



JAMMU AND KASHMIR PUBLIC SERVICE COMMISSION

RESHAM GHAR COLONY, BAKSHI NAGAR, JAMMU - 180001

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Subject: Conduct of Written Examination for the post of Horticulture Development Officer in Agriculture Production Department (Horticulture) - Provisional Answer Key thereof.

Notification No. PSC/Exam/S/2024/29

Dated: 29.05.2024

In pursuance of Rule 10(c) of the Jammu & Kashmir Public Service Commission (Conduct of Examination) Rules, 2022, as amended upto date, the Provisional Answer Key of Question Paper pertaining to the **Written Test for the post of Horticulture Development Officer** held on **29.05.2024**, is hereby notified for seeking objections from candidates:

Provisional Answer Key

Test Booklet Question No. (Series A)	
Q1	B
Q2	C
Q3	C
Q4	C
Q5	C
Q6	D
Q7	A
Q8	B
Q9	B
Q10	C
Q11	C
Q12	A
Q13	A
Q14	B
Q15	D
Q16	B
Q17	C
Q18	D
Q19	D
Q20	B
Q21	A
Q22	D
Q23	A
Q24	C
Q25	C
Q26	B
Q27	C

Test Booklet Question No. (Series A)	
Q28	B
Q29	A
Q30	B
Q31	C
Q32	D
Q33	C
Q34	D
Q35	A
Q36	D
Q37	C
Q38	C
Q39	C
Q40	B
Q41	A
Q42	A
Q43	B
Q44	C
Q45	D
Q46	D
Q47	C
Q48	A
Q49	B
Q50	A
Q51	A
Q52	C
Q53	A
Q54	A

Test Booklet Question No. (Series A)	
Q55	A
Q56	D
Q57	B
Q58	B
Q59	B
Q60	C
Q61	B
Q62	A
Q63	C
Q64	B
Q65	B
Q66	C
Q67	A
Q68	A
Q69	A
Q70	D
Q71	A
Q72	C
Q73	B
Q74	D
Q75	C
Q76	B
Q77	B
Q78	C
Q79	D
Q80	B
Q81	B

Test Booklet Question No. (Series A)	
Q82	C
Q83	B
Q84	D
Q85	D
Q86	D
Q87	A
Q88	A
Q89	C
Q90	A
Q91	C
Q92	C
Q93	A
Q94	A

Test Booklet Question No. (Series A)	
Q95	A
Q96	A
Q97	C
Q98	D
Q99	B
Q100	C
Q101	C
Q102	B
Q103	C
Q104	A
Q105	A
Q106	B
Q107	B

Test Booklet Question No. (Series A)	
Q108	A
Q109	B
Q110	C
Q111	D
Q112	C
Q113	A
Q114	B
Q115	C
Q116	C
Q117	C
Q118	D
Q119	C
Q120	D

The candidates are advised to refer to **Question Booklet (Series A)** to match the corresponding question(s) in their respective Question Booklet Series and if any candidate feels that the key to any of the question(s) is/are wrong, he/she may represent on prescribed format/proforma annexed as **Annexure-A** along with the documentary proof/evidence (**hard copies only**) and fee of Rs.500/- per question in the form of Demand Draft drawn in favour of **COE, J&K PSC** (refundable in case of genuine/correct representation) to the Controller of Examinations, Jammu & Kashmir Public Service Commission, from 30.05.2024 to 03.06.2024. **The candidates are further advised to clearly mention the question(s) objected to with reference to its serial number as it appears in the Question Booklet of Series A of the Provisional Answer Key.**

Further, any objection/application not accompanied by the requisite Demand Draft of Rs.500/- as prescribed, shall not be considered/entertained under any circumstances. Candidates are, in their own interest, advised to adhere to these instructions and not submit any objection unaccompanied by the Demand Draft as required under extant rules.

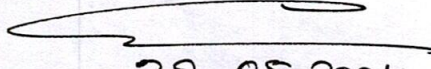
The Commission shall not entertain any such representation(s) after the expiry of the stipulated period i.e. **after 03.06.2024 (Monday), 05.00 pm.**

The provisional answer key is available on the website of the Commission <http://www.jkpsc.nic.in>.

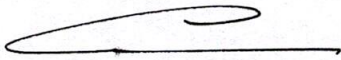
No. PSC/Ex-Secy/2024/23

Copy to the: -

1. Director, Information and Public Relations, J&K for publication of the notice in all leading newspapers published from Jammu/Srinagar.


29.05.2024
(G.L. Sharma), JKAS
 Additional Secretary
 J&K Public Service Commission
 Dated: 29.05.2024

2. P.S. to Hon'ble Chairman, J&K Public Service Commission for information of the Hon'ble Chairman.
3. P.S. to Hon'ble Member, Shri _____ for information of the Hon'ble Member.
4. P. A. to Secretary, J&K Public Service Commission for information of the Secretary.
5. P.A. to Controller of Examinations, J&K Public Service Commission.
6. Main file/Stock file/Notice Board.



Annexure-A

Representation regarding objection(s) to any Question/Answer pertaining to the Written Test conducted for the post(s) of Horticulture Development Officer on 29.05.2024

(NOTE: USE SEPARATE FORMS FOR SEPARATE QUESTIONS)

Name of the Applicant : _____

Roll No. : _____

Correspondence Address : _____

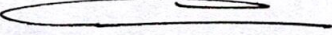
Contact/Mobile No. : _____

Date of Application: _____

Demand Draft No. date : _____

Candidates Account No.(16 digit) & IFSC Code : _____

Question No. in Series A	Details of the Objection	Resource Material (copy to be enclosed)	Details of the Website (if any)
<u>Correct Answer/Option as per candidate :</u>			


Signature of the Candidate

Note: Application for each question/answer shall be made on separate page in the given format, otherwise the first question entered in the format shall only be considered.

DO NOT OPEN THIS TEST BOOKLET UNTIL YOU ARE TOLD TO DO SO

Booklet Serial No. **204045**

Test Booklet Series

TEST BOOKLET
HORTICULTURE DEVELOPMENT OFFICER
Written Test - 2024
(17)



Time Allowed: Three Hours

Maximum Marks: 120

INSTRUCTIONS

1. IMMEDIATELY AFTER THE COMMENCEMENT OF THE EXAMINATION, YOU SHOULD CHECK THAT THIS TEST BOOKLET **DOES NOT** HAVE ANY UNPRINTED OR TORN OR MISSING PAGES OR ITEMS, ETC. IF SO, GET IT REPLACED BY A COMPLETE TEST BOOKLET.
2. Please note that it is the candidate's responsibility to encode and fill in the Roll Number and Test Booklet Series Code A, B, C or D carefully and without any omission or discrepancy at the appropriate places in the OMR Answer /Response Sheet. Any omission/discrepancy will render the Response Sheet liable for rejection.
3. You have to enter your Roll Number on the Test Booklet in the Box provided alongside.
DO NOT write anything else on the Test Booklet.
4. This Test booklet contains **120** items (questions). Each item comprises of four responses (answers). You will select the response which you want to mark on the Answer Sheet/Response Sheet. In case you feel that there is more than one correct response, mark the response which you consider the best. In any case, choose **ONLY ONE** response for each item.
5. You have to mark all your responses **ONLY** on the separate Answer /Response Sheet provided. See directions in the Response Sheet.
6. **All** items carry equal marks.
7. Before you proceed to mark in the Answer /Response Sheet, the response to various items in the Test Booklet, you have to fill in some particulars in the Answer /Response Sheet as per instructions sent to you with your Admission Certificate.
8. After you have completed filling in all your responses on the Response Sheet and the examination has concluded, you should hand over to the Invigilator **only the Answer /Response Sheet**. You are permitted to take away with you the Test Booklet and **Candidate's Copy of the Response Sheet**.
9. Sheets for rough work are appended in the Test Booklet at the end.
10. While writing Centre, Subject and Roll No. on the top of the Answer Sheet/Response Sheet in appropriate boxes use **"ONLY BALL POINT PEN"**.
11. **Penalty for wrong answers:**
THERE WILL BE PENALTY FOR WRONG ANSWERS MARKED BY THE CANDIDATE IN THE WRITTEN TEST (OBJECTIVE TYPE QUESTIONS PAPERS).
 - (i) There are four alternatives for the answer to every question. For each question for which a wrong answer has been given by the candidate, **(0.25)** of the marks assigned to that question will be deducted as penalty.
 - (ii) If a candidate gives more than one answer, it will be treated as a **wrong answer** even if one of the given answers happens to be correct and there will be same penalty as above for that question.
 - (iii) If a question is left blank, i.e., no answer is given by the candidate, there will be **no penalty** for that question.

DO NOT OPEN THIS TEST BOOKLET UNTIL YOU ARE TOLD TO DO SO

(17) (A)/2024

[P.T.O.]

504042

1. Which post harvest treatment is primarily used to delay ripening of fruits and vegetables?
 - A) Irradiation
 - B) Controlled atmosphere storage
 - C) Freezing
 - D) Blanching
2. Which of the following is the most important benefit offered by FPOs to their members?
 - A) Increased competition among farmers
 - B) Lower selling prices
 - C) Collective bargaining power
 - D) Agriculture inputs at higher costs
3. Why are horticulture plantations typically more labour intensive than field crop farming?
 - A) They require less technical expertise.
 - B) They are larger in size.
 - C) They require specialised cultivation practices.
 - D) They are less profitable.
4. Operation greens aims to support farmers of which types of crops by providing subsidies or transportation and storage to prevent post harvest losses?
 - A) Cereals and pulses.
 - B) Root vegetables.
 - C) TOP (Tomato, Onion, Potato).
 - D) Leafy greens.
5. Ginkgo biloba is traditionally used to improve.
 - A) Digestion.
 - B) Sleep.
 - C) Memory and cognitive function.
 - D) Skin.
6. Which of the following is one of the main focus of horticulture cluster development programme.
 - A) To provide insurance for horticulture crops in clusters.
 - B) To develop export oriented infrastructure.
 - C) To promote farmer producer organisation.
 - D) To enhance the competitiveness of horticulture clusters.

7. What type of pruning is essential in vineyards to ensure good quality and yield of grapes?
- A) Hard pruning.
 - B) Soft pruning.
 - C) No pruning.
 - D) Randomised pruning.
8. What is a common processing method used to extract essential oils from aromatic plants?
- A) Fermentation.
 - B) Steam distillation.
 - C) Cold pressing.
 - D) Sun drying.
9. Rainfed farming often involves integrated farming systems. What is the main advantage of such systems?
- A) Increased dependence on chemical inputs.
 - B) They offer diversification that can buffer farmers against weather variability.
 - C) They simplify farm management practices.
 - D) They require large investments in technology.
10. What type of crop is typically preferred in rainfed farming.
- A) Rice
 - B) Wheat.
 - C) Sorghum.
 - D) Sugarcane.
11. What type of legal entity can an FPO be registered as in India?
- A) Only as non profit organisation.
 - B) Only as a cooperative society.
 - C) As cooperative society, private limited or public limited company.
 - D) Only as a government agency.
12. Integrated pest management includes all of following except.
- A) Use of chemical pesticide firstly.
 - B) Biological control techniques.
 - C) Cultural practices.
 - D) Monitoring pest populations.

13. What is the significance of traceability systems in marketing of horticultural crops?
- A) Help in identifying the source of produce in case of health scare.
 - B) To make the product prices among source producers competitive.
 - C) To determine nutritional quality of produce.
 - D) Only important for marketing.
14. Which of the following is best indicator of metabolic activity and potential storage life of fresh produce?
- A) Rate of transpiration.
 - B) Rate of respiration.
 - C) Rate of ethylene production.
 - D) Rate of decay.
15. Indian Institute of Spices Research (IISR) is located at
- A) Sreekariyan.
 - B) Panniyur.
 - C) Karamana.
 - D) Kozhikode.
16. Polyembryony is noticed in
- A) Apple.
 - B) Mango.
 - C) Sapota.
 - D) Pineapple.
17. Lux Meter is used to find out.
- A) Sunlight duration.
 - B) Atmospheric temperature.
 - C) Sunlight intensity.
 - D) Atmospheric pressure.
18. Munsell's chart is used to determine.
- A) Soil pH.
 - B) Soil structure.
 - C) Soil texture.
 - D) Soil colour.

19. Repair grafting is otherwise known as
- A) Epicotyls grafting.
 - B) Top working.
 - C) Spice grafting.
 - D) Inarching.
20. _____ is a technique used to disinfect seed beds
- A) Scarification.
 - B) Solarisation.
 - C) Stratification.
 - D) Salinization.
21. Brown manuring refers to application of
- A) Oil cakes.
 - B) Farm yard manure.
 - C) Vermicompost.
 - D) Fertilizers.
22. Reduction or elimination of dormancy in crop plants is due to
- A) Domestication.
 - B) Hybridisation.
 - C) Mutation.
 - D) Acclimatization.
23. India has highest productivity in the world of
- A) Banana.
 - B) Mango.
 - C) Grapes.
 - D) Melon.
24. Competition of pollination and fertilisation in unopened flower bud is known as.
- A) Chasmogamy.
 - B) Apogamy.
 - C) Cleistogamy
 - D) Dichogamy.

25. Volatile toxic substances accumulate in the tissue when fruit are stored in environment of
- A) Above normal physiological range.
 - B) Below normal physiological range.
 - C) Under poor ventilation condition
 - D) In CA storage.
26. The enzyme which is responsible for browning of fruits and vegetables is
- A) Lipo oxidase.
 - B) Polyphenol oxidase.
 - C) Amylase.
 - D) Protease.
27. Fruits like banana, figs, grapes are susceptible to development of black mould rots due to.
- A) Rhizopus
 - B) Penecillium.
 - C) Aspergillus.
 - D) Gloeosporium.
28. Most suitable material for canning of vegetables is
- A) Tin foil.
 - B) Aluminium.
 - C) Glass.
 - D) Plastic.
29. Plant hormone that plays a key role in ripening and senescence of fruits and vegetables is
- A) Ethylene.
 - B) Auxin.
 - C) Gibberallic acid.
 - D) None of the above.
30. Citrus canker is a
- A) Fungal disease.
 - B) Bacterial disease.
 - C) Nutrient deficiency
 - D) Protozoal disease.

31. Tetrazolium chloride test is used for
- A) Estimation of chlorine in leaves.
 - B) Detection of nitrogen content.
 - C) Viability of seeds.
 - D) None of the above.
32. According to international standards, medicinal plants are those which have active ingredient in the range of
- A) 10%
 - B) < 20%
 - C) 40-60%
 - D) None of the above.
33. Tulip is an example of
- A) Rizhome.
 - B) Tuber.
 - C) Bulb.
 - D) Corm.
34. The new growth of 'Dieffenbachia' is weak and spindly with large gaps between leaves. The problem most likely is.
- A) Salt damage.
 - B) Nitrogen deficiency.
 - C) Botrytis.
 - D) Lack of light.
35. _____ is used for daily movement in the landscape.
- A) Functional path.
 - B) Temporary path.
 - C) Frequent path.
 - D) Decorative path.
36. *Pinus roxburghii* is very healthy growing in
- A) Tropical zone.
 - B) Sub tropical zone.
 - C) Both (A) and (B).
 - D) None.

37. Which of the following vegetables has a dioecious behaviour?
- A) Onion.
 - B) Cabbage.
 - C) Bitter gourd.
 - D) Spinach.
38. Drupe fruits have 3 ovarian layers
- A) Fused
 - B) Mixed.
 - C) Seperated.
 - D) None.
39. Which of the following sets of soil requirements correctly matches the corresponding horticulture crops?
- A) Apples : Well drained, loamy soil with pH of 6.0-7.0.
Peppers : Heavy clay soil with pH of 4.5-5.5
Lettuce : Silt loam soil with pH of 6.0-7.0.
 - B) Apples : Poorly drained, clay soil, pH of 5.0-6.0.
Peppers : Sandy loam soil with pH of 6.5-7.5.
Lettuce : Silt loam with pH of 6.0-7.0.
 - C) Apples : Well drained, loamy soil with pH of 6.0-7.0.
Peppers : Well drained loam or sandy loam with pH of 5.5-7.0.
Lettuce : Well drained sandy loam or loam soil with pH 6.0-7.0.
 - D) Apples : Sandy soil with pH 4.5-5.5
Peppers : Poorly drained clay, pH 7.5-8.5
Lettuce : Heavy clay with pH 7.0-8.0
40. What is the primary advantage of using mist propagation systems in Nursery Management?
- A) Reduce labor costs associated with watering plants manually.
 - B) Increase humidity around propagation material enhancing rooting.
 - C) Allow for uniform application of fertilizer solution across crops.
 - D) Prevent the spread of diseases among young plants.

41. Why is grafting preferred method of propagation for many fruit trees for commercial purposes?
- A) Ensures genetic uniformity and replication of desirable traits.
 - B) Less labour intensive compared to seed propagation.
 - C) Does not require any specialised skills as equipment.
 - D) Allows plants to mature and produce fruit at an earlier stage.
42. What advantage does use of plasticulture provide in cultivation of horticulture crops?
- A) Enhances water use efficiency.
 - B) Completely negates the need for pest management.
 - C) Decreases dependency on manual labour.
 - D) Reduces genetic variability among crop cultivars.
43. In marketing of horticulture crops, what does the term value addition primarily refer to?
- A) Increasing crop value through genetic modification.
 - B) Extending product range derived from original crop through processing.
 - C) Techniques that add to the aesthetic appearance of fresh produce.
 - D) Strategies that reduce the production cost of horticulture crops.
44. Which nutrient deficiency is commonly associated with 'little leaf' disease in fruit crops like peaches?
- A) Nitrogen.
 - B) Phosphorus.
 - C) Zinc.
 - D) Magnesium.
45. Which class of insecticides target the nervous system of insects but is considered relatively safe for use around humans due to specific mode of action?
- A) Organophosphates.
 - B) Carbamates.
 - C) Neo - nicotinoids.
 - D) Pyrethroids.

46. What safety precaution is critical when applying non selective herbicides in horticultural settings?
- A) Using them during dormant stage of crop.
 - B) Ensuring that chemical doesn't drift to non target species.
 - C) Applying only in dry weather condition.
 - D) All of the above.
47. How are insecticides classified according to world Health Organisation based on their toxicity?
- A) Categories I, II, III, IV where I is least toxic and IV is most toxic.
 - B) Categories A,B,C,D where A represents highest hazard and D lowest.
 - C) Categories I, II, III, IV where I is most toxic and IV is least toxic.
 - D) Categories Red, Orange, Yellow, Green based on increasing levels of environmental risk.
48. What common physiological disorder is associated with calcium deficiency in Geraniums?
- A) Chlorosis.
 - B) Necrosis.
 - C) Blossom end rot.
 - D) Tip burn
49. Toxic substance found in litchi seed is,
- A) Saponin
 - B) Methylene cyclopropyl glycine.
 - C) Ethyle hexanoate.
 - D) Methylene butanoate.
50. Which of the following flowering mechanism is observed in Kamlam fruit.
- A) Pin type heterostyly.
 - B) Thrum type heterostyly.
 - C) Distyly.
 - D) Tristyly.

51. The union between stock and scion of budded plants takes place through:
- A) Cambium.
 - B) Cortex.
 - C) Xylem.
 - D) Stomata.
52. What is the condition where some berries within a grapes cluster grow much larger or smaller than the typical berries.
- A) Hen and Rooster Syndrome.
 - B) Duck and Goose Condition.
 - C) Hen and Chicken Disorder.
 - D) Turkey and Quail Syndrome.
53. The first fruit crop to be whole genome sequenced is :
- A) Grape.
 - B) Papaya.
 - C) Apple.
 - D) Peach.
54. Species of mango which can withstand waterlogging conditions _____
- A) *Mangifera inocarpoides*.
 - B) *Mangifera pajang*.
 - C) *Mangifera similis*.
 - D) *Mangifera decandra*.
55. Genera with highest number of species under family Caricaceae is _____
- A) Carica.
 - B) Jacartia.
 - C) Jarilla.
 - D) Cyclomorpha.

56. Pusa Nanha, a dwarf mutant evolved by treating papaya seed with _____ rays.
- A) 50 Kr gamma rays.
 - B) 5 Kr gamma rays.
 - C) 70 Kr gamma rays.
 - D) 15 Kr gamma rays.
57. Grade and quality of papain is determined by _____
- A) Phenylalanine unit.
 - B) Tyrosine unit.
 - C) Caseinolytic unit.
 - D) Tryptophan unit.
58. Fruit phyllotaxis of 21/55 is a character of _____ fruit.
- A) Durian.
 - B) Pineapple.
 - C) Jackfruit.
 - D) Fig.
59. Falling of dried spine like stigma at the tip of fruit when touched is a maturity index for
- A) Banana
 - B) Sapota.
 - C) Apple.
 - D) Mango.
60. Cultivars of which crop are classified as pollination constant and pollination variant
- A) Durian.
 - B) Plum.
 - C) Persimmon.
 - D) Avocado.

61. Long styled flowers of fig which mature only after caprification belongs to ____
- A) Adriatic type.
 - B) Smyrna type.
 - C) San Pedro type
 - D) Capri fig type.
62. Which fruit among the following options implies to wooly inflorescence.
- A) Japan plum.
 - B) Jamun.
 - C) Jackfruit.
 - D) Quince.
63. Sodium hydroxide treatment is used to remove ____ the bitter principle of Olive.
- A) Oliverein.
 - B) Oleruptine.
 - C) Oleuropein.
 - D) Oleaster
64. Major volatile compounds responsible for strawberries flavour are
- A) Ethyl propanoate and ethyl hexanoate.
 - B) Ethyl butanoate and ethyl hexanoate.
 - C) Ethyl propanoate and ethyl butanoate.
 - D) Ethyl heptanoate and ethyl propanoate.
65. Walnuts contain around 65% of its compositions as lipids, which is the major fatty acid present.
- A) Linolic acid.
 - B) Linolenic acid.
 - C) Oleic acid.
 - D) Palmitic acid.
66. Black and purple raspberries are propagated by ____
- A) Cuttings.
 - B) Suckers.
 - C) Tip layering.
 - D) Stolons.

67. True statement regarding floral development of pecan nut
- A) Staminate flowers/catkins are borne laterally on current season's growth.
 - B) Pistillate flowers/spikes are borne laterally on current season's growth.
 - C) Staminate flowers/catkins are borne terminally on current season's growth.
 - D) Pistillate flowers/spikes are borne laterally on previous season's growth.
68. Select false statement of kiwi
- A) Kiwi is morphologically dioecious.
 - B) Pistillate flowers are less attractive to insects.
 - C) Kiwi follows triple sigmoid growth curve.
 - D) Dioecious flowers are borne on current season shoots arising from axillary buds on one year lateral canes.
69. Which of the following crop has the largest genome size
- A) Onion.
 - B) Potato.
 - C) Tomato.
 - D) Carrot.
70. Cytoplasmic male sterility is utilized for hybrid development in which of the following crop.
- A) Potato.
 - B) Melon.
 - C) Water melon.
 - D) Carrot.
71. Late blight is a major disease of
- A) Potato.
 - B) Onion.
 - C) Garlic.
 - D) None.
72. CRIPSR based genome editing was utilized for the first time in which of the following vegetable.
- A) Potato.
 - B) Chilli.
 - C) Tomato.
 - D) Carrot.

73. Yellow vein mosaic virus affects which crop.
- A) Brinjal.
 - B) Okra.
 - C) Melon.
 - D) None.
74. Pusa Madhavi is a cultivar of
- A) Tomato.
 - B) Potato.
 - C) Carrot.
 - D) Onion.
75. Bharat is a popular hybrid of
- A) Chilli.
 - B) Brinjal.
 - C) Bell pepper.
 - D) Cucumber.
76. Nursery sowing of vegetables can be done after soil sterilization with
- A) Captan.
 - B) Formalin.
 - C) Indofil M-45.
 - D) Bavistin.
77. Seed plot technique in potato is practiced to produce.
- A) Bacteria free seed.
 - B) Virus free seed
 - C) Fungal free seed.
 - D) None of the above.
78. Little leaf disease of brinjal is due to
- A) Bacteria
 - B) Fungus.
 - C) Mycoplasma like organisms.
 - D) Virus.

79. As per Harrington's simple Thumb Rule, _____ percent decrease in temperature nearly doubles the storability of the vegetable seeds.
- A) 0.01
 - B) 0.1
 - C) 1.0
 - D) 10
80. Male flowers are induced for seed production of parthenocarpic line of cucumber by application of
- A) Ethephone.
 - B) Silver nitrate.
 - C) NaCl.
 - D) Vipul.
81. Tag colour for packing of certified seed is
- A) White.
 - B) Blue.
 - C) Yellow.
 - D) Green.
82. To grow potato for processing purposes, the ideal temperature requirement during tuberization is
- A) 0-6 °C.
 - B) 7-13 °C.
 - C) 14-20 °C.
 - D) 21 -26 °C.
83. In chrysanthemum flower, ray florets are _____ type.
- A) Hermaphrodite.
 - B) Pistillate.
 - C) Stamens.
 - D) None of these

84. Which among the following is **NOT** a classification of inflorescence type of dahlia.
- A) Fimbriated.
 - B) Stellar.
 - C) Peony.
 - D) Thistle.
85. Some of the noticeable consequences of polyploidy in ornamentals is
- A) Increased heterozygosity.
 - B) Heterosis.
 - C) Bigger flowers.
 - D) All of these.
86. Variation observed among progeny of plants regenerated from somatic cells cultured *in vitro* is called.
- A) Spontaneous mutations.
 - B) Mutations.
 - C) Bud sports.
 - D) Somaclonal variations.
87. Sweet peas are.
- A) Self - pollinated.
 - B) Cross - pollinated.
 - C) Partially cross pollinated.
 - D) Partially self - pollinated.
88. Fruit type of Tendu (*Diospyrus melanoxylon* Roxb.) is Moderate
- A) Drupe.
 - B) Pome.
 - C) Berry.
 - D) Capsule.
89. Blood fruit (*Haematocarpus validus* (Miers.) Bakh. f. ex. Forman). a naturally distributed plant species in the northeast region of India belongs to family.
- A) Sapotaceae.
 - B) Rosaceae.
 - C) Menispermaceae.
 - D) Rutaceae.
90. Which state is the largest producer of large cardamom (*Amomum subulatum* Roxb)
- A) Sikkim.
 - B) Arunachal Pradesh.
 - C) West Bengal.
 - D) Nagaland.

91. *Dactylicapnos scandens*, commonly known as Yellow Bleeding Heart, derives its name from its distinctive.
- A) Leaf morphology and texture.
 - B) Fruit shape and colour.
 - C) Flower shape and colour.
 - D) Stem structure and growth pattern.
92. Peach like flavour in mango is due to.
- A) Esters.
 - B) Terpenes.
 - C) Lactones.
 - D) Acetone.
93. Which of the following annonaceous fruit is non - acidic in nature.
- A) Custard apple (*A. Squamosa*).
 - B) Atemoya (*A. atemoya*).
 - C) Sour sop (*A. muricata*).
 - D) Bullock's heart (*A. reticulata*).
94. 'Thar Malti' is a cultivar of
- A) Ber.
 - B) Aonla.
 - C) Khirni.
 - D) Phalsa.
95. Mangosteen is termed as 'Energy tablet' owing to its high.
- A) Reducing sugar content.
 - B) Carbohydrate content.
 - C) Cyanidin - 3 - glucoside.
 - D) Hexyl acetate content.

96. What is the primary disorder in Alphonso mangoes believed to be influenced by convective heat.
- A) Spongy tissue.
 - B) Black tip.
 - C) Anthracnose.
 - D) Malformation.
97. Which fruit crop is commonly associated with the cultural practice known as 'propping'.
- A) Mango.
 - B) Pineapple.
 - C) Banana.
 - D) Papaya.
98. What is the primary training system used for kiwi fruit vines.
- A) Central leader.
 - B) Tall spindle.
 - C) Spindle bush.
 - D) T-bar trellis.
99. How many chilling hours are typically required by low chill apple varieties for optimal fruit production.
- A) 50 chilling hours.
 - B) 250 chilling hours.
 - C) 750 chilling hours.
 - D) 1000 chilling hours.
100. Apple are sorted into how many grades on the basis of size in the Indian market.
- A) 3 grades.
 - B) 4 grades.
 - C) 6 grades.
 - D) 5 grades.
101. Which of the following is considered the ideal planting material for propagating pineapples?
- A) Runners.
 - B) Slips.
 - C) Suckers.
 - D) Seeds.

102. Which state is the leading producer of Avocados in India.
- A) Kerala.
 - B) Tamil Nadu.
 - C) Andhra Pradesh.
 - D) Karnataka.
103. Which of the following fruits primarily rely on bats as their major pollinating agents.
- A) Cape gooseberry.
 - B) Persimmon.
 - C) Durian.
 - D) Passion fruit
104. In Indian conditions, at which stage is date palm typically harvested?
- A) Doka.
 - B) Dang.
 - C) Tamer.
 - D) Gandora.
105. Apetalous flowers are found in
- A) Litchi.
 - B) Apple.
 - C) Mango.
 - D) Grape.
106. The concept of ball- skin versus bladder effect is observed in which fruit crop.
- A) Mango.
 - B) Litchi.
 - C) Strawberry.
 - D) Sapota.
107. The flower color of Kasuri methi (*Trigonella foenumgraecum*) is
- A) White.
 - B) Yellow.
 - C) Purple.
 - D) Green.

108. Which of the following fruit has the highest tolerance to saline/sodic soils.
- A) Ber.
 - B) Custard apple.
 - C) Bael.
 - D) Guava.
109. Which of the following planting system accommodates maximum number of plants.
- A) Square.
 - B) Septuplet.
 - C) Quincunx.
 - D) Triangular
110. Higher temperature is more conducive for production of _____ in mango
- A) Male flowers.
 - B) Female flowers.
 - C) Perfect flowers.
 - D) Both male and perfect flowers.
111. Banana belongs to the order _____
- A) Rosales.
 - B) Rutales.
 - C) Ericales.
 - D) Scitamineae.
112. Banana aphid (*Pentalonia nigronervosa*) transmit viral infection called.
- A) Bunchy top.
 - B) Curly top.
 - C) Both A and B.
 - D) None of the above.
113. Post fertilisation in coconut, it takes _____ months for the fruit to mature.
- A) 11 to 12 months.
 - B) 6 to 9 months.
 - C) 7 to 8 months.
 - D) 12 to 14 months.

114. Dwarf and tall variety coconuts are _____ and _____ pollinating.
- A) Allogamous and autogamous.
 - B) Autogamous and allogamous.
 - C) Allogamous and allogamous.
 - D) Autogamous and autogamous.
115. Crown choking in coconut is due to _____ deficiency
- A) Magnesium.
 - B) Calcium.
 - C) Boron.
 - D) Calcium and boron.
116. According to Knight (1980), cultivated pineapples are placed under _____ major groups.
- A) 3
 - B) 4
 - C) 5
 - D) 2
117. Most serious disease of pineapple is _____.
- A) Yellow spot.
 - B) Heart and root rot.
 - C) Mealy bug wilt.
 - D) Leaf spot.
118. BPP series of varieties belongs to _____ crop.
- A) Cocoa.
 - B) Coconut.
 - C) Chilli.
 - D) Cashewnut.
119. Most commonly used method for roasting of cashewnuts is
- A) Drum roasting.
 - B) Oil bath roasting.
 - C) Steam roasting.
 - D) Shell roasting.
120. Species of fruit fly not infecting guava is _____
- A) *Bactrocera dorsalis*.
 - B) *Bactrocera correcta*.
 - C) *Bactrocera zonata*.
 - D) *Bactrocera chaetodacus*.
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ROUGH WORK