

Sl. No. :

FAHOR

Register
Number

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2018

**HORTICULTURE
(Degree Standard)**

Time Allowed : 3 Hours]

[Maximum Marks : 300

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

IMPORTANT INSTRUCTIONS

1. The applicant will be supplied with Question Booklet 15 minutes before commencement of the examination.
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 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 and get it replaced with a complete Question Booklet. If any defect is noticed in the Question Booklet after the commencement of examination it will not be replaced.**
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 Room Invigilator to mark the answers.
6. You will also encode your Question Booklet Number 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 time of 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. Do not tick-mark or mark the answers in the Question Booklet.
12. Applicants have to write and shade the total number of answer fields left blank on the boxes provided at side 2 of OMR Answer Sheet. An extra time of 5 minutes will be given to specify the number of answer fields left blank.
13. 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.

SEAL

1. India has the capacity to process _____ metric tonnes of cocoa beans.
- (A) 25,000 (B) 20,000
(C) 28,000 (D) 30,000
2. The annual import of raw cashewnut from African countries is _____ lakh tonnes.
- (A) 3-4 (B) 5-6
(C) 8-9 (D) 9-10
3. _____ is a leading exporter of herbal materials.
- (A) India (B) China
(C) USA (D) Japan
4. World's largest producer of banana
- (A) Australia (B) China
 (C) India (D) Srilanka
5. The country ranks first in the productivity of pea
- (A) Spain (B) China
 (C) India (D) Germany
6. The major importer of processed products from India
- (A) UAE (B) USA
 (C) Russia (D) UK
7. The scientific Horticulture consists of the following divisions. Among them, which division provides more employment
- (A) Fruits (B) Flowers
(C) Spices (D) Plantations

8. Is a parthenocarpic fruits develops from the stimulus of the pollination, but without fertilization, it is known as
- (A) Vegetative parthenocarpy (B) Seed formation
 (C) Stimulative parthenocarpy (D) Flower induction
9. The growth and development of plants consists of two distinct phases like
- (A) Vegetative and reproductive phases (B) Stem and root phases
 (C) Flower and seed phases (D) Fruits and flower phases
10. _____ includes all the sequential steps from the time the seed imbibes water till the seedling is self sustaining.
- (A) Photosynthesis (B) Germination
 (C) Transpiration (D) Translocation
11. The occurrence of asexual reproductive process in the place of the normal seed reproductive process of reduction division and fertilization is known as
- (A) Pollination (B) Parthenocarpy
 (C) Fertilization (D) Apomixis
12. Plants which produce both apomictic and sexual embryos are called
- (A) Facultative apomicts (B) Adventitious embryony
 (C) Obligate apomicts (D) Recurrent apomixis
13. The receptivity of the stigma and viability of pollen occur in different periods is called as
- (A) Heterostyly (B) Dioecious
 (C) Dichogamy (D) Monoecious
14. _____ is responsible for ripening of fruits.
- (A) Gibberellic acid (B) Auxin
 (C) Ethylene (D) Cytokinin

28. Fig is commercially propagated by
- (A) Seed (B) Budding
 (C) Hard wood cutting (D) Grafting
29. _____ is the best method of irrigating steep and terraced lands.
- (A) Over head irrigation (B) Furrow irrigation
 (C) Bed irrigation (D) Ring irrigation
30. The complementary interactions in plants augmenting yield and performance of crops is known as
- (A) Annidation (B) Alleviation
 (C) Allelopathy (D) Boundary cropping
31. Field crops, fruit crops and fodder crops are components of which system of cropping?
- (A) Horti-Silvicultural system (B) Agri-Horti-Pastoral system
 (C) Horti-Silvi-Pastoral system (D) Horti-Pastoral system
32. The method of establishing a suitable grass to check soil erosion is known as
- (A) Pisciculture (B) Sod culture
 (C) Clean cultivation (D) Cover cropping
33. Dipping the grapes inflorescence in _____ during calyptra falling stage increases the fruit size in grapes.
- (A) GA₃ @ 50 PPM (B) GA₃ @ 60 PPM
 (C) GA₃ @ 70 PPM (D) GA₃ @ 80 PPM
34. In Banana, ripening can be induced by the application of
- (A) ethrel @ 1500 PPM (B) ethrel @ 2500 PPM
 (C) ethrel @ 3500 PPM (D) ethrel @ 4500 PPM

35. The partial ringing of a branch above a dormant lateral bud to induce fruiting branches is
- (A) Ringing (B) Notching
(C) Smudging (D) Dehorning
36. The chemical used for preventing fruit drop in grape fruit is
- (A) GA₃ @ 50 PPM (B) NAA @ 20 PPM
(C) NAA @ 100 PPM (D) GA₃ @ 100 PPM
37. The most efficient irrigation system of orchard under water scarcity condition is
- (A) Sprinkler system (B) Ring system
 (C) Drip system (D) Check basin system
38. The deficiency of which among the following element causes die-back disease in citrus
- (A) Cobalt (B) Copper
(C) Manganese (D) Magnesium
39. The uniform flowering in pine apple can be induced by application of
- (A) 100 PPM MH (B) 50 PPM GA₃
 (C) 25 PPM Ethephon + 2% Urea (D) 50 PPM Paclobutrazol
40. _____ is the most commonly used system of planting in orchard.
- (A) Rectangular system (B) Triangular system
 (C) Square system (D) Contour system
41. Which among the following crop is best suited as intercrop in banana?
- (A) Papaya (B) Persimmon
 (C) Ginger (D) Plum

42. Match the following :

- | | |
|------------------|-------------------------------|
| (a) Lime | 1. <u>Citrus paradisi</u> |
| (b) Lemon | 2. <u>Citrus aurantifolia</u> |
| (c) Grape fruit | 3. <u>Citrus sinensis</u> |
| (d) Sweet Orange | 4. <u>Citrus limon</u> |

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

43. Which of the following is a hybrid derivative papaya variety of CO₂ × Sunrise Solo?

- | | |
|---------------------|---|
| (A) CO ₄ | <input checked="" type="checkbox"/> (B) CO ₃ |
| (C) CO ₅ | (D) CO ₆ |

44. Match the following fruit crops its family :

- | | |
|---------------------|---------------|
| (a) Kinnow Mandarin | 1. Caricaceae |
| (b) Papaya | 2. Rosaceae |
| (c) Apple | 3. Rhamnaceae |
| (d) Ber | 4. Rutaceae |

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

45. Indian Institute of Vegetable Research is located at (IIVR)
- (A) Coimbatore (B) New Delhi
 (C) Varanasi (D) Hessorgatta
46. For long storage potato tuber should be kept at
- (A) 5–10°C (B) 10–15°C
(C) 15–20°C (D) 25–30°C
47. Diamond back moth is the serious pest of
- (A) Tomato (B) Bhendi
 (C) Pumpkin (D) Cauliflower
48. The richest source of iron is
- (A) Parsaley (B) Celery
 (C) Peas (D) Spinach
49. First picking in bitter gourd can be done in
- (A) 45 – 50 days (B) 50 – 60 days
(C) 70 – 80 days (D) 90 – 100 days
50. Edible part of Radish
- (A) Leaves (B) Root
(C) Flower (D) Immature fruit
51. Flavour in cabbage leaves is due to
- (A) Enzymes (B) Glucoside Sinigrin
(C) Flavour (D) Chlorosis

58. The technique used to grow the house plants in big sized bottles with narrow mouth is known as _____.
- (A) Terrarium (B) Water garden
(C) Indoor garden (D) Sunken garden
59. Delhi Crossandra is propagated by
- (A) Stem cuttings (B) Seeds
(C) Layering (D) Budding
60. Fern suitable for indoor gardening is
- (A) Nephrolepis exaltata
(B) Pilea muscosa
(C) Iresine sp
(D) Coleus sp
61. Antigonon leptopus is a
- (A) Rambler (B) Climber
(C) Trailer (D) Creeper
62. Pruning of Jasminum Sambac is done during
- (A) Last week of November (B) Last week of December
(C) First week of January (D) Last week of January
63. Scientific name for French Marigold is
- (A) Tagetes erecta (B) T. patula
(C) T. fenuifolia (D) T. lucida

64. Match the following :

- | | |
|--------------------|--------------|
| (a) Hanging basket | 1. Iresine |
| (b) Rockery | 2. Statice |
| (c) Dry flower | 3. Alyssum |
| (d) Edging | 4. Portulaca |

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

65. Pick out the tree with distinct growth habit

- | | |
|--------------------|--|
| (A) Gulmohar | (B) Rain tree |
| (C) Pride of India | <input checked="" type="checkbox"/> (D) Bottle Brush |

66. Match the following :

- | | |
|-------------------|------------|
| (a) Sikandar Bagh | 1. Kashmir |
| (b) Ram Bagh | 2. Lucknow |
| (c) Shalimar | 3. Jodhpur |
| (d) Mandor Garden | 4. Jaipur |

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

67. Large Cardamom or Nepal cardamom is the dried fruit of
(A) Eleltaria Cardamomum ✓ (B) Amomum subulatum
(C) Curcuma angustifolia (D) Curcuma ameda
68. The chief constituent of clove oil is
(A) Linalool and cineole
✓ (B) Eugenol and Eugenol acetate
(C) Cineole and Thymol
(D) β -caryophyllene and clovol
69. The botanical name of Indonesian Cassia is
(A) Cinnamomum cassia
✓ (B) Cinnamomum burmannii
(C) C. loureirii
(D) C. tamala
70. Nutmeg is native to
✓ (A) Moluccas Islands (B) Jamaica
(C) Trinidad (D) Papua New Guinea
71. All spice is indigenous to
(A) Molucas ✓ (B) West Indies
(C) Indonesia (D) Mexico
72. The cinnamon barks are scraped off without removing outer bark and the grade is known as
(A) Featherings
✓ (B) Unscraped chips
(C) Scraped chips
(D) Cinnamon powder

73. Distinct type of pepper shoots

- | | |
|-------------------|-------------------------------------|
| (a) Geotropes | 1. Fruiting branches |
| (b) Plagiotropes | 2. Top shoot |
| (c) Runner shoots | 3. Shoots arising from base of stem |
| (d) Orthotropes | 4. Shoots which hang down |

(a) (b) (c) (d)

(A) 4 3 2 1

(B) 1 2 3 4

(C) 4 1 3 2

(D) 2 1 4 3

74. Indian Cardamom Research Institute is located at

- (A) Kozhikode
- (B) Ajmer
- (C) Kasargod
- (D) Myladumpara

75. Type of fruit in Nutmeg is

- | | |
|---|----------|
| (A) Berry | (B) Pepo |
| <input checked="" type="checkbox"/> (C) Drupe | (D) Pome |

76. The word 'Horticulture' was derived from

- | | |
|---|-------------|
| <input checked="" type="checkbox"/> (A) Latin | (B) Greek |
| (C) French | (D) English |

77. Which of the following is correctly matched?
- (A) Aloe – Training
 - (B) Isabgol – Pinching
 - (C) Phyllanthus – Disbudding
 - (D) Glory lilly – Staking
78. The alkaloid imported by our country in large quantities is
- (A) Atropine Sulphate
 - (B) Chloroquine phosphate
 - (C) Colchicine
 - (D) Ergometrine
79. The method of propagation in Phyllanthus is
- (A) Cuttings
 - (B) Seeds
 - (C) Layering
 - (D) Budding
80. The Sweetening compound stevioside content in Stevia leaves is _____ percent.
- (A) 1 – 2%
 - (B) 3 – 10%
 - (C) 15 – 20%
 - (D) 20 – 25%
81. The highest morphine content variety of Opium Poppy is
- (A) Talia
 - (B) MOP –3
 - (C) Shweta
 - (D) Sharma

82. The Coleus seedlings are ready for transplanting at _____ days old.

(A) 15 – 20 days

(B) 25 – 30 days

(C) 40 – 45 days

(D) 50 – 60 days

83. The Vegetative method of Propagation followed in Lemon grass is

(A) Layering

(B) Budding

(C) Rooted Slips

(D) Runners

84. Which one of the following is wrongly matched

(A) Opium poppy – Lancing

(B) Stevia – Deflowering

(C) Glory lilly – Staking

(D) Aswagandha – Desuckering

85. Pick the odd one out

(A) Senna – Laxative

(B) Coleus – hypertension

(C) Opium poppy – pain killer

(D) Medicinal solanum – Aphrodisiac

86. To which family Periwinkle belongs?

(A) Malvaceae

(B) Rosaceae

(C) Apocynaceae

(D) Solanaceae

87. The ideal storage temperature for papaya is
(A) 18° C (B) 20° C
(C) 25°C (D) 30° C
88. The spirit test is associated to
(A) Testing starch content
(B) Test the sugar content
 (C) Testing pectin grade
(D) Test the juice content
89. The form of pectin in ripe fruit is
(A) Pectose (B) Pectic acid
(C) Pectinase (D) Pectate
90. The TSS content of Tomato Sauce is
(A) 24% (B) 26%
(C) 28% (D) 30%
91. Pick out the wrong statement
(A) Addition of excess sugar leads to poor jelly setting
(B) Use of immature fruits gives cloudy jelly
(C) Lack of pectin results in poor setting of jelly
 (D) Use of excess sugar results in weeping jelly
92. Which of the following is not a sprout inhibitor of potato
(A) Iso propyl Phenyl Carbonate
 (B) Thio urea
(C) Tetrachloro nitro benzene
(D) Maleic hydrazide

93. Pick out the wrong statement about Jam preparation

- (A) Invert sugar above 50 percent makes the Jam too sticky
- (B) Invert sugar is added to avoid crystallization during storage
- (C) Jam should have minimum of 68% TSS
- (D) A pH above 4 is desirable for good consistency

94. The instrument 'refractometer' is used for measuring

- (A) Reducing Sugar
- (B) Total sugar
- (C) Sugar to acid ratio
- (D) Total soluble solid

95. Choose the ideal condition for suberisation of wound potato tubers

- (A) 25°C and 95% RH
- (B) 25°C and 85% RH
- (C) 20°C and 95% RH
- (D) 20°C and 85% RH

96. Match the following

- | | |
|---------------|--|
| (a) Apple | 1. Valancene |
| (b) Banana | 2. 1 - (π -hydroxy phenyl) - 3 butanone |
| (c) Orange | 3. Eugenol |
| (d) Raspberry | 4. Ethyl 2-methyl butynate |

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

97. The major importer of fruits and vegetables from India
 (A) United Arab Emirates (B) USA
(C) Russia (D) United Kingdom
98. Peats type of organic soils contain more than _____% organic matter.
(A) 30% (B) 20%
 (C) 50% (D) 40%
99. Coriander, cumin and fennel occupy major area in _____ zone.
(A) North Eastern subtropical humid zone
(B) South Central tropical zone
 (C) Northwestern Arid Zone
(D) North Central subtropical zone
100. In India, hydroponics was first introduced in
 (A) Kalimpong (B) Simla
(C) Modipuram (D) Tripura
101. The most ideally suitable vegetable crop for growing under polyhouse
 (A) Cucumber (B) Drumsticks
(C) Potato (D) Brinjal
102. Psammophyte refers to
 (A) Plants growing in soil having sand and gravel
(B) Plants which grow on another plant
(C) Plants which grow on stones
(D) Plants which grow on earth
103. The fruit crop having both terminal and axillary bearing habit
 (A) Pomegranate (B) Loquat
(C) Bael (D) Litchi

117. Advection refers to

- (A) Horizontal movement of air mass in mist chamber
- (B) Vertical movement of air mass in mist chamber
- (C) Circular movement of air mass in mist chamber
- (D) Perpendicular movement of air mass in mist chamber

118. Tetrazolium test is done in seeds for testing the

- (A) Purity
- (B) Viability
- (C) Dormancy
- (D) Disease infection

119. Etiolation refers to

- (A) Absence of light
- (B) Absence of temperature
- (C) Absence of air
- (D) Absence of water

120. Author of the book "Plant propagation principles and practices" is

- (A) Hartmann and Kester's
- (B) N. Kumar
- (C) K.V. Peter
- (D) K.L. Chadha

121. ELISA is related to

- (A) Serology
- (B) Bacteriology
- (C) Physiology
- (D) Etiology

122. The following are the development stages in micro propagation

- (A) Multiplication, establishment, root formation, acclimatization
- (B) Establishment, Multiplication, root formation acclimatization
- (C) Root formation, establishment, multiplication acclimatization
- (D) Establishment, root formation, multiplication acclimatization

123. Embryos produced not as a result of meiosis and fertilization but by certain asexual processes is known as
- (A) Megasporogenesis (B) Microsporogenesis
 (C) Parthenocarpy ~~(D) Apomixis~~
124. The phenomenon in which more embryos are present within a single seed is known as
- (A) Adventitious embryony (B) Vegetative apomixis
~~(C) Polyembryony~~ (D) Apomixis
125. In which plant, cuttings taken from the male plant root better than the female plant
- (A) Papaya (B) Avocado
~~(C) Red maple~~ (D) Cinnamon
126. Clonal root stocks are used in which of the following fruit crop?
- (A) Sapota (B) Guava
~~(C) Apple~~ (D) Custard apple
127. Match the following :
- | | |
|-------------------|--------------|
| (a) Pineapple | 1. Suckers |
| (b) Banana | 2. Cuttings |
| (c) Bougainvillea | 3. Crown |
| (d) Sapota | 4. Inarching |
-
- | | | | |
|------------------|-----|-----|-----|
| (a) | (b) | (c) | (d) |
| (A) 3 | 1 | 2 | 4 |
| (B) 3 | 1 | 4 | 2 |
| (C) 4 | 1 | 3 | 2 |
| (D) 2 | 4 | 1 | 3 |
128. The protective cover of radicle is technically called as
- ~~(A) Coleorhizae~~ (B) Cotyledon
 (C) Sarcotesta (D) Testa

129. Bud breaking in apple under Tamilnadu conditions can be done by the application of
 (A) Sandolin A (Dinitro-Orthocresol) (B) Sandolin B
(C) Sandolin C (D) Sandolin D
130. Degreening of oranges and lemons can be done by the application of
(A) Ethrel @ 1000 to 1500 PPM (B) Ethrel @ 3000 to 5000 PPM
 (C) Ethrel @ 2000 to 4000 PPM (D) Ethrel @ 5000 to 6000 PPM
131. The drying of juicy vesicles in the fruits of citrus is
 (A) Granulation (B) Degreening
(C) Dehydration (D) Fruit rot
132. Kottaivazhai in poovan banana can be overcome by application of
 (A) 2, 4, D 20 PPM (B) 2, 4, D 60 PPM
(C) 2, 4, D 80 PPM (D) 2, 4, D 100 PPM
133. The Father of systematic pomology is
 (A) De Candolle (B) Re Candolle
(C) Pe Candolle (D) he Candolle
134. _____ is the common physiological disorder in citrus due to sudden change in climatic and water stress conditions.
 (A) Fruit cracking (B) Citrus decline
(C) Sun burn (D) Sun scald
135. _____ is the mango variety more susceptible to spongy tissue.
(A) Banarasi (B) Alphonso
(C) Kesar (D) Sindhu

136. The shape of queen type pineapple fruit is
- (A) oblong (B) round
 (C) cylindrical (D) oval
137. Which of the following is the parentage of Arkavati hybrid of grapes?
- (A) Anab-e-Shahi × Queen of Vineyard
 (B) Bangalore Blue × Black Champa
 (C) Black Champa × Thompson Seedless
 (D) Bangalore Blue × Anab-e-Shahi
138. The botanical name of China guava is
- (A) Psidium guajava (B) P. Guineese
 (C) P. Cattleianum (D) P. Friedrichhalianum
139. The ploidy level of Rasa kadali is
- (A) Triploid – AAA (B) Diploid – AB
 (C) Tetraploid – AAAA (D) Diploid – AA
140. The zoological name of mango nut Weevil is
- (A) Amritodus atkinsoni (B) Batocera rufomaculata
 (C) Sternochetus Mangiferae (D) Chlumetia traversa
141. Which of the following is the parentage of Mallika?
- (A) Rumani × Neelum (B) Neelum × Mulgoa
 (D) Neelum × Deshehari

142. Which fruit crop is known as Queen of fruits?
(A) Mango (B) Plum
 (C) Mangosteen (D) Apple
143. Edible part of Coccinia
(A) Ripened fruit (B) Tender and immature fruit
(C) Pods (D) Leaves
144. Bonneville is a variety in
 (A) Peas (B) Lab Lab
(C) Cluster Bean (D) Funch Bean
145. "Pusa meghali" is an improved variety of
(A) Radish (B) Turnip
(C) Beet root (D) Carrot
146. The cultivated musk melons are mostly
 (A) Monoecious (B) Gynaecious
(C) Androecious (D) Diecious
147. Pusa Ruby is variety of
(A) Pea (B) Brinjal
 (C) Tomato (D) Yam
148. Pride of India is a variety of
(A) Radish (B) Pumpkin
 (C) Cabbage (D) Tomato

149. Edible part of Knol-Khol

- (A) Knob (B) Stem
(C) Leaves (D) Fruit

150. Cavity spot is caused due to deficiency

- (A) Ag (B) Cl_2
 (C) Ca (D) $CaCO_3$

151. Pungent principle in onion

- (A) Allyl Propyl-di-Sulphide (B) Capsaicin
(C) Sinigrin (D) Riboflavin

152. The yield of Multiplier onion

- (A) 100 – 150 Q/ha (B) 150 – 180 Q/ha
(C) 200 – 300 Q/ha (D) 500 – 800 Q/ha

153. Garlic average yield per hectare

- (A) 1000 – 1500 Q/ha (B) 800 – 1000 Q/ha
(C) 500 – 600 Q/ha (D) 100 – 200 Q/ha

154. Which of the following is Garden Pea?

- (A) Pisum elatius (B) Pisum arvense
 (C) Pisum sativum (D) Doliceaus lablab

155. What is the recommended spacing for spinach?

- (A) 15 × 15 cm (B) 20 × 20 cm
(C) 15 × 20 cm (D) 20 × 5 cm

162. The tiny seeds contains embryo without endosperm in

- (A) Rose
- (B) Gerbera
- (C) Orchid
- (D) Marigold

163. Which of the following is incorrectly paired?

- (A) Gardening in dishes – Cacti and succulents
- (B) Vertical gardening – Green wall
- (C) Terrarium – Glass container
- (D) Miniature Garden – Bonsai

164. Which of the following are incorrectly paired?

- (A) Flowering annual – Petunia
- (B) Cut foliage – Asparagus
- (C) Cut flower – Gerbera
- (D) Flowering tree – Acalypha hispida

165. The creeper which occupied a prominent place in Kalidasa's Sakuntala is

- (A) Adenocalymna calycina
- (B) Antigonon leptopus
- (C) Hiptage madablota
- (D) Quisqualis indica

166. Match the crop with Research Stations :

- | | |
|---------------|-------------|
| (a) Cardamom | 1. Panniyur |
| (b) Turmeric | 2. Ajmer |
| (c) Pepper | 3. Poltangi |
| (d) Coriander | 4. Apangala |

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

167. East Indian Arrow root which is having plenty of starch in its rhizome is scientifically named as

- | | |
|------------------------------|-------------------------|
| (A) <u>Curcuma longa</u> | (B) <u>C. aromatica</u> |
| ✓ (C) <u>C. angustifolia</u> | (D) <u>C. ameda</u> |

168. Choose the correct statements :

- (i) Spices and condiments are the food adjuncts that add aroma and flavour
- (ii) Condiments are food adjuncts that add taste only
- (iii) Spices and condiments are the rich source of nutrition
- (iv) All the spices are condiments

- | | |
|--------------------------------|--------------------------------|
| ✓ (A) (i) and (ii) are correct | (B) (ii) and (iii) are correct |
| (C) (iii) and (iv) are correct | (D) (i) and (iv) are correct |

169. The high yielding introduction in ginger which has popularity among the growers in India is

- | | |
|--------------|----------------------|
| (A) Suruchi | (B) Maran |
| (C) Himagiri | ✓ (D) Rio-de-Janeiro |

170. Find the correct combinations :

1. Coriander - Schizocarp

2. Cardamom - Capsule

3. Vanilla - Pod

(A) 1, 2, 3 are correct

(B) 1 and 2 are correct

(C) 1 alone is correct

(D) 2 alone is correct

171. In which country, the major production of clove is used for making KRETEK cigarette?

(A) Indonesia

(B) Mexico

(C) Srilanka

(D) Brazil

172. In Vietnam, the pepper cuttings are taken from _____ for propagation.

(A) Plagiotropes

(B) Runner shoots

(C) Orthotropes

(D) Geotropes

173. Indian institute of species research is located at

(A) Calicut

(B) Kasargod

(C) Kottayam

(D) Coorg

174. The Black pepper varieties Sreekara and Subakara are the selections from

(A) Kottanadan

(B) Ottaplackal

(C) Karimunda

(D) Cimpriyan

175. "Rio-de-Janeiro" is a popular Cultivar of
(A) Turmeric (B) Ginger
(C) Clove (D) Pepper
176. Leading producer of spices in the World is
(A) Brazil (B) China
 (C) India (D) Mexico
177. Clove is commonly propagated by
(A) Grafting (B) Air layering
(C) Cultings (D) Seeds
178. Fenugreek belongs to the family
 (A) Fabaceae (B) Myrtaceae
(C) Apiaceae (D) Mysisticaceae
179. Pungency in black pepper is due to the presence of
(A) Capsanthin
 (B) Piperine
(C) Curcumin
(D) Cryptoxanthin
180. Hand pollination is done for fruit selling in
(A) Paprika (B) Rosemary
 (C) Vanilla (D) Coriander

181. The Origin of Lemon Grass is

(A) Japan

(B) Taiwan

(C) India

(D) Srilanka

182. Match the following

(a) NBPGR

1. Jammu

(b) NRC on Medicinal and Aromatic plants

2. Lucknow

(c) CIMAP

3. Gujarat

(d) RRL

4. New Delhi

(a) (b) (c) (d)

(A) 3 4 1 2

(B) 4 3 2 1

(C) 2 3 4 1

(D) 3 2 1 4

183. The new method of extraction of Steviol Glycosides is

(A) Steam distillation

(B) Solvent extraction

(C) Ultra - filtration

(D) Gamma radiation

184. The Seed rate of Phyllanthus is _____ Kg/ha.

(A) 1 Kg/ ha

(B) 5 Kg/ ha

(C) 6 Kg/ ha

(D) 7 Kg/ ha

185. Senna belonging to the family

- (A) Fabaceae (B) Lamiaceae
(C) Apiaceae (D) Solanaceae

186. In Sweet flag, the essential oil content of dry rhizome is

- (A) 1.0 – 1.5% (B) 0.1 – 0.5%
(C) 0.5 – 1.5% (D) 3.0 – 3.5%

187. In Isabgol, most of the exported husk is of the grade designated as

- (A) 10 mesh (B) 20 mesh
(C) 40 mesh (D) 70 mesh

188. Spraying of _____ at 25 mg/Lit, twice increased the Seed yield of isabgol.

- (A) MH (B) B – 9
 (C) CCC (D) GA – 3

189. _____ is necessary to test the Isabgol musilage for its quantity and quality parameters.

- (A) Alkaloid Content
(B) Essential oil content
 (C) Swelling capacity of the husk
(D) Moisture content of the seed

190. Which one of the following have antifertility properties?

- (A) Withanin (B) Solasodine
(C) Ajmalicine (D) Aloin

191. The optimal harvesting stage of standard Chrysanthemum for local market is

- (A) Centre of oldest flower is fully open
- (B) Disc floret start elongating
- (C) Outer petals fully elongated
- (D) Half florets open

192. Pick out the standard Carton size of CFB boxes used for rose packaging

- (A) $102.5 \times 40 \times 20$ cm
- (B) $102.5 \times 82.5 \times 40$ cm
- (C) $82.5 \times 40 \times 40$ cm
- (D) $102.5 \times 20 \times 40$ cm

193. Which of the following statement on Anthurium is incorrect.

- (A) Harvested when spathe is fully open
- (B) Flowers of 13-15 cm long stalk are grouped as medium
- (C) Anthurium is highly sensitive to chilling injury
- (D) Flowers are relatively insensitive to ethylene

194. Which of the following delays Ripening of Mango if applied as Post harvest dip.

- (A) GA 200 ppm
- (B) ABA 200 ppm
- (C) MH 200 ppm
- (D) Ethrel 200 ppm

195. Pick out the correct statement

- (A) Carnauba wax imparts attractive lusture to the produce
- (B) Carnauba wax provides effective control of water loss
- (C) Carnauba wax provide chalky appearance on fruit
- (D) Carnauba wax is a synthetic wax

196. Which of the following is a climacteric fruit?

- (A) Carambola
- (B) Kiwi
- (C) Rambutan
- (D) Cherry

197. Which one of the following is wrongly matched

- (A) Melon – Abscission
- (B) Persimmon – Astringency
- (C) Sapota – Waxiness
- (D) Orange – Juice content

198. Which of the following is not a chemical method of maturity determination

- (A) TSS
- (B) Ethylene evolution
- (C) Organic acid content
- (D) Aroma compounds

199. The storability of ' γ ' irradiated potato tubers is

- (A) One month
- (B) 3 months
- (C) 6 months
- (D) 1 year

200. The preservative which is found effective against yeast is

- (A) Potassium Metabisulphite
- (B) Potassium permanganate
- (C) Sodium Benzoate
- (D) Sucrose