

HORTICULTURE ICAR SEPT 2022

Topic:- 08 HORTICULTURE_PG

1) The soil with more than 20 Kg/ ha. phosphorous are rated as

[Question ID = 481][Question Description = 101_30_HOR_AUG22_Q01]

1. Low in P [Option ID = 1921]
2. Medium in P [Option ID = 1922]
3. High in P [Option ID = 1923]
4. Very low in P [Option ID = 1924]

2) The first stable product of C_3 pathway is

[Question ID = 482][Question Description = 102_30_HOR_AUG22_Q02]

1. Phosphoglycerate
[Option ID = 1925]
2. Oxaloacetate
[Option ID = 1926]
3. Pyruvic acid
[Option ID = 1927]
4. Malate dehydrogenase
[Option ID = 1928]

3) Which one of the following is NOT an example of mesophytes?

[Question ID = 483][Question Description = 103_30_HOR_AUG22_Q03]

1. Wheat [Option ID = 1929]
2. Maize [Option ID = 1930]
3. Cotton [Option ID = 1931]
4. Low land rice [Option ID = 1932]

4) The water requirement of wheat is [Question ID = 484][Question Description = 104_30_HOR_AUG22_Q04]

1. 20 - 25 cm [Option ID = 1933]
2. 30 - 35 cm [Option ID = 1934]
3. 50 - 55 cm [Option ID = 1935]
4. 60 - 65 cm [Option ID = 1936]

5) According to planning commission (1985-1990) India is divided into how many agro climatic zone? [Question ID = 485]

[Question Description = 105_30_HOR_AUG22_Q05]

1. 12 [Option ID = 1937]
2. 15 [Option ID = 1938]
3. 20 [Option ID = 1939]
4. 25 [Option ID = 1940]

6) High yielding varieties programme was initially started with

[Question ID = 486][Question Description = 106_30_HOR_AUG22_Q06]

1. 100 districts in country during 1965-66 [Option ID = 1941]
2. 100 districts in the country during 1970-71 [Option ID = 1942]
3. All district of Punjab and Haryana during 1965-66 [Option ID = 1943]
4. 1000 district in the country during 1965-66 [Option ID = 1944]

7) The combined effect of alleo chemical and competition of weed with crop, is known as [Question ID = 487][Question Description = 107_30_HOR_AUG22_Q07]

1. Interference [Option ID = 1945]
2. Suppressed weed growth [Option ID = 1946]
3. Allelopathy [Option ID = 1947]
4. Hindrance [Option ID = 1948]

8) Under north Indian condition plant crop of sugarcane should be harvested during which period to obtain profuse ratoon

initiation[Question ID = 488][Question Description = 108_30_HOR_AUG22_Q08]

1. Mid December - Mid January [Option ID = 1949]
2. Mid January- Mid February [Option ID = 1950]
3. Mid February - Mid March [Option ID = 1951]
4. Mid March- Mid April [Option ID = 1952]

9) The quality of air at a given location is characterised by AQI in the range of[Question ID = 489][Question Description = 109_30_HOR_AUG22_Q09]

1. 0-200 [Option ID = 1953]
2. 0-300 [Option ID = 1954]
3. 0-400 [Option ID = 1955]
4. 0-500 [Option ID = 1956]

10) Soils of 'b' horizon are dominated by

[Question ID = 490][Question Description = 110_30_HOR_AUG22_Q10]

1. Mineral matter [Option ID = 1957]
2. Organic matter [Option ID = 1958]
3. Clay, Fe, Al and humus [Option ID = 1959]
4. Sand and Silt particles [Option ID = 1960]

11) Stem rot disease of rice occurs at a stage from[Question ID = 491][Question Description = 111_30_HOR_AUG22_Q11]

1. Panicle initiation to booting [Option ID = 1961]
2. Pre tillering to mid tillering [Option ID = 1962]
3. Pre flowering-Post flowering [Option ID = 1963]
4. Nursery to Tillering [Option ID = 1964]

12) Which portion of the sugar cane is the best for use as seed?

[Question ID = 492][Question Description = 112_30_HOR_AUG22_Q12]

1. Top 1/3 to ½ portion
[Option ID = 1965]
2. Top 2/3 to 3/4 portion
[Option ID = 1966]
3. 2/3 portion of bottom
[Option ID = 1967]
4. 3/4 portion of bottom
[Option ID = 1968]

13) Zinc is responsible for the biosynthesis of which plant auxin ?

[Question ID = 493][Question Description = 113_30_HOR_AUG22_Q13]

1. NAA [Option ID = 1969]
2. 2,4-D [Option ID = 1970]
3. IBA [Option ID = 1971]
4. IAA [Option ID = 1972]

14) How much amount of urea would be required for supplying 5 Kg of N?

[Question ID = 494][Question Description = 114_30_HOR_AUG22_Q14]

1. 5.25 [Option ID = 1973]
2. 9.62 [Option ID = 1974]
3. 10.87 [Option ID = 1975]
4. 15.66 [Option ID = 1976]

15) Which biological agent can control *Parthenium hysterophorus* weed?

[Question ID = 495][Question Description = 115_30_HOR_AUG22_Q15]

1. *Teleonima scruplosa* [Option ID = 1977]
2. *Neochetina bruchi* [Option ID = 1978]
3. *Dactylopius tomentosus* [Option ID = 1979]
4. *Zygogramma bicolorata* [Option ID = 1980]

16) Given below are two statements

Statement I: During 1972-73 there was a apple epidemic in Jammu and Kashmir

Statement II: Commercial scab resistant variety for Jammu and Kashmir are Shalimar Apple I and Shalimar Apple II

In light of the above statements, choose the *correct* answer from the options given below

[Question ID = 496][Question Description = 116_30_HOR_AUG22_Q16]

1. Both Statement I and Statement II are true [Option ID = 1981]
2. Both Statement I and Statement II are false [Option ID = 1982]
3. Statement I is true but Statement II is false [Option ID = 1983]
4. Statement I is false but Statement II is true [Option ID = 1984]

17) Which one of the following is a dioecious mutant of papaya?

[Question ID = 497][Question Description = 117_30_HOR_AUG22_Q17]

1. Solo [Option ID = 1985]
2. Pusa Nanha [Option ID = 1986]
3. Co 5 [Option ID = 1987]
4. Co 7 [Option ID = 1988]

18) Number of bee hives required for effective pollination in case of strawberry

[Question ID = 498][Question Description = 118_30_HOR_AUG22_Q18]

1. 2 - 5 [Option ID = 1989]
2. 8 - 10 [Option ID = 1990]
3. 12 - 15 [Option ID = 1991]
4. 25 or more [Option ID = 1992]

19) Agricultural Education Day is celebrated on

[Question ID = 499][Question Description = 119_30_HOR_AUG22_Q19]

1. 1st December [Option ID = 1993]
2. 3rd December [Option ID = 1994]
3. 5th September [Option ID = 1995]
4. Guru Purnima [Option ID = 1996]

20) Match List I with List II

List I	List II
Planting system	Features
A. Hexagonal	I. Filler Plant
B. Quincunx	II. Originated from Israel
C. Meadow orcharding	III. 15 % more plant than square system
D. Contour	IV. Plant spacing varies

Choose the correct answer from the options given below:

[Question ID = 500][Question Description = 120_30_HOR_AUG22_Q20]

1. A - III, B - I, C - II, D - IV [Option ID = 1997]
2. A - I, B - II, C - III, D - IV [Option ID = 1998]
3. A - III, B - I, C - IV, D - II [Option ID = 1999]
4. A - IV, B - III, C - II, D - I [Option ID = 2000]

21) Coconut hybrids

- A. VHC 3
- B. Chandra Kalpa
- C. Chandra Sarkara
- D. Kera Sree
- E. Pratap

Choose the *correct* answer from the options given below:

[Question ID = 501][Question Description = 121_30_HOR_AUG22_Q21]

1. A, B and D only [Option ID = 2001]
2. A, C and D only [Option ID = 2002]
3. A and E only [Option ID = 2003]
4. C, D and E only [Option ID = 2004]

22) Which of the following is NOT true for cashew nut shell liquid?

[Question ID = 502][Question Description = 122_30_HOR_AUG22_Q22]

1. Naturally occurring phenol [Option ID = 2005]
2. Used in formulation of resins, detergents, insecticides and dyes [Option ID = 2006]
3. It is obtained during processing of nuts in isolation of kernels [Option ID = 2007]
4. Naturally occurring tannins [Option ID = 2008]

23) Which of the following is NOT true for Ney Poovan banana?

[Question ID = 503][Question Description = 123_30_HOR_AUG22_Q23]

1. It is AB type banana [Option ID = 2009]
2. Diploid variety [Option ID = 2010]
3. Highly susceptible BBMV [Option ID = 2011]
4. Resistant to nematodes [Option ID = 2012]

24) Pineapple variety that has got Geographical Indication Status[Question ID = 504][Question Description = 124_30_HOR_AUG22_Q24]

1. Amrita [Option ID = 2013]
2. Giant Kew [Option ID = 2014]
3. Kew [Option ID = 2015]
4. Vazhakulam [Option ID = 2016]

25) Given below are two statements, one is labelled as Assertion A and the other is labelled as Reason R

Assertion A: Guava is ideal fruit for jelly preparation

Reason R: Guava is rich in pectin and acids

In light of the above statements, choose the *most appropriate* answer from the options given below

[Question ID = 505][Question Description = 125_30_HOR_AUG22_Q25]

1. Both A and R are correct and R is the correct explanation of A [Option ID = 2017]
2. Both A and R are correct but R is NOT the correct explanation of A [Option ID = 2018]
3. A is correct but R is not correct [Option ID = 2019]
4. A is not correct but R is correct [Option ID = 2020]

26) Given below are two statements

Statement I: Tea Mosquito Bug is a major pest of cashew

Statement II: Mid season/ late season flowering varieties such as Bhaskara are able to escape from the severity of this pest

In light of the above statements, choose the *correct* answer from the options given below

[Question ID = 506][Question Description = 126_30_HOR_AUG22_Q26]

1. Both Statement I and Statement II are true [Option ID = 2021]
2. Both Statement I and Statement II are false [Option ID = 2022]
3. Statement I is true but Statement II is false [Option ID = 2023]
4. Statement I is false but Statement II is true [Option ID = 2024]

27) Mango hybrid Pusa Peetamber is a cross between[Question ID = 507][Question Description = 127_30_HOR_AUG22_Q27]

1. Ratna x Alphonso [Option ID = 2025]
2. Neelam x Alphonso [Option ID = 2026]
3. Alphonso x Banganpalli [Option ID = 2027]
4. Amrapali x Lal Sundari [Option ID = 2028]

28) Which grapefruit cultivar has originated as a pink fleshed budsport of Marsh?

[Question ID = 508][Question Description = 128_30_HOR_AUG22_Q28]

1. Duncan [Option ID = 2029]
2. Foster [Option ID = 2030]
3. Thompson [Option ID = 2031]
4. Star Ruby [Option ID = 2032]

29) Sequence the Agri export zone according to the fruit.

A. Tripura and West Bengal

B. Maharashtra & Gujarat

C. Maharashtra

D. Chittoor

E. Tamil Nadu

Choose the *correct* answer from the options given below

[Question ID = 509][Question Description = 129_30_HOR_AUG22_Q29]

1. Kesar Mango-Mango Pulp-Grape-Cashewnut-Pineapple [Option ID = 2033]
2. Pineapple-Kesar Mango-Grape-Mango Pulp-Cashewnut [Option ID = 2034]
3. Pineapple-Cashewnut-Mango Pulp-Kesar Mango-Grape [Option ID = 2035]
4. Grape-Pineapple-Kesar Mango-Cashewnut-Mango Pulp [Option ID = 2036]

30) Given below are two statements

Statement I: A chimera is a mixture of tissues of genetically different constitutions on the same part of plant.

Statement II: The differences usually arise due to irregular meiosis.

In light of the above statements, choose the *most appropriate* answer from the options given below

[Question ID = 510][Question Description = 130_30_HOR_AUG22_Q30]

1. Both Statement I and Statement II are correct [Option ID = 2037]
2. Both Statement I and Statement II are incorrect [Option ID = 2038]
3. Statement I is correct but Statement II is incorrect [Option ID = 2039]
4. Statement I is incorrect but Statement II is correct [Option ID = 2040]

31) Given below are two statements, one is labelled as Assertion A and the other is labelled as Reason R

Assertion A: In monocot plants Grafting is difficult with low percentage of takes as compared to dicots.

Reason R: Monocots have vascular bundle scattered throughout the stem as compared to dicots.

In light of the above statements, choose the *correct* answer from the options given below

[Question ID = 511][Question Description = 131_30_HOR_AUG22_Q31]

1. Both A and R are true and R is the correct explanation of A [Option ID = 2041]
2. Both A and R are true but R is NOT the correct explanation of A [Option ID = 2042]
3. A is true but R is false [Option ID = 2043]
4. A is false but R is true [Option ID = 2044]

32) Match List I with List II for control of citrus pest through parasite/predators

List I	List II
A. White flies	I. <i>Coccinella septempunctata</i>
B. Mealy bug	II. <i>Cryptolaemus montrouzieri</i>
C. Citrus psylla	III. <i>Brumus suturalis</i>
D. Citrus leaf miner	IV. <i>Citrospilus quadristriatus</i>

Choose the correct answer from the options given below:

[Question ID = 512][Question Description = 132_30_HOR_AUG22_Q32]

1. A - I, B - II, C - III, D - IV [Option ID = 2045]
2. A - IV, B - I, C - II, D - III [Option ID = 2046]
3. A - III, B - II, C - I, D - IV [Option ID = 2047]
4. A - II, B - IV, C - I, D - III [Option ID = 2048]

33) Mid season pear cultivars for high hills of Himachal Pradesh are

A. Bartlett

B. Starkrimson

C. Flemish Beauty

D. Conference

Choose the *correct* answer from the options given below:

[Question ID = 513][Question Description = 133_30_HOR_AUG22_Q33]

1. A, B and D only [Option ID = 2049]
2. A, B and C only [Option ID = 2050]
3. B, C and D only [Option ID = 2051]
4. A, C and D only [Option ID = 2052]

34) The tedious process of emasculation in pineapple is overcome due to:

[Question ID = 514][Question Description = 134_30_HOR_AUG22_Q34]

1. Incompatibility of pollen [Option ID = 2053]
2. Incompatibility of pollen and ovule [Option ID = 2054]
3. Incompatibility of ovule [Option ID = 2055]
4. Incompatibility of stigma [Option ID = 2056]

35) Sequence the disorder with their respective fruits

- A. Soft nose
- B. Goose flesh
- C. Stalk necrosis
- D. Granulation
- E. Black Heart

Choose the *correct* answer from the options given below

[Question ID = 515][Question Description = 135_30_HOR_AUG22_Q35]

1. Banana-Citrus-Grape-Pineapple-Mango [Option ID = 2057]
2. Mango-Pineapple-Grape-Citrus-Banana [Option ID = 2058]
3. Pineapple-Citrus-Banana-Grape-Mango [Option ID = 2059]
4. Mango-Banana-Grape-Citrus-Pineapple [Option ID = 2060]

36) Given below are two statements

Statement I: Banana develops deep root system to trap water and nutrients from the lower profile of soil.

Statement II: Depth and drainage are therefore important factors while selecting soil for Banana

In light of the above statements, choose the *most appropriate* answer from the options given below

[Question ID = 516][Question Description = 136_30_HOR_AUG22_Q36]

1. Both Statement I and Statement II are correct [Option ID = 2061]
2. Both Statement I and Statement II are incorrect [Option ID = 2062]
3. Statement I is correct but Statement II is incorrect [Option ID = 2063]
4. Statement I is incorrect but Statement II is correct [Option ID = 2064]

37) Given below are two statements, one is labelled as Assertion A and the other is labelled as Reason R

Assertion A : Grape seeds are stratified to break dormancy to get higher percentage of germination

Reason R : Seeds contain high level of GA and low level of phenols.

In light of the above statements, choose the *correct* answer from the options given below

[Question ID = 517][Question Description = 137_30_HOR_AUG22_Q37]

1. Both A and R are true and R is the correct explanation of A [Option ID = 2065]
2. Both A and R are true but R is NOT the correct explanation of A [Option ID = 2066]
3. A is true but R is false [Option ID = 2067]
4. A is false but R is true [Option ID = 2068]

38) Match List I with List II with the related term

List I	List II
A. Draining of latex from mango fruit	I. Verasion
B. On set of ripening in grape	II. Verdelli
C. Summer production of lemon under water stress	III. Desapping
D. Stage of inflorescence emergence in pineapple	IV. Red Heart

Choose the correct answer from the options given below:

[Question ID = 518][Question Description = 138_30_HOR_AUG22_Q38]

1. A - I, B - II, C - III, D - IV [Option ID = 2069]
2. A - IV, B - I, C - II, D - III [Option ID = 2070]
3. A - III, B - I, C - II, D - IV [Option ID = 2071]
4. A - II, B - III, C - IV, D - I [Option ID = 2072]

39) Which coloured pollinizer can be included in the delicious plantations of apple?

- A. Gloster
- B. Spartan
- C. Smoothy
- D. Summer Queen

Choose the *correct* answer from the options given below

[Question ID = 519][Question Description = 139_30_HOR_AUG22_Q39]

1. A, B and D only [Option ID = 2073]
2. A, B and C only [Option ID = 2074]
3. B, C and D only [Option ID = 2075]
4. A, C and D only [Option ID = 2076]

40) Given below are two statements, one is labelled as Assertion A and the other is labelled as Reason R

Assertion A: Ripe mango peels show colour variation from green to greenish yellow, yellow red to violet

Reason R: It is due to the concentrated action of pectin

In light of the above statements, choose the *correct* answer from the options given below

[Question ID = 520][Question Description = 140_30_HOR_AUG22_Q40]

1. Both A and R are true and R is the correct explanation of A [Option ID = 2077]
2. Both A and R are true but R is NOT the correct explanation of A [Option ID = 2078]
3. A is true but R is false [Option ID = 2079]
4. A is false but R is true [Option ID = 2080]

41) Annual water requirement of banana[Question ID = 521][Question Description = 141_30_HOR_AUG22_Q41]

1. 500 - 700 mm [Option ID = 2081]
2. 800 -1000 mm [Option ID = 2082]
3. 1200 -2200 mm [Option ID = 2083]
4. 2500 - 3000 mm [Option ID = 2084]

42) Given below are two statements

Statement I: In plum, both self fruitful and self incompatible varieties are available

Statement II: Green Gage is self unfruitful variety of plum

In light of the above statements, choose the *correct* answer from the options given below

[Question ID = 522][Question Description = 142_30_HOR_AUG22_Q42]

1. Both Statement I and Statement II are true [Option ID = 2085]
2. Both Statement I and Statement II are false [Option ID = 2086]
3. Statement I is true but Statement II is false [Option ID = 2087]
4. Statement I is false but Statement II is true [Option ID = 2088]

43) Given below are two statements, one is labelled as Assertion A and the other is labelled as Reason R

Assertion A : ABA helps during water stress

Reason R : ABA has a role in stomatal closing

In light of the above statements, choose the *correct* answer from the options given below

[Question ID = 523][Question Description = 143_30_HOR_AUG22_Q43]

1. Both A and R are true and R is the correct explanation of A [Option ID = 2089]
2. Both A and R are true but R is NOT the correct explanation of A [Option ID = 2090]
3. A is true but R is false [Option ID = 2091]
4. A is false but R is true [Option ID = 2092]

44) The isolation distance for seed production in case of papaya through open pollination is[Question ID = 524][Question Description = 144_30_HOR_AUG22_Q44]

1. 1 Km [Option ID = 2093]
2. 2 Km [Option ID = 2094]
3. 3 Km [Option ID = 2095]
4. 5 Km [Option ID = 2096]

45) Which one of the following is an unfavourable factor for self pollination?

[Question ID = 525][Question Description = 145_30_HOR_AUG22_Q45]

1. Cleistogamy [Option ID = 2097]
2. Geitonogamy [Option ID = 2098]
3. Monoecy [Option ID = 2099]
4. Protogyny [Option ID = 2100]

46) Chilling requirement for plum (Japanese)

[Question ID = 526][Question Description = 146_30_HOR_AUG22_Q46]

1. 200 - 300 hours [Option ID = 2101]
2. 400 -500 hours [Option ID = 2102]
3. 700 -1000 hours [Option ID = 2103]
4. 1200 - 1500 hours [Option ID = 2104]

47) The seedling of which plants are thorny during juvenile phase

- A. Apple
- B. Pear
- C. Citrus
- D. Guava
- E. Mango

Choose the *correct* answer from the options given below:

[Question ID = 527][Question Description = 147_30_HOR_AUG22_Q47]

1. A, B and D only [Option ID = 2105]
2. A, B and C only [Option ID = 2106]
3. C only [Option ID = 2107]
4. A and C only [Option ID = 2108]

48) Young fruits are the site for synthesis of [Question ID = 528][Question Description = 148_30_HOR_AUG22_Q48]

1. IAA [Option ID = 2109]
2. GA [Option ID = 2110]
3. Cytokinin [Option ID = 2111]
4. Ethylene [Option ID = 2112]

49) Match List I with List II

List I	List II
A. Heliophytes	I. Plants which grow in open sunny situation
B. Sciophytes	II. Plants which grow in shade
C. Obligative sciophytes	III. Plants which always grow in shade
D. Obligative heliophytes	IV. Plants which always grow under sunny situation

Choose the correct answer from the options given below:

[Question ID = 529][Question Description = 149_30_HOR_AUG22_Q49]

1. A - 1, B - II, C - III, D - IV [Option ID = 2113]
2. A - I, B - II, C - IV, D - III [Option ID = 2114]
3. A - I, B - IV, C - III, D - II [Option ID = 2115]
4. A - IV, B - III, C - II, D - I [Option ID = 2116]

50) Polyembryony is common in citrus except

- A. Pumelo
- B. Tahti lime
- C. Kinnow
- D. Sweet orange
- E. Acid lime

Choose the *correct* answer from the options given below:

[Question ID = 530][Question Description = 150_30_HOR_AUG22_Q50]

1. A, B and D only

[Option ID = 2117]

2. A only

[Option ID = 2118]

3. B only

[Option ID = 2119]

4. A and B only

[Option ID = 2120]

51) Grape variety suitable for preparing Monukka[Question ID = 531][Question Description = 151_30_HOR_AUG22_Q51]

1. Anabe -e - Shahi [Option ID = 2121]

2. Bangalore Blue [Option ID = 2122]

3. Perlette [Option ID = 2123]

4. Sharad Seedless [Option ID = 2124]

52) Given below are two statements

Statement I: Stooling is successful and economical method of propagation in case of guava

Statement II: The number of stools per plant increase with age of the plant and can be done for many years on the same plant

In light of the above statements, choose the *correct* answer from the options given below

[Question ID = 532][Question Description = 152_30_HOR_AUG22_Q52]

1. Both Statement I and Statement II are true [Option ID = 2125]

2. Both Statement I and Statement II are false [Option ID = 2126]

3. Statement I is true but Statement II is false [Option ID = 2127]

4. Statement I is false but Statement II is true [Option ID = 2128]

53) Which of the following is NOT true for rootstock 13 - 1?

[Question ID = 533][Question Description = 153_30_HOR_AUG22_Q53]

1. It is mango rootstock [Option ID = 2129]

2. Developed from Israel [Option ID = 2130]

3. Salt tolerant [Option ID = 2131]

4. Dwarfing rootstock [Option ID = 2132]

54) Which of the following is correct for low chilling varieties of apple?

A. Chilling requirement is less than 800 hours below 7°C

B. Poor in dessert quality

C. Michal is low chilling apple variety

D. Excellent dessert quality

Choose the *correct* answer from the options given below:

[Question ID = 534][Question Description = 154_30_HOR_AUG22_Q54]

1. A, B and D only

[Option ID = 2133]

2. A, B and C only

[Option ID = 2134]

3. A and B only

[Option ID = 2135]

4. A and C only

[Option ID = 2136]

55) Which of the following is a biological agent for suppressing *Parathenium hysterophorus*?[Question ID = 535][Question Description = 155_30_HOR_AUG22_Q55]

1. Mexican beetle [Option ID = 2137]

2. Gall fly [Option ID = 2138]

3. Grass hopper [Option ID = 2139]

4. Tricoderma [Option ID = 2140]

56) Given below are two statements

Statement I: Seeds of subtropical fruits like mango and subtropical fruits like citrus germinate immediately after extraction from the fruits under favourable conditions of moisture, temperature and aeration

Statement II: However, the seeds extracted from temperate fruits like apple, paer and peach do not germinate immediatelty even the seed is viable and condition for germination are favourable

In light of the above statements, choose the *correct* answer from the options given below

[Question ID = 536][Question Description = 156_30_HOR_AUG22_Q56]

1. Both Statement I and Statement II are true [Option ID = 2141]
2. Both Statement I and Statement II are false [Option ID = 2142]
3. Statement I is true but Statement II is false [Option ID = 2143]
4. Statement I is false but Statement II is true [Option ID = 2144]

57) Which of the following pineapple variety belong to Cayenne group?

- A. Kew
- B. Charlotte Rothchild
- C. Jaldhup
- D. Lakhat
- E. Giant Kew

Choose the *correct* answer from the options given below:

[Question ID = 537][Question Description = 157_30_HOR_AUG22_Q57]

1. B only [Option ID = 2145]
2. A, B and E only [Option ID = 2146]
3. A only [Option ID = 2147]
4. A and D only [Option ID = 2148]

58) Match List I with List II

List I	List II
Book	Author
A. Fundamentals of Horticulture	I. B. S. Chudawat
B. Fruit Breeding	II. M.R. Dinesh
C. Fruit Production in India	III. Jitender Singh
D. Dryland Horticulture	IV. W. S. Dhillon
	V. Amar Singh

Choose the correct answer from the options given below:

[Question ID = 538][Question Description = 158_30_HOR_AUG22_Q58]

1. A - III, B - II, C - IV, D - I [Option ID = 2149]
2. A - I, B - II, C - III, D - IV [Option ID = 2150]
3. A - II, B - III, C - V, D - IV [Option ID = 2151]
4. A - III, B - II, C - IV, D - I [Option ID = 2152]

59) Match List I with List II

List I	List II
A. Litchi	I. Aril
B. Mango	II. Mesocarp and endocarp
C. Banana	III. Mesocarp
D. Grape	IV. Pericarp and placenta
	V. Endosperm

Choose the correct answer from the options given below:

[Question ID = 539][Question Description = 159_30_HOR_AUG22_Q59]

1. A - I, B - III, C - II, D - IV [Option ID = 2153]
2. A - I , B - III, C - II, D - V [Option ID = 2154]
3. A - I, B - II, C - III, D - IV [Option ID = 2155]
4. A - I, B - IV, C - III, D - II [Option ID = 2156]

60) Match List I with List II

List I	List II
--------	---------

A. Kanji	I. Grapes
B. Cider	II. Carrot
C. Wine	III. Apple
D. Marmalade	IV. Citrus
	V. Pear

Choose the correct answer from the options given below:

[Question ID = 540][Question Description = 160_30_HOR_AUG22_Q60]

1. A - II, B - III, C - I, D - IV

[Option ID = 2157]

2. A - II, B - IV, C - I, D - V

[Option ID = 2158]

3. A - II, B - III, C - IV, D - V

[Option ID = 2159]

4. A - III, B - II, C - I, D - IV

[Option ID = 2160]

61) Which of the following is specific origin of Bottlegourd?

[Question ID = 541][Question Description = 161_30_HOR_AUG22_Q61]

1. Tropical East Africa [Option ID = 2161]
2. Malabar region of Kerala [Option ID = 2162]
3. Canary islands [Option ID = 2163]
4. Mediterranean [Option ID = 2164]

62) Homeostasis that leads to adaptability and stability is NOT favoured by

[Question ID = 542][Question Description = 162_30_HOR_AUG22_Q62]

1. Self-pollination [Option ID = 2165]
2. Heterogeneity [Option ID = 2166]
3. Heterozygosity [Option ID = 2167]
4. Genetic polymorphism [Option ID = 2168]

63) Given below are two statements, one is labelled as Assertion A and the other is labelled as Reason R

Assertion A: When black pepper is grown on slopes, due care has to be taken to avoid slopes facing south and southwest.

Reason R: The northern and northern eastern slopes planting prevent the scorching effect of sun during summer.

In light of the above statements, choose the *most appropriate* answer from the options given below

[Question ID = 543][Question Description = 163_30_HOR_AUG22_Q63]

1. Both A and R are correct and R is the correct explanation of A [Option ID = 2169]
2. Both A and R are correct but R is NOT the correct explanation of A [Option ID = 2170]
3. A is correct but R is not correct [Option ID = 2171]
4. A is not correct but R is correct [Option ID = 2172]

64) Black heart/ hollow heart of potato is caused by[Question ID = 544][Question Description = 164_30_HOR_AUG22_Q64]

1. Low soil temperature (less than 13°C) [Option ID = 2173]
2. Favourable supply of oxygen during storage and transport [Option ID = 2174]
3. Rapid growth and development of tubers followed by sudden irrigation [Option ID = 2175]
4. It is more common in small sized tubers [Option ID = 2176]

65) Given below are two statements, one is labelled as Assertion A and the other is labelled as Reason R

Assertion A: High rainfall and long photoperiod promote vine growth and reduce the tuber yield of sweet potato.

Reason R: Temperature less than 25 °C was found critical for tuberization in sweet potato.

In light of the above statements, choose the *most appropriate* answer from the options given below

[Question ID = 545][Question Description = 165_30_HOR_AUG22_Q65]

1. Both A and R are correct and R is the correct explanation of A [Option ID = 2177]
2. Both A and R are correct but R is NOT the correct explanation of A [Option ID = 2178]
3. A is correct but R is not correct [Option ID = 2179]
4. A is not correct but R is correct [Option ID = 2180]

66) What is the family of Tapioca?

[Question ID = 546][Question Description = 166_30_HOR_AUG22_Q66]

1. Dioscoreaceae [Option ID = 2181]
2. Convolvulaceae [Option ID = 2182]
3. Araceae [Option ID = 2183]
4. Euphorbiaceae [Option ID = 2184]

67) Match List I with List II

List I	List II
Variety	Pedigree/Parent
A. Varsha Uphar	I. Lam selection-1 x Parvati Kranti
B. Pusa Sawani	II. Mutant from Pusa Sawani
C. Prabhani Kranti	III. Pusa Sawani x A. <i>manihot</i>
D. Punjab-8	IV. Pusa Makhmali x IC1542

Choose the correct answer from the options given below:

[Question ID = 547][Question Description = 167_30_HOR_AUG22_Q67]

1. A - I, B - IV, C - III, D - II [Option ID = 2185]
2. A - IV, B - II, C - I, D - III [Option ID = 2186]
3. A - III, B - I, C - II, D - IV [Option ID = 2187]
4. A - II, B - III, C - IV, D - I [Option ID = 2188]

68) The Indian group of radishes including the rat-tail evolved in [Question ID = 548][Question Description = 168_30_HOR_AUG22_Q68]

1. Northern western region [Option ID = 2189]
2. Northern eastern region [Option ID = 2190]
3. Southern eastern region [Option ID = 2191]
4. Southern western region [Option ID = 2192]

69) Which of the following part of carrot contains the highest carotene level ? [Question ID = 549][Question Description = 169_30_HOR_AUG22_Q69]

1. Top part of root [Option ID = 2193]
2. Middle part of root [Option ID = 2194]
3. Distal end of root [Option ID = 2195]
4. Middle Core [Option ID = 2196]

70) What is the main cause of appearance of gold colour flecks on tomato fruits?

[Question ID = 550][Question Description = 170_30_HOR_AUG22_Q70]

1. Low K: Ca ratio [Option ID = 2197]
2. High Mg content [Option ID = 2198]
3. High EC level [Option ID = 2199]
4. Low Boron content [Option ID = 2200]

71) Arrange the following according establishment year of Institute/Organization

- A. Indian Institute of Vegetable Research
- B. Indian Institute of Horticultural Research
- C. Indian Society of Vegetable Science
- D. The Horticultural Society of India
- E. Indian Council of Agricultural Research

Choose the *correct* answer from the options given below

[Question ID = 551][Question Description = 171_30_HOR_AUG22_Q71]

1. D, E, B, C, A [Option ID = 2201]
2. E, D, C, A, B [Option ID = 2202]
3. E, D, B, C, A [Option ID = 2203]
4. D, E, A, B, C [Option ID = 2204]

72) Match List I with List II

List I	List II
--------	---------

Characteristics of Onion	Chemicals
A. Flavour and pungency	I. Anthocyanin
B. Yellow coloured	II. High dry matter
C. Red coloured	III. Allyl propyl disulphide
D. White coloured	IV. Quercetin

Choose the correct answer from the options given below:

[Question ID = 552][Question Description = 172_30_HOR_AUG22_Q72]

1. A - IV, B - II, C - I, D - III [Option ID = 2205]
2. A - III, B - IV, C - I, D - II [Option ID = 2206]
3. A - I, B - III, C - II, D - IV [Option ID = 2207]
4. A - II, B - I, C - IV, D - III [Option ID = 2208]

73) Eggplant specific piquant and bitter taste is due to the presence of [Question ID = 553][Question Description = 173_30_HOR_AUG22_Q73]

1. Flavonoids [Option ID = 2209]
2. Solasonine [Option ID = 2210]
3. Solanidine [Option ID = 2211]
4. Spirostanol [Option ID = 2212]

74) How many months after planting the ginger crop is ready for harvesting ? [Question ID = 554][Question Description = 174_30_HOR_AUG22_Q74]

1. 14-16 [Option ID = 2213]
2. 4 - 5 [Option ID = 2214]
3. 11-12 [Option ID = 2215]
4. 7-9 [Option ID = 2216]

75) Which of the following is NOT a F₁ hybrid of chilli?

[Question ID = 555][Question Description = 175_30_HOR_AUG22_Q75]

1. Kashi Tej [Option ID = 2217]
2. Kashi Ratna [Option ID = 2218]
3. Kashi Surkh [Option ID = 2219]
4. Kashi Sinduri [Option ID = 2220]

76) What is the main purpose of blanching in cauliflower?

[Question ID = 556][Question Description = 176_30_HOR_AUG22_Q76]

1. Increase in yield [Option ID = 2221]
2. To improve the nutrition [Option ID = 2222]
3. To keep the curd white [Option ID = 2223]
4. To keep the curd compact [Option ID = 2224]

77) Given below are two statements, one is labelled as Assertion A and the other is labelled as Reason R

Assertion A: Whip tail physiological disorder is caused due to molybdenum deficiency in cauliflower.

Reason R: The occurrence of whip tail disorder particularly in the soil pH above 5.5.

In light of the above statements, choose the *most appropriate* answer from the options given below

[Question ID = 557][Question Description = 177_30_HOR_AUG22_Q77]

1. Both A and R are correct and R is the correct explanation of A [Option ID = 2225]
2. Both A and R are correct but R is NOT the correct explanation of A [Option ID = 2226]
3. A is correct but R is not correct [Option ID = 2227]
4. A is not correct but R is correct [Option ID = 2228]

78) Male and female plants of spinach are identified on the basis of [Question ID = 558][Question Description = 178_30_HOR_AUG22_Q78]

1. High leaf sugars, chlorophyll and carotenoids in female plants [Option ID = 2229]
2. High leaf sugars, chlorophyll and carotenoids in male plants [Option ID = 2230]
3. Red venal pigmentation in male plants [Option ID = 2231]
4. Downward cupping in female leaves [Option ID = 2232]

79) Steps for synthetic breeding are as given below:

A. Testing of specific combining ability effects

- B. Growing inbred lines in isolation and allowing random mating
- C. Development of inbred lines
- D. Selection of about 5 inbred lines basis of higher sca effects
- E. Testing performance of synthetics over varieties

Choose the *correct* answer from the options given below

[Question ID = 559][Question Description = 179_30_HOR_AUG22_Q79]

1. D, A, C, E, B [Option ID = 2233]
2. A, C, B, D, E [Option ID = 2234]
3. C, A, D, B, E [Option ID = 2235]
4. A, B, C, D, E [Option ID = 2236]

80) Match List I with List II

List I	List II
Vegetable Crop	Minimum soil temperature requirement for seed germination
A. Brinjal	I. 1.6 °C
B. Cauliflower	II. 10 °C
C. Onion	III. 4.4 °C
D. Palak	IV. 15.5 °C

Choose the correct answer from the options given below:

[Question ID = 560][Question Description = 180_30_HOR_AUG22_Q80]

1. A - II, B - I, C - III, D - IV [Option ID = 2237]
2. A - IV, B - III, C - I, D - II [Option ID = 2238]
3. A - IV, B - II, C - III, D - I [Option ID = 2239]
4. A - II, B - III, C - IV, D - I [Option ID = 2240]

81) Given below are two statements, one is labelled as Assertion A and the other is labelled as Reason R
Assertion A : Male sterility is considered to be most important for commercial hybrid seed production of vegetable crops.

Reason R : The male sterile lines eliminate the tedious emasculation procedure and make it possible to produce hybrid seed.

In light of the above statements, choose the *correct* answer from the options given below

[Question ID = 561][Question Description = 181_30_HOR_AUG22_Q81]

1. Both A and R are true and R is the correct explanation of A [Option ID = 2241]
2. Both A and R are true but R is NOT the correct explanation of A [Option ID = 2242]
3. A is true but R is false [Option ID = 2243]
4. A is false but R is true [Option ID = 2244]

82) Dr. Puskarnath is associated to

[Question ID = 562][Question Description = 182_30_HOR_AUG22_Q82]

1. Tomato breeding [Option ID = 2245]
2. Potato breeding [Option ID = 2246]
3. Okra breeding [Option ID = 2247]
4. Cucurbit breeding [Option ID = 2248]

83) Which of the following is a major onion producing state in India?

[Question ID = 563][Question Description = 183_30_HOR_AUG22_Q83]

1. Gujarat [Option ID = 2249]
2. Karnataka [Option ID = 2250]
3. Maharashtra [Option ID = 2251]
4. Madhya Pradesh [Option ID = 2252]

84) Spice Board India' works under administrative control of

[Question ID = 564][Question Description = 184_30_HOR_AUG22_Q84]

1. Ministry of Agriculture and Farmer Welfare [Option ID = 2253]
2. Ministry of Science and Technology [Option ID = 2254]
3. Ministry of Food Processing Industries [Option ID = 2255]
4. Ministry of Commerce and Industry [Option ID = 2256]

85) Which of the following is NOT a desirable trait for mechanical harvesting of pickling cucumber?

[Question ID = 565][Question Description = 185_30_HOR_AUG22_Q85]

1. Small mature fruit size [Option ID = 2257]
2. Parthenocarp [Option ID = 2258]
3. Indeterminate habit [Option ID = 2259]
4. Short inter-nodal length [Option ID = 2260]

86) Sugary secretion (gummosis) is a physiological disorder of [Question ID = 566][Question Description = 186_30_HOR_AUG22_Q86]

1. Fennel [Option ID = 2261]
2. Fenugreek [Option ID = 2262]
3. Cumin [Option ID = 2263]
4. Clove [Option ID = 2264]

87) Given below are two statements

Statement I: Vermiculite is heat expanded mica which is main ingredients in rooting medium.

Statement II: Perlite is heavy rock material and easily sedimented during mixing in growing medium.

In light of the above statements, choose the *correct* answer from the options given below

[Question ID = 567][Question Description = 187_30_HOR_AUG22_Q87]

1. Both Statement I and Statement II are true [Option ID = 2265]
2. Both Statement I and Statement II are false [Option ID = 2266]
3. Statement I is true but Statement II is false [Option ID = 2267]
4. Statement I is false but Statement II is true [Option ID = 2268]

88) Given below are two statements

Statement I: Pusa Gaurav variety of tomato is suitable for long distance transportation.

Statement II: Pusa Lal Meeruti variety of tomato is induced mutant by chemical mutagen

In light of the above statements, choose the *most appropriate* answer from the options given below

[Question ID = 568][Question Description = 188_30_HOR_AUG22_Q88]

1. Both Statement I and Statement II are correct [Option ID = 2269]
2. Both Statement I and Statement II are incorrect [Option ID = 2270]
3. Statement I is correct but Statement II is incorrect [Option ID = 2271]
4. Statement I is incorrect but Statement II is correct [Option ID = 2272]

89) Which of the following mushroom is still dominating (more than 85 % share) the Indian mushroom industry?

[Question ID = 569][Question Description = 189_30_HOR_AUG22_Q89]

1. *Agaricus bisporus* [Option ID = 2273]
2. *Lentinula edodes* [Option ID = 2274]
3. *Volvariella volvacea* [Option ID = 2275]
4. *Pleurotus eous* [Option ID = 2276]

90) Flower drop and less fruit setting/fruit drop in chilli can be controlled by spraying

[Question ID = 570][Question Description = 190_30_HOR_AUG22_Q90]

1. Sulphur (1.5 - 2%) at 10 days intervals at growing stage
[Option ID = 2277]
2. Planofix (NAA) @ 2-3 ml per 10 litres water at flowering stage
[Option ID = 2278]
3. Dicofol (0.25%) at flowering stage
[Option ID = 2279]
4. Fipronil (5 % SC) 1ml per litre at flowering stage
[Option ID = 2280]

91) Which of the following new curcuminoid has been isolated from nematocidally active fraction of turmeric?

[Question ID = 571][Question Description = 191_30_HOR_AUG22_Q91]

1. Demethoxy curcumin
[Option ID = 2281]
2. Diferuloylmethane

[Option ID = 2282]

3. Bisdemethoxycurcumin

[Option ID = 2283]

4. Cyclocurcumin

[Option ID = 2284]

92) Which is NOT correct about 'Shellac coating' which is generally used for increasing the shelf life of vegetables?

[Question ID = 572][Question Description = 192_30_HOR_AUG22_Q92]

1. Shellac is a resin secreted by the insect [Option ID = 2285]
2. Shellac is composed of aleuritic and shelloic acids [Option ID = 2286]
3. Shellac is incompatible with waxes [Option ID = 2287]
4. Shellac is permitted as an indirect food additive [Option ID = 2288]

93) Which of the following wild cucumber has highest level of cucurbitacins?

[Question ID = 573][Question Description = 193_30_HOR_AUG22_Q93]

1. *C. naudinianus* [Option ID = 2289]
2. *C. hookei* [Option ID = 2290]
3. *C. foetidissima* [Option ID = 2291]
4. *C. melo* [Option ID = 2292]

94) Match List I with List II

List I	List II
Vegetable Hybrid	Used genetic system
A. Pusa Nayanjyoti	I. GMS
B. Pusa Hybrid-2	II. CMS
C. Pusa Seedless Cucumber-6	III. Self Incompatibility
D. CH-1	IV. Gynoecy

Choose the correct answer from the options given below:

[Question ID = 574][Question Description = 194_30_HOR_AUG22_Q94]

1. A - II, B - I, C - III, D - IV [Option ID = 2293]
2. A - IV, B - II, C - I, D - III [Option ID = 2294]
3. A - III, B - II, C - IV, D - I [Option ID = 2295]
4. A - II, B - III, C - IV, D - I [Option ID = 2296]

95) Which of the following variety of onion is suitable for dehydration?

[Question ID = 575][Question Description = 195_30_HOR_AUG22_Q95]

1. Punjab-48 [Option ID = 2297]
2. Udaipur-101 [Option ID = 2298]
3. Udaipur-103 [Option ID = 2299]
4. N-53 [Option ID = 2300]

96) Match List I with List II

List I	List II
Garden Name	Purpose
A. Pramododyan	I. Dedicated to lord Krishna.
B. Udyan	II. Enjoyment of the royal couples.
C. Brikshavatika	III. Playing chess, enjoying dance of maids, etc by the king.
D. Nandanavana	IV. Enjoying life with courtesans by the high placed persons in the king's court.

Choose the correct answer from the options given below:

[Question ID = 576][Question Description = 196_30_HOR_AUG22_Q96]

1. A - III, B - IV, C - II, D - I [Option ID = 2301]
2. A - I, B - II, C - IV, D - III [Option ID = 2302]
3. A - II, B - III, C - IV, D - I [Option ID = 2303]
4. A - IV, B - III, C - I, D - II [Option ID = 2304]

97) Which of the following colours belong to hard or warm colours in "Colour scheme"? [Question ID = 577][Question Description = 197_30_HOR_AUG22_Q97]

1. Blue, violet and green [Option ID = 2305]
2. White, black and grey [Option ID = 2306]

3. Red, white and green [Option ID = 2307]
4. Red, orange and yellow [Option ID = 2308]

98) Which of the following pigment is responsible for blue colour of flowers?[Question ID = 578][Question Description = 198_30_HOR_AUG22_Q98]

1. Pelargonidin [Option ID = 2309]
2. Lycopene [Option ID = 2310]
3. Delphinidin [Option ID = 2311]
4. Lutein [Option ID = 2312]

99) Famous blue coloured variety 'Applause' belongs to which of the following flower crop?[Question ID = 579][Question Description = 199_30_HOR_AUG22_Q99]

1. *Lilium longiflorum* [Option ID = 2313]
2. *Rosa hybrida* [Option ID = 2314]
3. *Dianthus caryophyllus* [Option ID = 2315]
4. *Tagetes erecta* [Option ID = 2316]

100) Which of the following shrubs have white flowers?

- A. *Ixora acuminata*
- B. *Ixora armeniaca*
- C. *Ixora superba*
- D. *Ixora chinensis*

Choose the *correct* answer from the options given below:

[Question ID = 580][Question Description = 200_30_HOR_AUG22_Q100]

1. B and D only [Option ID = 2317]
2. A and B only [Option ID = 2318]
3. A and C only [Option ID = 2319]
4. A and D only [Option ID = 2320]

101) The elements of garden and landscape designs are

- A. Line
- B. Focalization
- C. Rhythm
- D. Habit

Choose the *correct* answer from the options given below:

[Question ID = 581][Question Description = 201_30_HOR_AUG22_Q101]

1. A and C only [Option ID = 2321]
2. A and B only [Option ID = 2322]
3. B and C only [Option ID = 2323]
4. A and D only [Option ID = 2324]

102) Given below are two statements

Statement I: Term heterosis was first used by Shull (1914) and is defined as the superiority of an F_1 hybrid over both its parents in terms of yield and some other characters.

Statement II: Genetic basis of heterosis is explained by two main theories namely dominance hypothesis and over dominance hypothesis.

In light of the above statements, choose the *most appropriate* answer from the options given below

[Question ID = 582][Question Description = 202_30_HOR_AUG22_Q102]

1. Both Statement I and Statement II are correct [Option ID = 2325]
2. Both Statement I and Statement II are incorrect [Option ID = 2326]
3. Statement I is correct but Statement II is incorrect [Option ID = 2327]
4. Statement I is incorrect but Statement II is correct [Option ID = 2328]

103) Perennial plants having erect and bushy growth and attain a height of 0.5 to 4 meters, are called as.[Question ID = 583][Question Description = 203_30_HOR_AUG22_Q103]

1. Seasonal flowers [Option ID = 2329]
2. Trees [Option ID = 2330]

3. Shrubs [Option ID = 2331]
4. Climbers [Option ID = 2332]

104) Which of the following turf grasses are used to develop a lawn in cooler areas of India?

- A. *Agrostis palustris*
- B. *Cynodon dactylon*
- C. *Lolium perene*
- D. *Paspalum notatum*

Choose the **correct** answer from the options given below:

[Question ID = 584][Question Description = 204_30_HOR_AUG22_Q104]

1. A and B only [Option ID = 2333]
2. A and C only [Option ID = 2334]
3. B and D only [Option ID = 2335]
4. C and D only [Option ID = 2336]

105) Given below are two statements

Statement I: Male sterility is characterized by nonfunctional pollen grains, while female gametes function normally.

Statement II: Male sterility is found common in rose, ageratum and chrysanthemum flower crops.

In light of the above statements, choose the **most appropriate** answer from the options given below

[Question ID = 585][Question Description = 205_30_HOR_AUG22_Q105]

1. Both Statement I and Statement II are correct [Option ID = 2337]
2. Both Statement I and Statement II are incorrect [Option ID = 2338]
3. Statement I is correct but Statement II is incorrect [Option ID = 2339]
4. Statement I is incorrect but Statement II is correct [Option ID = 2340]

106) Which of the following climber possesses special structure- tendrils to climb over a support?[Question ID = 586]

[Question Description = 206_30_HOR_AUG22_Q106]

1. *Bougainvillea peruviana* [Option ID = 2341]
2. *Ficus repens* [Option ID = 2342]
3. *Quisqualis indica* [Option ID = 2343]
4. *Antigonon leptopus* [Option ID = 2344]

107) Which of the following is a thermo-photo insensitive variety of chrysanthemum?[Question ID = 587][Question Description = 207_30_HOR_AUG22_Q107]

1. Pusa Aaditya [Option ID = 2345]
2. Birbal Sahni [Option ID = 2346]
3. Pusa Anmol [Option ID = 2347]
4. Himanshu [Option ID = 2348]

108) Which of the following trees are grown for their ornamental foliage?

- A. *Bombax malabaricum*
- B. *Cedrus deodara*
- C. *Jacaranda mimosifolia*
- D. *Thuja orientalis*

Choose the **correct** answer from the options given below:

[Question ID = 588][Question Description = 208_30_HOR_AUG22_Q108]

1. B and C only [Option ID = 2349]
2. B and D only [Option ID = 2350]
3. A and C only [Option ID = 2351]
4. C and D only [Option ID = 2352]

109) Match List I with List II

List I	List II
Crop	Basic chromosome number
A. Carnation	I. X = 9
B. Marigold	II. X = 30

C. Tuberose	III. X = 15
D. Chrysanthemum	IV. X = 12

Choose the correct answer from the options given below:

[Question ID = 589][Question Description = 209_30_HOR_AUG22_Q109]

1. A - I, B - II, C - IV, D - III [Option ID = 2353]
2. A - III, B - IV, C - II, D - I [Option ID = 2354]
3. A - IV, B - III, C - I, D - II [Option ID = 2355]
4. A - II, B - III, C - IV, D - I [Option ID = 2356]

110) The group 'Picotees' belongs to which of the following commercial flower crop?[Question ID = 590][Question Description = 210_30_HOR_AUG22_Q110]

1. Tuberose [Option ID = 2357]
2. Rose [Option ID = 2358]
3. Carnation [Option ID = 2359]
4. Orchids [Option ID = 2360]

111) Which of the following is the most common rootstock for budding in rose under North Indian conditions?[Question ID = 591][Question Description = 211_30_HOR_AUG22_Q111]

1. *Rosa foetida* [Option ID = 2361]
2. *Rosa lucida* [Option ID = 2362]
3. *Rosa multiflora* [Option ID = 2363]
4. *Rosa indica* var. *odorata* [Option ID = 2364]

112) Given below are two statements, one is labelled as Assertion A and the other is labelled as Reason R

Assertion A: Deformed flowers and browning of throat are major disorders of orchids.

Reason R: These disorders of orchids occur due to low temperature and chilling injury.

In light of the above statements, choose the *most appropriate* answer from the options given below

[Question ID = 592][Question Description = 212_30_HOR_AUG22_Q112]

1. Both A and R are correct but R is NOT the correct explanation of A [Option ID = 2365]
2. Both A and R are correct and R is the correct explanation of A [Option ID = 2366]
3. A is correct but R is not correct [Option ID = 2367]
4. A is not correct but R is correct [Option ID = 2368]

113) Which of the following gladiolus cultivars were developed through spontaneous mutation?

- A. Pusa Manmohak
- B. Salman's Sensation
- C. Ratna's Butterfly
- D. Gunjan

Choose the *correct* answer from the options given below:

[Question ID = 593][Question Description = 213_30_HOR_AUG22_Q113]

1. A and B only [Option ID = 2369]
2. A and C only [Option ID = 2370]
3. B and C only [Option ID = 2371]
4. A and D only [Option ID = 2372]

114) *Petrea volubilis*, a light climber with beautiful flowers belongs to which of the following family?[Question ID = 594][Question Description = 214_30_HOR_AUG22_Q114]

1. Bignoniaceae [Option ID = 2373]
2. Verbenaceae [Option ID = 2374]
3. Polygonaceae [Option ID = 2375]
4. Convolvulaceae [Option ID = 2376]

115) Which of the following is a new scientific name of *Polianthes tuberosa*?[Question ID = 595][Question Description = 215_30_HOR_AUG22_Q115]

1. *Agave americana* [Option ID = 2377]
2. *Agave amica* [Option ID = 2378]
3. *Agave parviflora* [Option ID = 2379]
4. *Agave angustifolia* [Option ID = 2380]

116) Which of the following gardens are laid out on the pattern of Mughal gardens?

- A. Rashtrapati Bhavan garden, New Delhi
- B. Buddha Jayati Park, New Delhi
- C. Mandor Garden, Jodhpur
- D. Nishat Bagh, Kashmir

Choose the *correct* answer from the options given below:

[Question ID = 596][Question Description = 216_30_HOR_AUG22_Q116]

- 1. A and C only [Option ID = 2381]
- 2. A and D only [Option ID = 2382]
- 3. B and C only [Option ID = 2383]
- 4. C and D only [Option ID = 2384]

117) Arrange the following steps of gladiolus hybrid development in correct sequence?

- A. Development of hybrids
- B. Combining ability testing of inbred lines
- C. Development of inbred lines
- D. Seed production of hybrids
- E. Parents selection and hybrid development

Choose the correct answer from the options given below

[Question ID = 597][Question Description = 217_30_HOR_AUG22_Q117]

- 1. C, D, E, B, A [Option ID = 2385]
- 2. A, D, C, B, E [Option ID = 2386]
- 3. C, B, E, A, D [Option ID = 2387]
- 4. A, D, E, C, B [Option ID = 2388]

118) Given below are two statements, one is labelled as Assertion A and the other is labelled as Reason R

Assertion A: Gametophytic self incompatibility was first described by Hughes and Babcock in *Crepis foetida*.

Reason R: In gametophytic system, incompatibility reaction of pollen is determined by its own genotype and not by the genotype of the plant on which it is produced.

In light of the above statements, choose the *most appropriate* answer from the options given below

[Question ID = 598][Question Description = 218_30_HOR_AUG22_Q118]

- 1. Both A and R are correct and R is the correct explanation of A [Option ID = 2389]
- 2. Both A and R are correct but R is NOT the correct explanation of A [Option ID = 2390]
- 3. A is correct but R is not correct [Option ID = 2391]
- 4. A is not correct but R is correct [Option ID = 2392]

119) Make the correct sequence of steps involved in the pureline selection method of flower crop improvement?

- A. Conducting preliminary yield trials of progenies.
- B. Selection of individual plants from a local variety or some other genetically variable and homozygous population.
- C. Conducting replicated yield trials at several locations.
- D. Planting of progenies from individual plants separately with proper spacing.
- E. Release of best progeny as variety and seed multiplication for distribution.

Choose the correct answer from the options given below

[Question ID = 599][Question Description = 219_30_HOR_AUG22_Q119]

- 1. A, B, D, E, C [Option ID = 2393]
- 2. A, D, B, C, E [Option ID = 2394]
- 3. B, D, A, C, E [Option ID = 2395]
- 4. D, E, A, C, B [Option ID = 2396]

120) Which of the following orchids have sympodial growth pattern?

- A. *Phalaenopsis*

B. Dendrobium

C. Habenaria

D. Cymbidium

Choose the *correct* answer from the options given below:

[Question ID = 600][Question Description = 220_30_HOR_AUG22_Q120]

1. A and B only [Option ID = 2397]
2. A and C only [Option ID = 2398]
3. A and D only [Option ID = 2399]
4. B and D only [Option ID = 2400]

