

COMPILED QUESTIONS for NET and ARS (Fruit Science).

1. Inheritance pattern of dwarfness in Papaya is **Recessive**
2. Self fertile apple cultivar **Golden delicious**
3. Nendran genotype **AAB**
4. The fruit crop which has greater biodiversity in India (Peach Apricot/Olive Kiwi)
5. Vigorous rootstock of grape **Dogridge**
6. Summer pruning is practiced in **Apple/Cherry/Peach/Citrus** /1
7. Mangosteen family **Guttiferae**
8. Ornamental papaya **C.gracilis**
9. Pusa Majesty & Pusa Delicious are **Gynodioecious**
10. Spacing followed in mango HDP is **2.5 x 2.5 m**
11. Amrit Sagar is a var of **Banana**
12. Mango var. resistant to Malformation **Illachi Bombay Green**
13. Papaya cultivar most suitable for papain extraction is CO-2 Co-5
14. The fruit crop which doesn't have a developed rootstock till date **Litchi Pear Cherry**
15. Litchi is propagated by **Air Layering**
16. In mango, spongy tissue is governed by **Recessive genes**
17. Pineapple is mostly packed in (CFB/Wooden crates/Polythene lined Gunny bag /Polythene lined bamboo baskets)
18. Kew & Giant Kew belong to **Cayenne group**
19. Ornithophilous fruit crop (**Banana/Pineapple/Jack Sapota**)
20. Cauliflorous fruiting is observed in **Jack fruit**
21. Transgenic papaya var **Rainbow**
22. BT papaya was developed from **USA**
23. Carambola is rich in **Oxalic acid**
24. Ber budding time **July-August/Sept-Oct/May-June**
25. Banana cultivar susceptible to Panama wilt is **Rastahli**
26. Pusa Nanha is a dwarf mutant of papaya developed through **Gamma irradiation**
27. Mango quarantine for export include exposing them to G-radiations of (400 Gy/450 Gy/500 Gy/ 550 Gy)
28. During VHT, the temperature attained by mango fruit pulp is (**43°C/47.5°C/50°C/55°C**)
29. Postharvest drop of grape berries from bunch can be controlled by spraying the bunches **with 50 ppm NAA** one week before harvest.

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30. Preharvest drop in fruits is controlled by (GA:BA 2, 4, 5-T)
31. Auxin precursor is **Tryptophan**
32. The pigment present over the surface of mature orange during harvest is (Carotene/Chlorophyll/Naringin)
33. Transgraft has **transgenic rootstock** transgenic scion/Both are transgenic
34. First transgenic fruit crop (Walnut/Pear/
35. Nutrient indicator of pineapple is **D-leaf**.
36. The nutrient element which is immobile ion soil & hence applied only as a basal dose is **P**
37. UPOV act **1961**
38. The nutrients most amenable to supply through drip irrigation **NPK**
39. The raising problem in protected cultivation is (Nematodes/**Fruit fly**/
40. The protected structure in which all the environmental factors including direction of sunlight are controlled is **Phytotron**
41. Expensive type of protected structure is **Phytotron**
42. Most common type of protected structure used by Indian nursery men is **Net house**
43. The polyethylene used as a cladding material in polyhouse should be **UV stabilized**
44. The crop grown commercially in protected structures in India is **strawberry**
45. Molecular marker used for Gene mapping is **RAPD**
46. 0.1 g of a compound mixed in 10 lit of water gives (1000 ppm/100ppm/10 ppm/
47. Dry neck is a disorder in **Avocado**
48. The crop most suitable for protected cultivation is Mango/**Papaya**/
49. Loquat has **gametophytic SI**
50. Ca deficiency is observed in **top leaves**
51. The cultivar of grape whose genome is sequenced is **Pinot Noir**
52. Mountain papaya *V. candamarcensis*
53. Citrus tetraploid *Fortunella hindii* **CT - FH**
54. Deciduous citrus spp **Trifoliolate orange** **DC - T**
55. Sapota fruit is botanically **Berry**
56. Opt. C: N ratio for balance growth & flowering is **CCC:NN**
57. In Aonla, pruning will (increase C:N ratio/decrease C:N ratio/No effect on C:N ratio/improve vegetative growth)
58. Fruit dormancy is observed in **Aonla**
59. Papaya spp having virus resistance source is *V. cauliflora*
60. Triple sigmoid growth curve **Kiwi fruit**

Anil rana

61. Apple single sigmoid growth curve
62. Highest vitamin C content **West Indian Cherry (Barbados Cherry)**
63. Total no. of AEZ in India **60**
64. The AEZ for mango was not present in the area of Maharashtra (**Pune/Thane/Ratnagiri/Sindudurg**)
65. Highest production of coconut (Indonesia/Philippines)
66. In rubber, the latex flow can be increased by spraying with **ethylene**
67. Coffee origin **Ethiopia**
68. Pineapple origin **Brazil/Paraguay**
69. Mango origin **Indo-Myanmar**
70. Pus Pratibha Amrapali x Sensation
71. Pinching is practiced in mango cultivar **Amrapali**
72. Deciduous vine **Kiwi**
73. Fruit juices are dried using (Cabinet dryer/**Drum drier** tray drier)
74. Post harvest losses in India **25-30 %**
75. Ethylene absorber **KMnO₄**
76. Bioregulator which cause leaf senescence is **Ethylene**
77. Natural inhibitor present in plants is **ABA**
78. Banana classification is given by **Simmonds & Shepherd**
79. Severe pruning is done in **Ber**
80. Pectin is present in **Cellwall**
81. **Harvest Index** = Economic yield/Total biomass yield
82. **Water use efficiency** = Max. yield/unit water utilization
83. Tangelo: *C. reticulata* x *C. paradisi*
84. Citrangequat is an **inter-generic** hybrid
85. Kinnow is **inter-specific** hybrid
86. Mandarin cvr. Suited for North west region is **Kinnow**
87. The following bioregulator is present naturally in the ovaries of the **parthenocarpic fruit**
GA
88. Thickness of black mulch used in pineapple (100 guage/150 guage/400 guage/)
89. The color of mulch which absorbs more heat **black**
90. Mulching reduced weed growth by (**prevention of light penetration in to soil/toxic** effect on the plants/)
91. The hybrid formed by fusion of two somatic cells is known as **Cybrid/Somatic hybrid**

Ethylene **KMnO₄**
 Bioreg - leaf fall - Ethylene
 Nat. Inhibitor - **ABA**

Quaric GA

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Ethylene \rightarrow **KMnO₄**
 Bioreg - leaf fall - Ethylene
 Natural Inhibitor - **ABA**

quatic GA

92. Coconut is a **cross pollinated** crop
93. Percent fruit set in mango is **less than 1**
94. Percent fruit set in custard apple **0.5-5 %**
95. Most widely used rootstock of apple all over the world is **M-9**
96. EMLA series of rootstock are resistant to **viruses**
97. MM series are resistant to wooly **apple aphids**
98. Sunehari **Ambri x Golden Delicious**
99. Dwarfing rootstock for citrus **Flying Dragon**
100. Wood apple propagated by **budding**
101. Annual water requirement of Cavendish Banana -
102. Cavendish Banana genotype **AAA**
103. Days from full bloom to maturity for Dwarf Cavendish ($90 \pm 5 / 100 \pm 5 / 125 \pm 5 / 130 \pm 5$)
104. Marmalade is prepared from **Orange/Lime**
105. Protected structure are used to raise **early season nursery**
106. Banana storage temperature **13°C**
107. The sugars are transported in the form of **sorbitol** in Rosaceae family
108. Spring crop in fig is called as **Breba**/Ambe bahar Mrig bahar/Haste Bahar
109. The pollination by the wasp *Blastophaga sp* is known as **Caprification**
110. Cashew inflorescence is **Andromonoecious**
111. The papaya crop is **Polygamo gynodioecious**
112. Apomixis from male gametes without fertilisation is **Androgamy**
113. Burrknots are related to (Woolyapple aphids/**Clonal rootstock**/
114. Application of **TIBA** bioregulator induces lateral branching
115. The process of culturing rapidly growing shoot tips/root tips is known as **meristem culture**
116. The part of the plant used for developing callus in tissue culture is termed as **Explant**
117. The undifferentiated mass of cells is known as **Callus**
118. Tissue culture is commercially exploited in **banana**
119. The ability of a plant cell to develop into whole plant is known as **Totipotency**
120. The technique used for producing virus free plants in citrus **Micro grafting**
121. The bioregulator essential for callus formation is **BA**
122. The natural cytokine Zeatin is first extracted from **Sorghum/Maize kernel**
123. CaCl_2 release **acetylene** when mixed with water
124. Embryos can be rescued using **Embryo culture**

125. Haploid plants produced through **pollen/anther culture**
126. Sibmating is practiced in **papaya**
127. In **papaya**, female plants can be produced in bulk through **pollen culture/ovule culture/ovary culture/anther culture**
128. **Somaclonal variations** Definition
129. A set of plants derived from a single parent plant through vegetative propagation is referred as **clone**
130. Cimeras are maintained by **cuttings**
131. Red apple are a result of (**periclinal chimeras**/sectorial chimeras/mericlinal chimeras/normal chimeras)
132. **Christ thorn** – *Carissa carandus* *Caronada*.
133. **Goma Priya** is a cultivar of **Jamun**
134. Alternate bearing is not so common in (Sapota/Tamarind/Apple/Citrus)
135. High net returns for grapes is observed in **Overhead trellis system**
136. **Strawberry** propagated by **Runner**
137. Albinism is a disorder in **Strawberry**
138. Weight of banana sucker is 0.25-0.75 kg/**0.75-1.0 kg**/1.5-2.0 kg
139. **Smyrna fig** & **San Pedro fig** are **Edible fig**
140. Bio-regulator as an alternative for chilling requirement is **GA**
141. Chilling treatment is referred to as **vernalisation**
142. **Cool chain** is essential to **reduce postharvest losses**
143. Modern packaging /storage method available for preservation of fruits & vegetables (**MAP/vacuum packaging**/
144. Precooling is done to remove **field heat**
145. Ca deficiency cause bitter pit
146. Viability of recalcitrant seeds can be retained by storing them at refrigerated temperature/ room temperature/ < 7°C with low RH/< 7°C with high RH
147. Cryo preservation of pollen is done at -196 °C *liquid N₂*
148. Dwarf rootstock of Mango **Totapuri Red Small**
149. Fruit crop belonging to Myrtaceae is **Jamun**
150. The seed & fruit useful for diabetes is **Jamun**
151. The compound present in grape fruit which is helpful for people suffering from type-II diabetes is **Naringin**
152. **Rootstock** of citrus resistant to Tristeza.....

*Alternate bearing
Not in Citrus*

153. Mutant of Thompson Seedless (**Tas-e-Ganesh** Sonaka Sharad Seedless/)
154. Major problem in Mutation breeding is **stability**
155. Hybrids of *Euvitis* x *Muscadine* are **sterile**
156. Ultra dwarf rootstock of apple is **M-27**
157. Myrobalan B is a rootstock of **Plum**
158. Flame is a mutant of grape fruit from **Henderson**.
159. Most preferred planting material for pineapple is **slips**
160. Meadow orchard in guava is based on the principle of **reduced spacing & continuous pruning**
161. Pineapple HDP accommodates **50,000 to 60,000** plant/ha
162. Most commonly used training system for most of the fruit crops is **Modified leader system**
163. The PGR CCC is used to reduce / check the growth of the leaves
164. The tree canopy can be controlled using application of retardants such as **Paclobutrazol**
165. The crop which does not belong to the same family
(Mango/Cashew/Pistachionut **Strawberry**)
166. The pomegranate fruit 'Balausta' is a modified **Berry**
167. In peach, the flowers are produced on **last years growth**
168. **Florina** is introduced from **France**/London/USA/ **Florina - France**
169. Strawberry is an **Short Day plant**
170. The common name of *Fragaria vesca* is **Strawberry**
171. Mango pollinator is **House fly**
172. Possible intercrop in Banana is Turmeric/Guava/**Ginger**
173. Fruit crop which is highly tolerant o salt is **Date palm**
174. Moderate tolerance to saline soil is **Fig**
175. The salt excluder plant is Citrus
176. False fruit is observed in **Apple**
177. Yellow color of papaya is due to **Caricaxanthin**
178. Polyploidy breeding is common in **Banana**
179. Major hindrance in banana breeding is (Male sterility and dichogamy, **Female sterility and polyploidy**, Male sterility and pest incidence, Male sterility and viral diseases)
180. High calorific value food (**Almond**/Banana/Mango/)
181. **Mattocking** Definition
182. Citrus spp with high Malicacid **Sweet lime**

183. Degreening is not done in (Mango Banana/Citrus/Grapes)
184. Indicator plant of tristeza disease is **Kagzi lime**
185. Grape is predominant in having the following **tartaric acid**
186. Which var of grape show stimulative Parthenocarpy **Black Corinth**
187. Leading raisin grape cultivar is **Thompson Seedless**
188. Mango inflorescence has **Male & Bisexual** flowers
189. The ratio of edible to non-edible part in mango is **3:4**
190. The skin color in Mango is governed by (Polygenes/oligo genes/dominant genes/)
191. In North India, the grape is pruned **only once**
192. In Maharashtra, the grape is pruned **twice**.
193. The one year old shoot of grape in which the fruit bunches appear are known as (Arms/Canes/Shoots/Spurs)
194. The fan/Palmate training system is a modification of
195. The dwarf pyramid training system is a modification of
196. Leaves show drying scorching effect due to deficiency of (N/P/K/Ca)
197. Papaya Origin **Tropical America** *Mexico*
198. The Enzyme Bromelin is extracted from Pineapple
199. Most stable sex form in papaya is **Female**
200. Pineapple is a **perennial herb**
201. Fuerte is a type of **Avocado**
202. Bisexual flowers are found in **Wild Fig**
203. Solar training system is followed in
204. **Kaveri** (Passion Fruit): Purple x ~~Yellow~~ *Golden*
205. Passion fruit propagated by **Seed**
206. Nectarines belong to **Peaches**
207. Kiwi fruit is propagated by cuttings
208. Dichogamy is very much common in **Annonaceous fruits**
209. Time gap between emergence of ant two leaves is known as **Phyllocron**
210. Secondary center of origin for Banana is **South India**
211. The bud wood of temperate plant species is stored at **32 F/48 F**
212. The fruit crop in which the cell division continues to take place till harvest is **Avocado**
213. The sugar acts as a preservative by the mechanism of osmosis
214. The fruit juices are pasteurized at **85°C/95°C/100°C**
215. The most common used preservative for household purposes is Salt

Fuerte - Avocado

216. Defoliation in Annona results in good crop is achieved by spraying 0.5 % KI
217. The seedless mango cultivar is **Sindhur**
218. Mango seed is classified as **recalcitrant**
219. Granulation disorder is found in **Citrus**
220. Monocotyledonous, monoecious, monocarpic, mesophytic, herbaceous plant
(Plum/Guava/ **Banana**/litchi).
221. Tangor is inter-specific cross between **Tangerine (*C. reticulata*) x Sweet Orange (*C. sinensis*)**
222. Majority of the cultivated banana belong to the group **Dwarf Cavendish**
223. The plant growth regulator used for increasing berry size of grapes is **GA3**
224. Miracle fruit of China is **Kiwi fruit**
225. Mallika (Mango) : **Neelum x Dashehari**
226. In the world, grapes are mostly processed into Raisin Juice/Wine/Jam
227. Storage temperature for lime is $0-1^{\circ}\text{C}/5-6^{\circ}\text{C}/-1^{\circ}\text{C}/4-10^{\circ}\text{C}$
228. The suitable structure for plant growth studies is Shed net house/ Low cost green house/
Phytotron/ Low cost polyhouse
229. The best irrigation system for protected cultivation is **Drip system**
230. Intermittent mist sprinkler is necessary in protected houses for Grafts/**Rooting of Cuttings/budding/air** layering
231. Hen & Chick disorder is found in **Grapes**
232. Plant highly sensitive to moisture stress is Ber/**Banana**/Citrus/
233. Santa Rosa is a cultivar of **Plum**
234. Strawberry is commercially propagated by **Runners**
235. HDP spacing in Mango is **2.5 x 2.5 m**
236. Litchi leaf scorching is due to deficiency of N/P/K/Ca
237. High temperature during maturity period causes poor development of fruit and remains green in (Sweet orange/ Khasi mandarin/ Kinnow mandarin/ Malta blood red orange).
238. Dormex or Hydrogen cyanamide is used for early bud break in
(Litchi/**Grape**/Papaya/Banana).
239. Expand CFB: **Corrugated Fiber Board**
240. The Physiological Disorder of Apple reduced by CA storage is **scab**.
241. Age old practice of ripening of annona fruit by keeping some fruits of (**Ripe banana / Ripe orange / Ripe grapes/ Ripe Pineapple**).
242. Chemical thinning of fruit is done by (GA3/Ethrel/IAA/ 2,4-D)

243. **α -(1-4) polygalacturonic acid** - Structural component of pectin.
244. Custard apple- etario of berries.
255. dwarfness: that's why dwarfing rootstocks have Bark(periderm, cortex, phloem and vascular cambium) to Wood(xylem) ratio higher than vigorous rootstock, less no. of xylem vessels, less Auxin content. A large proportionate volume occupied by living cells(Axial parenchyma and ray parenchyma cells) relative to functionally dead xylem cells (vessels and fibres), Constant root- shoot ratio (Auxin : Cytokinin), Higher ABA: IAA - greater differentiation of phloem and related tissues- dwarfing stocks.
- 256- **Papaya- female identification at seedling stage- Proline present, Cystiene is absent, tryptophan level just double than Male seedlings.**
257. Curing is followed in which fruits for Ripening - Banana.
258. Loquat followed- single sigmoid curve. (Pome fruits- Apple, Pear, Quince- several seeds) *+ apple - white*
259. *flav* flavado and albedo cells are important in citrus fruit growth, where the flavado cells having carotenoids in stage II and As Albedo cells enlarge the peel of fruit reduces results in more pulp content and increase in diameter of juice sacs.
- 260- 2,4-D used mainly in citrus as- to reduce fruit drop at 2 months after colour break where GA has applied 2 weeks before. - Bz delay in senescence(Reduce Rind Disorders and decline the acid level results in delay of overripe flavour) or pre mature fruit drop by better connection of phloem and xylems results in longer time of fruit attachment to tree and delay in abscission layer formation.
- 261- **Single sigmoid curve** - All pome fruits except loquat, Pineapple, Apple, pear, banana, citrus, avocado, strawberry, datepalm, (Several seeded), Cran berry
- 262- **Double sigmoid curve**- Stone fruits and Rasp berries, Blue berries, Fig, Grape, Mango, Olive, cherry, sapota Almond and Apricot
- 263- **Triploid Sigmoid curve**- Kiwifruit (Chinese gooseberry)
264. Among Temperate fruit crops- less time taken from Full bloom to Harvest- Cherry
More time taken from FBD to Harvest- Pear, Apple, Peach
Early flowering- Almond.
265. Expressing fruit growth as a relative growth rate (RGR) mass/unit mass/unit time)
266. Why is Sigmoid curves are more important? Because it provides a way to understand fruit growth and the responses of fruit growth to crop load, thinning and even weather in different years
267. Bunch covering increased the % of weight of Neypoovan bunch by 6 -7%.