

# 016/2021

Question Booklet  
Alpha Code

A

Question Booklet  
Serial Number

Total No. of Questions : 100

Time : 75 Minutes

Maximum : 100 Marks

## INSTRUCTIONS TO CANDIDATES

1. The question paper will be given in the form of a Question Booklet. There will be four versions of question booklets with question booklet alpha code viz. A, B, C & D.
2. The Question Booklet Alpha Code will be printed on the top left margin of the facing sheet of the question booklet.
3. The Question Booklet Alpha Code allotted to you will be noted in your seating position in the Examination Hall.
4. If you get a question booklet where the alpha code does not match to the allotted alpha code in the seating position, please draw the attention of the Invigilator IMMEDIATELY.
5. The Question Booklet Serial Number is printed on the top right margin of the facing sheet. If your question booklet is un-numbered, please get it replaced by new question booklet with same alpha code.
6. The question booklet will be sealed at the middle of the right margin. Candidate should not open the question booklet, until the indication is given to start answering.
7. Immediately after the commencement of the examination, the candidate should check that the question booklet supplied to him contains all the 100 questions in serial order. The question booklet does not have unprinted or torn or missing pages and if so he/she should bring it to the notice of the Invigilator and get it replaced by a complete booklet with same alpha code. This is most important.
8. Blank sheets of paper is attached to the question booklet. These may be used for rough work.
9. **Please read carefully all the instructions on the reverse of the Answer Sheet before marking your answers.**
10. Each question is provided with four choices (A), (B), (C) and (D) having one correct answer. Choose the correct answer and darken the bubble corresponding to the question number using Blue or Black Ball-Point Pen in the OMR Answer Sheet.
11. **Each correct answer carries 1 mark and for each wrong answer 1/3 mark will be deducted. No negative mark for unattended questions.**
12. No candidate will be allowed to leave the examination hall till the end of the session and without handing over his/her Answer Sheet to the Invigilator. Candidates should ensure that the Invigilator has verified all the entries in the Register Number Coding Sheet and that the Invigilator has affixed his/her signature in the space provided.
13. Strict compliance of instructions is essential. Any malpractice or attempt to commit any kind of malpractice in the Examination will result in the disqualification of the candidate.

016/2021-A





**016/2021**

**Total Marks : 100 Marks**

**Time : 1 hour and 15 minutes**

1. Purple white Dendrobium variety popular in Kerala.  
(A) Master Delight (B) Lemon Glow  
(C) Velvet Soft (D) Sonia - 17
2. Red seedless watermelon hybrid released from KAU  
(A) Pusa Bedana (B) Sugar baby  
(C) Swarna (D) Shonima
3. The propagule in Gladiolus  
(A) Corms and Cormels (B) Seed  
(C) Stem cuttings (D) Suckers
4. Oil yield of Jasminum grandifolium  
(A) 15.4 kg/ha (B) 10.3 kg/ha  
(C) 29 kg/ha (D) 40 kg/ha
5. Double flowered tuberose variety with several whorls of petals.  
(A) Sringer (B) Suvarna Rekha  
(C) Suchitra (D) Suvasini
6. Common practice to increase yield in marigold.  
(A) Pinching (B) Girdling  
(C) Notching (D) Ring
7. Maturity of papaya fruit, in days, for papain extraction.  
(A) 70-100 (B) 50-70  
(C) 100-120 (D) 25-50
8. The pigment imparting red colour in tomato.  
(A) Anthocyanin (B) Lycopene  
(C) Capsorubin (D) Cryptocapsin
9. One Amaranth variety resistant to Leaf blight  
(A) Arun (B) Krishnasree  
(C) Renusree (D) Co-1

10. Minimum number of nuts per tree per annum for selection as mother plant in Coconut.  
 (A) 100 (B) 80  
 (C) 120 (D) 60
11. A serious viral disease transmitted by aphids in cardamom.  
 (A) Katte (B) Azhukal  
 (C) Clump rot (D) Leaf blotch
12. Oleoresin content in dry black pepper.  
 (A) 25% (B) 6-10%  
 (C) 15-20% (D) 10-13%
13. Two winter season tropical legumes for Kerala.  
 (A) Peas and Beans (B) Cluster bean and French bean  
 (C) Dolichos bean and Winged bean (D) Cow-pea and Cluster bean
14. Most ideal season for tomato cultivation in Kerala.  
 (A) June – July (B) Sept. – Oct.  
 (C) Feb. – April (D) April – May
15. Most widely adapted vegetative propagation technique in guava.  
 (A) Grafting (B) Cutting  
 (C) Budding (D) Air layering.
16. Phytophthora foot rot resistant pepper variety.  
 (A) Karimunda (B) Balamkotta  
 (C) IISR Sakthi (D) Panniyur – 4
17. Best performing types of cocoa under Indian condition.  
 (A) Trinitario (B) Criollo  
 (C) Forastero (D) Venmany
18. Two underexploited fruits of high production potential and commercial value under Kerala conditions.  
 (A) Loquat and lovilovi (B) Mangosteen and Rambutan  
 (C) Breadfruit and Litchi (D) Loquat and Litchi
19. Pineapple variety recommended for commercial cultivation for table purpose.  
 (A) Yellow Newton (B) Golden Delicious  
 (C) Kew (D) Mauritius
20. The growth regulator used for induction of flowering in mango.  
 (A) NAA (B) IBA  
 (C) CCC (D) Paclobutrazole

21. Blue flowered tree species is  
(A) *Jacaranda mimosifolia* (B) *Jacquemontia violacea*  
(C) *Petrea volubilis* (D) *Clitoria ternatea*
22. Browning in cauliflower is due to the deficiency of  
(A) Mo (B) Zn  
(C) B (D) Fe
23. The headquarters of National Horticultural Board is in  
(A) Gurgaon (B) New Delhi  
(C) Bangalore (D) Jaipur
24. Anupama is a variety of  
(A) Cow-pea (B) Drumstick  
(C) Okra (D) Coleus
25. Coconut variety preferred for root wilt affected area  
(A) Kerasagara (B) Komadan  
(C) Chandrasankara (D) Chandrakalpa
26. F1 hybrid of *Solanum melongena*  
(A) Neelima (B) Haritha  
(C) Swetha (D) Surya
27. A dioecious vegetable  
(A) Snake gourd (B) Bottle gourd  
(C) Ivy gourd (D) Bitter gourd
28. Chekkurmanis is botanically  
(A) *Benincasa hispida* (B) *Talinum triangulare*  
(C) *Sauropus androgynus* (D) *Canavalia ensiformis*
29. Sugandhini is a variety of  
(A) Vettiver (B) Cardamom  
(C) Ginger (D) Cinnamon
30. 'Green ring' in grafted cucumber is due to  
(A) Incompatibility between stock and the scion  
(B) Mg deficiency  
(C) B deficiency  
(D) Mo deficiency

31. A vegetable designated as plant-insulin  
 (A) *Benincasa 'hsipida* (B) *Sechium edule*  
 (C) *Luffa cylindrical* (D) *Memordica charantia*
32. Chambakad Large is a variety of  
 (A) Gooseberry (B) Guava  
 (C) Mandarin Orange (D) Chikku
33. Sauerkraut is prepared from  
 (A) Tomato (B) French Bean  
 (C) Grapes (D) Cabbage
34. Approximate number of coconut trees that can be accommodated per hectare of land in triangular system of planting.  
 (A) 300 (B) 280  
 (C) 198 (D) 120
35. Gladiolus is propagated by  
 (A) Offshoot (B) Corm  
 (C) Sucker (D) Bulb
36. Red and gold hybrids are interspecific hybrids of  
 (A) Chinaaster (B) Marigold  
 (C) Chrysanthemum (D) Dahlia
37. Clipping and shearing shrubs and small trees into different shapes  
 (A) Terrariums (B) Pruning  
 (C) Trophy (D) Topiary
38. Tutty fruity is prepared from  
 (A) Ash gourd (B) Musk melon  
 (C) Cantaloupe (D) Papaya
39. Pseudobulbs are present in \_\_\_\_\_ orchids.  
 (A) Monopodials (B) Sympodials  
 (C) Both (D) None
40. Tea garden is a type of  
 (A) Japanese Garden (B) Persian Garden  
 (C) English Garden (D) Italian Garden

41. Variety of rice
- (A) Nidhi (B) Uma  
(C) Poornima (D) Keraganga
42. Process by which undesirable genes or gene combinations are removed from population
- (A) Hybridization (B) Selection  
(C) Introduction (D) Mutation
43. Father of plant genetic resource activities
- (A) Gregor Mendel (B) George Bentham  
(C) N.I. Varvilow (D) Francis Crick
44. Cryoprotectant used in cryopreservation
- (A) Poly ethylene glycol  
(B) Mustard gas  
(C) Ethyl methane sulphonate  
(D) Dimethyl sulphoxide
45. A protogynous plant
- (A) Orchid (B) Anthurium  
(C) Brinjal (D) Bajra
46. Chemical used to induce polyploidy
- (A) Ethyl methyl sulphonate  
(B) Colchicine  
(C) Poly ethylene glycol  
(D) Potassium permanganate

47. Male sterility showing cytoplasmic inheritance
- (A) Cytoplasmic genetic male sterility
  - (B) Cytoplasmic male sterility
  - (C) Genetic male sterility
  - (D) Incompatibility
48. Headquarters of National Biodiversity Authority
- (A) New Delhi
  - (B) Kerala
  - (C) Chennai
  - (D) Calcutta
49. A physical mutagen
- (A) EMS
  - (B) MMS
  - (C) Gamma rays
  - (D) Mustard gas
50. Removal of immature anther from hermaphrodite flower
- (A) Emasculation
  - (B) Crossing
  - (C) Tagging
  - (D) Inbreeding
51. Variety of chilli produced by hybridization
- (A) Ujwala
  - (B) Jwalamukhi
  - (C) Kiran
  - (D) Mukthi
52. A variety of cow-pea
- (A) Bhagyalekshmi
  - (B) Surya
  - (C) Swetha
  - (D) Sreebhadra
53. An individual having dissimilar alleles of gene
- (A) Homogynous
  - (B) Heterogynous
  - (C) Hybrid
  - (D) Albino



54. Progeny of the breeder seed
- (A) Nucleus seed (B) Foundation seed  
(C) Registered seed (D) Certified seed
55. Class of seed with no tag
- (A) Nucleus seed (B) Breeder seed  
(C) Foundation seed (D) Certified seed
56. The first GI (geographical indication) tagged product in India
- (A) Darjeeling tea (B) Aranmulakanadi  
(C) Chandari fabric (D) Mysore silk
57. Hybrid progeny from a cross between 2 single crosses
- (A) 3 way cross hybrid (B) double cross hybrid  
(C) double top cross (D) multiple cross
58. Progeny of a single plant obtained by asexual reproduction
- (A) Hybrid (B) Cybrid  
(C) Inbred (D) Clone
59. Process of bringing wild and weedy species under human management.
- (A) Selection (B) Introduction  
(C) Domestication (D) Hybridization
60. Oldest method of crop improvement
- (A) Introduction (B) Hybridization  
(C) Selection (D) Mutation

61. Food given to honey-bee larva which later develops to queen  
 (A) Royal jelly (B) Royalactin  
 (C) Queen substance (D) Nectar
62. Mechanism by which the host plant adversely affects the biology of insect and its progeny  
 (A) Antixenosis (B) Tolerance  
 (C) Nonpreference (D) Antibiosis
63. Bordeaux mixture was discovered by  
 (A) E. F. Smith (B) Robert Hook  
 (C) Tisdale (D) Millardet
64. Parasitoid introduced for the management of papaya mealybug  
 (A) *Trichogramma chilonis* (B) *Acerophagus papayae*  
 (C) *Cyrtobagous salviniae* (D) *Goniozus nephantidis*
65. A systemic fungicide  
 (A) Copper oxychloride (B) Copper hydroxide  
 (C) Carbendazim (D) Mancozeb
66. Vector of cassava mosaic disease  
 (A) Whitefly (B) Thrips  
 (C) Plant hoppers (D) Mealybug
67. Which among the following is a total stem parasite ?  
 (A) Broomrape (B) Witchweed  
 (C) Loranthus (D) Dodder
68. 'Dead heart' symptom in rice is caused by the infestation of  
 (A) Rice Leaf folder (B) Brown plant hopper  
 (C) Rice bug (D) Rice stem borer
69. 'Bollguard' is a transgenic cotton which expresses the crystal protein of  
 (A) *Bacillus thuringiensis* (B) *Beauveria bassiana*  
 (C) *Bacillus popilliae* (D) *Metarhizium anisopliae*
70. Name a fungus used in the biological control of plant diseases.  
 (A) *Aspergillus* (B) *Rhizopus*  
 (C) *Trichoderma* (D) *Pseudomonas*

71. Causal organism of the sheath blight of rice  
(A) *Sarocladium oryzae* (B) *Rhizoctonia solani*  
(C) *Drechslera oryzae* (D) *Pyricularia oryzae*
72. The most important biologically active component of Neem  
(A) Rotenone (B) Nicotene  
(C) Azadirachtin (D) Pyrethrum
73. Alternate host of *Puccinia graminis tritici*  
(A) Wheat (B) Barbery  
(C) Barley (D) Cow-pea
74. Name the viral disease of banana.  
(A) Moko wilt (B) Bunchytop  
(C) Panama wilt (D) Rhizome rot
75. 'Buprofezin' is an insecticide belonging to the group  
(A) Chitin synthesis inhibitor  
(B) Sclerotization inhibitor  
(C) Juvenile hormone analogue  
(D) Antijvenile hormone analogue
76. Chemical used for communication between individuals of the same species in insects  
(A) Allomone (B) Pheromone  
(C) Synomone (D) Kairomone
77. Root wilt disease of coconut is caused by  
(A) Virus (B) Fungus  
(C) Bacteria (D) Phytoplasma
78. An example of acute rodenticide  
(A) Zinc phosphide (B) Warfarin  
(C) Methyl bromide (D) Metaldehyde
79. 'Erineum' is the symptom caused by the infestation of  
(A) Thrips (B) Aphids  
(C) Mites (D) Mealybugs
80. 'Kresek symptom' in rice is due to  
(A) Blast (B) Sheath blight  
(C) Bacterial leaf blight (D) Sheath rot

81. Indian Institute of Sugarcane Research is located at  
(A) Delhi (B) Hyderabad  
(C) Pune (D) Lucknow
82. Who wrote the book 'Elements of Agricultural Chemistry' ?  
(A) John Bennet (B) Sir Humphry Davy  
(C) Charles Darwin (D) Jethro Tull
83. NATP was started in the year  
(A) 1990 (B) 1998  
(C) 1995 (D) 1993
84. Food grain production in India in 2013-14  
(A) 265.6 mt (B) 245 mt  
(C) 256.7 mt (D) 205 mt
85. Rudimentary system of settled farming, which includes cultivation, gathering and hunting is called  
(A) Subsistence farming  
(B) Intensive agriculture  
(C) Subsidiary farming  
(D) Mixed farming
86. Soil moisture status reaches Ultimate wilting point at \_\_\_\_\_.  
(A) -15 bars (B) -30 bars  
(C) -45 bars (D) -60 bars
87. The most common method among surface methods of irrigation, which is suitable for close growing crops is  
(A) flooding (B) basin method  
(C) border strip method (D) check basin method

88. Which of the following crops have highest WUE ?
- (A) Rice (B) Wheat  
(C) Sorghum (D) Cow-pea
89. Susceptibility of soil to erosion is called \_\_\_\_\_
- (A) Erosivity (B) Adhesion  
(C) Erodability (D) Cohesion
90. Among the land capability classes, which one has no limitation for growing crops ?
- (A) Class VIII (B) Class I  
(C) Class V (D) Class II
91. \_\_\_\_\_ are manifestations of prolonged process of gully erosion.
- (A) Ravines (B) Landslides  
(C) Sheet erosion (D) Rill erosion
92. \_\_\_\_\_% of India's geographical area is subjected to degradation.
- (A) 53 (B) 64  
(C) 78 (D) 86
93. First stage of movement of soil particles in wind erosion
- (A) Surface creep (B) Saltation  
(C) Suspension (D) Sheet erosion
94. Spacing of Hybrid Napier as a pure crop in Kerala is \_\_\_\_\_
- (A) 60 × 30 cm (B) 50 × 50 cm  
(C) 60 × 60 cm (D) 60 × 50 cm

95. Growing two or more crops simultaneously in intermingled without any row pattern is \_\_\_\_\_
- (A) intercropping (B) sequence cropping  
(C) relay cropping (D) mixed cropping
96. Sum of area planted to different crops and harvested in a single year divided by total cultivated area expressed as percentage is \_\_\_\_\_
- (A) Cropping intensity index  
(B) Relative yield total  
(C) Land equivalent ratio  
(D) Multiple cropping index
97. Jhonson grass is \_\_\_\_\_
- (A) *Sorghum halpense*  
(B) *Chenopodium album*  
(C) *Eichhornia crassipes*  
(D) *Cynodon dactylon*
98. Ratio of evapotranspiration of crop (ETc) to potential evapotranspiration (ETo) is
- (A) Plant coefficient (B) IW/CPE ratio  
(C) Pan coefficient (D) Crop coefficient
99. One cubic metre of water is \_\_\_\_\_
- (A) 100 litre (B) 1000 litre  
(C) 10000 litre (D) 5000 litre
100. Normal irrigation water has a boron content of \_\_\_\_\_ ppm.
- (A) < 2 (B) < 5  
(C) < 3 (D) < 10
- \_\_\_\_\_

**SPACE FOR ROUGH WORK**

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