperature requirement of strawberry plants is
 (A) Below 0°C (B) Below 5°C
 (C) Below 10°C (D) Below 15°C
84. In self unfruitful pear varieties a pollinizer should be planted at
 (A) Every 4th tree in every 4th row (B) Every 5th tree in every 5th row
 (C) Every 6th tree in every 6th row (D) Every 7th tree in every 7th row

85. ● The amount seeds required to raise seedling for one hectare of papaya is
(A) 500g (B) 1,000g
(C) 1,500g (D) 2,000g
86. For long distance transport strawberries can be harvested when they are
(A) Green (B) Yellow
(C) Red (D) Black
87. The mango variety most suited for high density planting is
(A) Sindhu (B) Bangalora
(C) Amrapali (D) Mulgoa
88. Granulation in citrus can be reduced by spraying
(A) Manganese (B) Copper
(C) Magnesium (D) Boron
89. Bahar treatment is practiced in
(A) Citrus, pomegranate and guava (B) Mango, sapota and pineapple
(C) Apple, pear and plum (D) Grapes and papaya
90. The regular bearing mango variety is
(A) Bangalora (B) Banganapalli
(C) Peter (D) Jahangir
91. Berry elongation and thinning in grapes is done with
(A) Ethephon (B) GA₃
(C) NAA (D) 2, 4-D
92. In pineapple, planting of _____ will come to harvest earlier
(A) Crowns (B) Slips
(C) Suckers (D) Seeds

93. Find out the mismatch
- | | | |
|---|---|----------------|
| (A) Spinach | - | Chenopodiaceae |
| (B) Multivitamin green | - | Euphorbiaceae |
| <input checked="" type="checkbox"/> (C) Asparagus | - | Asteraceae |
| (D) Winged bean | - | Fabaceae |
94. In banana, the fertilizers should be applied during _____, _____ and _____ month after planting
- | | |
|---|---|
| (A) 2 nd , 4 th and 6 th | <input checked="" type="checkbox"/> (B) 3 rd , 5 th and 7 th |
| (C) 4 th , 6 th and 8 th | (D) 6 th , 8 th and 10 th |
95. In Ber, under rainfed conditions, the radius of saucer basin for rain water harvest should be
- | | |
|---------|---|
| (A) 2 M | <input checked="" type="checkbox"/> (B) 3 M |
| (C) 4 M | (D) 5 M |
96. For chemical thinning of pear fruits, spraying of NAA @ 25 PPM is done during
- | | |
|--------------------------------|---|
| (A) 3-8 days before petal fall | <input checked="" type="checkbox"/> (B) 3-8 days after petal fall |
| (C) 6 weeks after blooming | (D) 6 weeks before blooming |
97. The widely cultivated Indian Ber is
- | | |
|------------------------------|--|
| (A) <i>Zizyphus jujube</i> | <input checked="" type="checkbox"/> (B) <i>Zizyphus mauritiana</i> |
| (C) <i>Zizyphus vulgaris</i> | (D) <i>Zizyphs sativa</i> |
98. Paddy straw mulching is commercially followed for
- | | |
|--|------------|
| (A) Pineapple | (B) Annona |
| <input checked="" type="checkbox"/> (C) Strawberry | (D) Peach |
99. Fasciation is found in
- | | |
|---|------------|
| (A) Guava | (B) Mango |
| <input checked="" type="checkbox"/> (C) Pineapple | (D) Banana |
100. Bending is an intercultural operation performed in
- | | |
|------------|---|
| (A) Papaya | <input checked="" type="checkbox"/> (B) Guava |
| (C) Sapota | (D) Aonla |

101. Which one of the following is correctly matched?
- | | | |
|---|---|--|
| (A) Carnauba Wax | - | Provide effective control of weight loss |
| <input checked="" type="checkbox"/> (B) Shellac based waxes | - | Give best shine |
| (C) Polythene based waxes | - | Cause rind injury |
| (D) Resin based waxes | - | Give low shine |
102. During picking, care must be taken to avoid any possible damages to the
- | | |
|---|-----------|
| (A) Twigs | (B) Canes |
| <input checked="" type="checkbox"/> (C) Spurs | (D) Buds |
103. Relative humidity should be monitored with
- | | |
|-----------------|--|
| (A) Humidifier | <input checked="" type="checkbox"/> (B) Hygrometer |
| (C) Tensiometer | (D) None of the above |
104. Which one of the following is correctly matched?
- | | | |
|--|---|---------------|
| (A) Very low ethylene production rate | - | Mango |
| (B) Moderate ethylene production rate | - | Papaya |
| (C) High ethylene production rate | - | Citrus |
| <input checked="" type="checkbox"/> (D) Very high ethylene production rate | - | Passion fruit |
105. Which one of the following is correctly matched?
- | | | |
|---|---|-----------------------|
| <input checked="" type="checkbox"/> (A) Polemounted cut and hold picking shears | - | Jack |
| (B) Hook type fruit plucker | - | High density Orchards |
| (C) Mechanical harvester | - | Mango |
| (D) Manual harvesting | - | Strawberries |
106. Which one of the following is correctly matched?
- | | | |
|---|---|------------------------------|
| (A) Lye peeling | - | Apples, Peaches and cherries |
| <input checked="" type="checkbox"/> (B) Flame peeling | - | Garlic and onion |
| (C) Mechanical peeling | - | Irregular shaped fruits |
| (D) Hand peeling | - | 1-2% caustic soda |

107. Which one of the following is correctly matched?

- (A) Penicillium sp. – Causes spoilage of canned fruits
- (B) Aspergillus sp. – Blue moulds
- (C) Mucor sp. – Grey mould
- (D) Byssochlamys fulva – Black mould

108. Consider the statements

- (i) The inhibitory action of preservatives is due to their interference with the mechanism of cell division, permeability of cell membrane, and activity of enzymes
- (ii) Sulphur-di-oxide has good preserving action against bacteria and moulds
- (iii) Sulphur-di-oxide increases mono enzymatic browning
- (iv) Sulphur-di-oxide is not generally used in the form of its salts such as sulphite, bi sulphite and meta bi sulphite

Of the above statements

- (A) (i) alone correct
- (B) (i) and (ii) are correct
- (C) (i), (ii) and (iii) are correct
- (D) All are correct

109. During fruit juice canning pasteurization is done at the temperature of

- (A) 71° C
- (B) 74° C
- (C) 77° C
- (D) 80° C

110. Consider the statements

- (i) For each increase of 10° C above optimum, rate of deterioration increases by two to three fold
- (ii) Rate of enzymatic reactions decreases with increase in temperature
- (iii) Rate of chemical reactions approximately doubles for each 10° C rise in temperature
- (iv) Temperature below optimum range for a given commodity causes freezing or chilling injury

Of the above statements

- (A) (i) alone correct
- (B) (i) and (ii) are correct
- (C) (i), (ii) and (iii) are correct
- (D) (i), (iii) and (iv) are correct

111. Consider the statements

- (i) The 'continuous agitating cookers' are generally used in big production units for canning of fruits
- (ii) By using the 'continuous agitating cookers' the processing time is reduced considerably during canning of fruits
- (iii) Fruits require much severe sterilization than non acid vegetables
- (iv) Non-acid vegetables require to be processed at temperatures much above 100° C

Of the above statements

- (A) (i) alone correct
- (B) (i) and (ii) are correct
- (C) (i), (ii) and (iii) are correct
- (D) (i), (ii) and (iv) are correct

112. Air is evacuated by vacuum pump to achieve desired low pressure in

- (A) Refrigerated storage
- (B) Air Cooled storage
- (C) Hydrobaric storage
- (D) Controlled atmospheric storage

113. Re-usable packaging material is

- (A) Stretch film
- (B) Film wrap
- (C) Cellophane
- (D) Polypropylene corrugated box

114. Which one of the following post harvest application of hormones is correctly matched?

- (A) Gibberellins - Inhibits onion sprouting
- (B) Cytokinins - Retards ripening of tomato
- (C) 2, 4 D + BA - Retards yellowing of cauliflower
- (D) Maleic hydrazide - Retards maturity of leafy vegetables

115. Best time for picking fruits is during

- (A) Evening hours
- (B) Early morning
- (C) Mid day
- (D) Night hours

116. The ideal temperature for storage often depends on the

- (A) Size and shape of the product
- (B) Nutrient content of the product
- (C) Geographical origin of the product
- (D) Colour of the product

117. The concentration of hot brine solution for covering vegetables is

- (A) 1 - 3 percent
- (B) 3 - 5 percent
- (C) 5 - 7 percent
- (D) 7 - 9 percent

118. During preparation of vinegar sliced fruit and sugar juice are mixed in proportion of
- (A) 2 : 1 (B) 3 : 1
 (C) 4 : 1 (D) 5 : 1
119. In respect of world vegetable production, India ranks
- (A) First (B) Second
 (C) Third (D) Fourth
120. Products harvested from hot fields have
- (A) High rates of transpiration (B) High rates of respiration
 (C) High rates of chilling injury (D) High rates of evaporation
121. Budding is most commonly done when there is
- (A) Early initiation of growth in plants (B) No gap flow in plants
 (C) Late initiation of growth in plants (D) Good sap flow in the plant
122. Mango seeds lose their viability within :
- (A) 3 - 4 weeks (B) 4 - 5 weeks
 (C) 3 - 4 months (D) 4 - 5 months
123. In nutmeg, the sex problem can be overcome by
- (A) Seed propagation (B) Softwood grafting
 (C) Budding (D) Epicotyl grafting
124. Garlic is propagated by cloves. The alternate method of propagation is by using :
- (A) Corm (B) Seed
 (C) Bulbils (D) Bulbs
125. Which one of the following is correctly matched?
- (A) CO₂ - Hormonal effect
 (B) Ethylene - Root initiation
 (C) Auxin - Senescence
 (D) Cells - Totipotency

126. Synthetic seeds in vegetables are produced by

- (A) Embryo rescue (B) Micro propagation
(C) Somatic embryo genesis (D) Anther culture

127. Consider the statements

Double working in grafting or budding to avoid incompatibility and is done by :

- (1) Using two parts viz; scion and root stock
(2) Using three parts viz, root stock, scion and interstock
(3) Using two parts viz, root stock and interstock
(4) Using two parts viz, scion and interstock

Of the statements

- (A) 1 alone is correct (B) 2 alone is correct
(C) 1, 2 and 3 are correct (D) All are correct

128. Which one of the following is correctly matched and write the correct code.

List - I

- (a) Hermetical seal
(b) Accelerated ageing
(c) Cryopreservation
(d) Tetrazolium

List - II

1. Seed viability
2. Low temperature
3. High temperature
4. Aluminium pouches

- | | (a) | (b) | (c) | (d) |
|-----|-----|-----|-----|-----|
| (A) | 2 | 4 | 1 | 3 |
| (B) | 4 | 3 | 2 | 1 |
| (C) | 2 | 1 | 3 | 4 |
| (D) | 1 | 3 | 2 | 4 |

129. Citranges, the potential root stock of citrus has originated as a result of cross between

- (A) Citrus sinensis × Trifoliate orange (B) Sweet orange × Mandarin
(C) Trifoliate orange × Sweet orange (D) Trifoliate orange × Mandarin

130. Dwarfing root stock used in high density planting of ber is

- (A) Z. jujuba (B) Z. nummularia
(C) Z. lotus (D) Z. rotundifolia

131. Recalcitrants are those

- (A) Seeds germinating only after the process of ripening
- (B) Seeds germinating prior to fruit maturity
- (C) Seeds germinating immediately after ripening and harvest
- (D) Seeds germinating after prolonged storage and drying

132. Vivipary is observed in

- (A) Avocado
- (B) Jack fruit
- (C) Coffee
- (D) Mango

133. Clove is propagated by

- (A) Budding
- (B) Seed
- (C) Grafting
- (D) Layering

134. Match the correct answers and write the correct code

- | | | |
|------------------------|----|--|
| (a) Kurukkan | 1. | Northern spy X m-series |
| (b) Old Home | 2. | Salt resistant polyembryonic root stock of mango |
| (c) Kalapady | 3. | Nematode resistant root stock |
| (d) Citrus macrophylla | 4. | Dwarf polyembryonic mango root stock |

Now write the correct code

- | | (a) | (b) | (c) | (d) |
|---|-----|-----|-----|-----|
| (A) | 1 | 2 | 3 | 4 |
| (B) | 3 | 1 | 4 | 2 |
| <input checked="" type="checkbox"/> (C) | 2 | 1 | 4 | 3 |
| (D) | 4 | 3 | 2 | 1 |

135. Chow-Chow is propagated by

- (A) Seed
- (B) Vine cutting
- (C) Entire fruit
- (D) Tuber

136. Choose the right answer

- (A) Top working in cashew is done in six months old root stock
- (B) Top working in cashew is done on 20-25 years old senile tree
- (C) Top working in cashew is done on dead trees
- (D) Top working in cashew is done on disease affected branches

137. The variety of turmeric suitable for drought and saline soil is

- (A) IISR Prathibha (B) Ranga
(C) Rasmi (D) CO-1

138. The temporary shade tree suitable for planting in cardamom plantation is

- (A) Artocarpus fraxini folius (B) Cedrella loona
(C) Diospyrous ebenum (D) Erythrina lithosperma

139. Multiple selection

- (1) Carrot is an annual requiring one seasons to complete its root growth.
(2) Carrot is a biennial and requires two seasons for maturing a crop of seed
(3) Stecklings are planted to produce seed
(4) Carrot is commercially propagated through stecklings

Of these statements, write the correct one

- (A) 1 alone is correct (B) 1 and 2 are correct
(C) 1, 2 and 3 are correct (D) 4 is correct

140. Match the following with correct answers and write the code

- | | |
|---------------|--------------------------------------|
| (a) Radicle | 1. Stem extending cotyledon and root |
| (b) Hypocotyl | 2. Rudimentary root |
| (c) Cotyledon | 3. Miniature shoot |
| (d) Plumule | 4. Leaves |

- | | (a) | (b) | (c) | (d) |
|-----|-----|-----|-----|-----|
| (A) | 1 | 2 | 4 | 3 |
| (B) | 2 | 1 | 4 | 3 |
| (C) | 4 | 1 | 3 | 2 |
| (D) | 3 | 2 | 1 | 4 |

141. The extraction of sap from Palmyrah inflorescence is known as

- (A) Staking (B) Tapping
(C) Cutting (D) Trimming

142. Feni is prepared from

- (A) Oil palm (B) Arecanut
(C) Coconut (D) Cashew

143. Cashew belongs to the family of
 (A) Musaceae (B) Anacardiaceae
 (C) Rutaceae (D) Rhamnaceae
144. In Tamil Nadu, Coconut Research Station is situated at
 (A) Srivilliputhore (B) Arupukottai
 (C) Vaepankulam (D) Vathalagundu
145. The flowering behaviour of cocoa belongs to
 (A) Auxillary (B) Terminal
 (C) Cauliflorous (D) Terminal and auxillary
146. Rubber is propagated commercially through
 (A) Cuttings (B) Layerings
 (C) Buddings (D) Graftings
147. The general fertilizer recommendation for turmeric is
 (A) 125 : 60 : 60 Kg NPk/ha (B) 150 : 100 : 100 Kg NPk/ha
 (C) 250 : 125 : 125 Kg NPk/ha (D) 300 : 150 : 150 Kg NPk/ha
148. Turmeric belongs to the family of
 (A) Rubiaceae (B) Zingiberaceae
 (C) Euphorbiaceae (D) Anacardiaceae
149. The mutant variety in ginger is
 (A) Rio-de-Janeiro (B) Suprabha
 (C) Surari (D) Suruchi
150. Trashing is an important intercultural operation for
 (A) Pepper (B) Cardamom
 (C) Turmeric (D) Ginger
151. The inflorescence in cardamom is termed as
 (A) Panicle (B) Spike
 (C) Cyme (D) Raceme

152. Theaflarins in tea is responsible for
 (A) Texture (B) Colour
 (C) Smell (D) Consistency
153. Panchami is a variety of
 (A) Cardamom (B) Pepper
 (C) Ginger (D) Turmeric
154. Pepper is propagated commercially through
 (A) Leaf cutting (B) Vine cutting
 (C) Root cutting (D) Layering
155. The botanical name of commercially cultivated pepper is
 (A) Piper mullesua (B) Piper cubeba
 (C) Piper nigrum (D) Piper longum
156. SVPR – 1 is a variety of
 (A) Arecanut (B) Oil palm
 (C) Palmyrah (D) Coconut
157. The oil is patchouli is obtained from
 (A) Fresh leaves (B) Fresh roots
 (C) Shade dried leaves (D) Dried flowers
158. The hybrid tenera belongs to
 (A) Coconut (B) Arecanut
 (C) Oil palm (D) Palmyrah
159. In India, Coconut is largely cultivated in
 (A) Tamil Nadu (B) Kerala
 (C) Karnataka (D) Andhra Pradesh
160. Cocoa is commercially propagated through
 (A) Seeds (B) Cuttings
 (C) Layerings (D) Budding

161. RR11 208 is a variety of
(A) Tea (B) Coffee
(C) Rubber (D) Cocoa
162. _____ is the state flower of Tamil Nadu.
(A) Gladiolus (B) Aster
(C) Glory lily (D) Jasmine
163. Coffee originated from
(A) India (B) Ethiopia
(C) Brazil (D) Australia
164. Tea is propagated through
(A) Layering (B) Cutting
(C) Grafting (D) Budding
165. The Central Plantation Crop Research Institute is located at
(A) Kottayam (B) Kasargod
(C) Vellanikara (D) Cochin
166. Tamarind is commercially propagated through
(A) Seeds (B) Cutting
(C) Layering (D) Micro propagation
167. The medicinal principle of Solanum Khaisianum is
(A) Tylo phorine (B) Cathartine
(C) Solasodine (D) Vincristine
168. During vedic period _____ is the Lord of Ayurvedic healing
(A) Lord Muruga (B) Lord Shiva
(C) Lord Dhanvantri (D) Lord Vaitheeswara
169. Geranium is propagated through
(A) Seeds (B) Terminal cuttings
(C) Suckers (D) Rhizomes

170. ● Apricot can be classified under

- (A) Pome (B) Pepo
(C) Berry (D) Drupe

171. _____ is a medicinal plant which is a climbing perennial.

- (A) Ashmagandha (B) Sarpagandha
(C) Aloe vera (D) Glory Lily

172. Horticultural practice followed for bud formation and fruit growth is

- (A) Bending (B) Gridling
(C) Root pruning (D) Smudging

173. Sona is a high yielding variety of _____ crop released from CIMAP.

- (A) Colepus (B) Peri winkle
(C) Solanum (D) Senna

174. The crop widely used in cosmetic industry is

- (A) Ashmagandha (B) Coleous
(C) Aloe vera (D) Mint

175. The Sennoside content present in the pods of Senna is

- (A) 2.5 – 25% (B) 1.25 – 2.5%
(C) 25 – 50% (D) 0.25 – 0.3%

176. _____ tree is most suitable for avenue planting

- (A) Delonix regia (B) Michelia Champaka
(C) Saraca indica (D) Ficus religiosa

177. The alkaloid present in Ashmagandha is

- (A) Solasodine (B) Vincristine
(C) Piperine (D) Withanine

178. Aloe vera is propagated through
(A) Seeds (B) Tubers
(C) Leaf cuttings (D) Root suckers
179. Double variety of tuberose is
(A) Rakthagandha (B) Super Star
(C) Calcutta Double (D) Friendship
180. _____ is a variety of lemon grass released from Aromatic and medicinal plants research station, Kerala
(A) Savithiri (B) Sugandhi
(C) Anburani (D) Sunanthini
181. _____ is shallow rooted and requires frequent irrigation
(A) Ocimum (B) Mint
(C) Geranium (D) Citronella
182. The ideal pH for rooting of cutting is
(A) 5.5 - 6.5 (B) 4.5 - 5.0
(C) 6.5 - 7.0 (D) 5.0 - 5.5
183. Which plantation crop is heliotropic in nature?
(A) Cocoa (B) Coconut
(C) Coffee (D) Arecanut
184. In avacado, softening during ripening is due to
(A) Hydrolysis of fat (B) Breakdown of starch
(C) Degradation of Chlorophyll (D) Break down of proteins
185. Alkaline soil can be reclaimed by applying
(A) Lime (B) Potassium sulphate
(C) Gypsum (D) Epsom

186. Nutmeg is
- (A) Monoecious (B) Dioecious
(C) Gynomonoecious (D) Gyno dioecious
187. Fruit drop in chilli is controlled by spraying
- (A) NAA (B) Triacantanol
(C) IAA (D) Both (A) and (B)
188. Fruit necrosis in anola is due to deficiency of
- (A) Calcium (B) Phosphorus
(C) Boron (D) Iron
189. Abnormal leaf fall is mainly due to the accumulation of
- (A) ABA (B) Cytokinin
(C) GA (D) Ethylene
190. The botanical name of phalsa is
- (A) *Grewia subinequalis* (B) *Phydis peruviana*
(C) *Garcinia cowa* (D) *Garcinia mangostona*
191. Low temperature in banana leads to
- (A) Chocking (B) Flushing
(C) Flowering (D) Scorching
192. Pollination and fertilization takes place but the embryo gets aborted resulting in seedlessness is known as
- (A) Stimulative parthenocarpy
(B) Vegetative parthenocarpy
(C) Stenospermo carpy
(D) Polyembryony

193. _____ is a variety of guava, fruits of which are pyriform in shape
(A) Lucknow-49 (B) Lucknow-46
(C) Arka mridula (D) Chittidar
194. The movement of auxin is
(A) Lateral (B) Basipetal
(C) Acropetal (D) Immobile
195. Initiation of flower bud makes the ends of _____ phase.
(A) Reproductive phase (B) Vegetative phase
(C) Juvenile phase (D) Seedling emergence phase
196. Pre-harvest fruit drop in citrus is controlled by spraying _____
(A) 2, 4 - D (B) GA₃
(C) Ethephon (D) MH
197. Gynodioecious type of sex forms is seen in
(A) Papaya (B) Grapes
(C) Mango (D) Guava
198. Bud netting is done in
(A) Orchids (B) Jasmine
(C) Rose (D) Gerbera
199. A phenomenon of gynoecium maturing earlier than androecium is called :
(A) Protandry (B) Protogyny
(C) Heterostyly (D) Herkogamy
200. January - February flowering season is called as :
(A) Mrig bahar (B) Ambe bahar
(C) Hasta bahar (D) None of the above