

16 Post Harvest Management ICAR SEPT 2022

Topic:- GEN KNOW COMMON PHD

1) Colour of the tag used on certified seed bags is[Question ID = 16958][Question Description = 101_221_GKD_SEP22_Q01]

1. Blue [Option ID = 37829]
2. Purple [Option ID = 37830]
3. White [Option ID = 37831]
4. Golden Yellow [Option ID = 37832]

2) Following are the statements regarding the Usar soil -

- A. It is reclaimed by adding lime.
- B. This soil has pH more than seven.
- C. Paddy crop can be grown in this soil.

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

[Question ID = 16959][Question Description = 102_221_GKD_SEP22_Q02]

1. A and B only [Option ID = 37833]
2. B and C only [Option ID = 37834]
3. C only [Option ID = 37835]
4. A only [Option ID = 37836]

3) When total utility of a commodity increases, marginal utility will be

[Question ID = 16960][Question Description = 103_221_GKD_SEP22_Q03]

1. Negative but increasing
[Option ID = 37837]
2. Positive but decreasing
[Option ID = 37838]
3. Constant
[Option ID = 37839]
4. Either positive or negative
[Option ID = 37840]

4) Where is the headquarter of International Fund for Agriculture Development located?

[Question ID = 16961][Question Description = 104_221_GKD_SEP22_Q04]

1. Vienna, Austria
[Option ID = 37841]
2. Rome, Italy
[Option ID = 37842]
3. New York, USA
[Option ID = 37843]
4. Berlin, Germany
[Option ID = 37844]

5) Mid-Oceanic Ridges are one of the important divisions of the ocean floor. In this respect, point out the incorrect statement regarding the 'Mid-Oceanic Ridges'. [Question ID = 16962][Question Description = 105_221_GKD_SEP22_Q05]

1. It is the largest mountain chain on the surface of the earth [Option ID = 37845]
2. It is a series of interconnected chain within the ocean. [Option ID = 37846]
3. It is characterised by a central rift system [Option ID = 37847]
4. The rift system at the crest is the zone of very low volcanic activity. [Option ID = 37848]

6) Consider the following facts about the union territory of India and point out the one which is incorrect in relation to union territory. [Question ID = 16963][Question Description = 106_221_GKD_SEP22_Q06]

1. These are the areas under the direct control of central government. [Option ID = 37849]
2. Also known as the 'centrally administered territories. [Option ID = 37850]

3. These territories constitute a conspicuous departure from the unitary feature of India. [Option ID = 37851]
4. There is no uniformity in their administrative systems. [Option ID = 37852]

7) Variety of flora and fauna are found in the different types of forest in India. In this regard, species of trees like teak, *sal shisham*, *sandalwood*, etc. are found in which of the following type of forests in India?[Question ID = 16964][Question Description = 107_221_GKD_SEP22_Q07]

1. Tropical evergreen forests [Option ID = 37853]
2. Tropical thorn forests [Option ID = 37854]
3. Tropical deciduous forests [Option ID = 37855]
4. Montane forests [Option ID = 37856]

8) The Marginal Preference Theory of consumption behaviour was proposed by

[Question ID = 16965][Question Description = 108_221_GKD_SEP22_Q08]

1. Armstrong
[Option ID = 37857]
2. J.K.Hicks
[Option ID = 37858]
3. Neumann
[Option ID = 37859]
4. Edmund Cannon
[Option ID = 37860]

9) Point out the incorrect statements regarding the service sector in India.[Question ID = 16966][Question Description = 109_221_GKD_SEP22_Q09]

1. It is the highest contributor to GDP [Option ID = 37861]
2. It requires skilled labour [Option ID = 37862]
3. It is the fastest growing sector [Option ID = 37863]
4. It is restricted to very few sectors. [Option ID = 37864]

10) Consider the statements regarding the agriculture sector in India and point out the incorrect statement.[Question ID = 16967][Question Description = 110_221_GKD_SEP22_Q10]

1. Agriculture sector is the largest employer of workforce [Option ID = 37865]
2. It has contributed to the Gross Value Added (GVA) [Option ID = 37866]
3. Growth in allied sectors is the major drivers of overall growth in the sector. [Option ID = 37867]
4. Minimum Support Price (MSP) policy is used as to promote crop uniformity. [Option ID = 37868]

11) In case of related goods, the cross elasticity of demand is[Question ID = 16968][Question Description = 111_221_GKD_SEP22_Q11]

1. Low [Option ID = 37869]
2. High [Option ID = 37870]
3. Zero [Option ID = 37871]
4. Unity [Option ID = 37872]

12) With reference to organic farming in India, consider the following statements :

- A. The National Programme for Organic Production' (NPOP) is operated under the guidelines and directions of the Union Ministry of Rural Development.
- B. The Agricultural and Processed Food Products Export Development Authority' (APEDA) functions as the Secretariat for the implementation of NPOP.
- C. Sikkim has become India's first fully organic state.

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

[Question ID = 16969][Question Description = 112_221_GKD_SEP22_Q12]

1. A and B only
[Option ID = 37873]
2. B and C only
[Option ID = 37874]
3. C only
[Option ID = 37875]
4. A, B and C

[Option ID = 37876]

13) With reference to the circumstances in Indian agriculture, the concept of "Conservation Agriculture" assumes significance. Which of the following falls under the Conservation Agriculture ?

- A. Avoiding the monoculture practices.
- B. Adopting minimum tillage.
- C. Avoiding the cultivation of plantation crops.
- D. Using crop residues to cover soil surface.
- E. Adopting spatial and temporal crop sequencing/ crop rotations.

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

[Question ID = 16970][Question Description = 113_221_GKD_SEP22_Q13]

- 1. A, C and D only [Option ID = 37877]
- 2. B, C, D and E only [Option ID = 37878]
- 3. B, D and E only [Option ID = 37879]
- 4. A, B, C and E only [Option ID = 37880]

14) Consumers are likely to get a variety of goods in which kind of market competition[Question ID = 16971][Question Description = 114_221_GKD_SEP22_Q14]

- 1. Monopoly [Option ID = 37881]
- 2. Duopoly [Option ID = 37882]
- 3. Oligopoly [Option ID = 37883]
- 4. Monopolistic [Option ID = 37884]

15) What is the correct chronological order of the following laws enacted for the conservation and protection of environment ?

- A. Environment (Protection) Act.
- B. Water (Prevention & Control of Pollution) Act.
- C. Air (Prevention & Control of pollution) Act.
- D. National Green Tribunal Act.

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

[Question ID = 16972][Question Description = 115_221_GKD_SEP22_Q15]

- 1. B, C, A, D [Option ID = 37885]
- 2. A, B, C, D [Option ID = 37886]
- 3. C, B, A, D [Option ID = 37887]
- 4. D, C, B, A [Option ID = 37888]

16) The scientific study of soil is[Question ID = 16973][Question Description = 116_221_GKD_SEP22_Q16]

- 1. Earth Study [Option ID = 37889]
- 2. Soil Science [Option ID = 37890]
- 3. Pedology [Option ID = 37891]
- 4. Soil Chemistry [Option ID = 37892]

17) *Triticum aestivum*, the common bread wheat is -

[Question ID = 16974][Question Description = 117_221_GKD_SEP22_Q17]

- 1. Tetraploid

[Option ID = 37893]

- 2. Hexaploid

[Option ID = 37894]

- 3. Haploid

[Option ID = 37895]

- 4. Diploid

[Option ID = 37896]

18) Sectoral inflation refers to[Question ID = 16975][Question Description = 118_221_GKD_SEP22_Q18]

- 1. Running inflation [Option ID = 37897]

2. Comprehensive inflation [Option ID = 37898]
3. Sporadic inflation [Option ID = 37899]
4. Creeping inflation [Option ID = 37900]

19) Keynes Liquidity trap refers to[Question ID = 16976][Question Description = 119_221_GKD_SEP22_Q19]

1. Speculative demand for money [Option ID = 37901]
2. Transactions motive of money is inelastic [Option ID = 37902]
3. Precautionary motive of money is inelastic [Option ID = 37903]
4. Transactions motive of money is constant [Option ID = 37904]

20) A business is solvent if[Question ID = 16977][Question Description = 120_221_GKD_SEP22_Q20]

1. Total receipts exceed total expenditures [Option ID = 37905]
2. Total debt exceeds total equity [Option ID = 37906]
3. Total sales exceed total cash expense [Option ID = 37907]
4. Total assets exceed total liabilities [Option ID = 37908]

Topic:- Horticulture_PHD

1) Which of the following is a potassium loving crop and also consider as high K and S foraging crop?[Question ID = 3101][Question Description = 101_160_HOR_SEP22_Q01]

1. Cauliflower [Option ID = 12401]
2. Cucumber [Option ID = 12402]
3. Potato [Option ID = 12403]
4. Okra [Option ID = 12404]

2) Which among the following vegetable has extremely high respiration rate?

[Question ID = 3102][Question Description = 102_160_HOR_SEP22_Q02]

1. Carrot [Option ID = 12405]
2. Asparagus [Option ID = 12406]
3. French bean [Option ID = 12407]
4. Cabbage [Option ID = 12408]

3) Based on plant spread and fruit shape which of the botanical variety of brinjal (*Solanum melongena*) is reported to have round and egg-shaped fruits?

[Question ID = 3103][Question Description = 103_160_HOR_SEP22_Q03]

1. *Solanum melongena* var. *esculenta*
[Option ID = 12409]
2. *Solanum melongena* var. *serpentinum*
[Option ID = 12410]
3. *Solanum melongena* var. *depressum*
[Option ID = 12411]
4. *Solanum melongena* var. *incanum*
[Option ID = 12412]

4) Which of the following tomato hybrid carries multiple disease resistance with respect to leaf curl virus, bacterial wilt and early blight?[Question ID = 3104][Question Description = 104_160_HOR_SEP22_Q04]

1. Arka Abha [Option ID = 12413]
2. Arka Ananya [Option ID = 12414]
3. Arka Samrat [Option ID = 12415]
4. Kashi Vishesh [Option ID = 12416]

5) Nutritional value of which group of vegetable in general is reduced due to the presence of trypsin inhibitors?

[Question ID = 3105][Question Description = 105_160_HOR_SEP22_Q05]

1. Cucurbits [Option ID = 12417]
2. Solanaceous [Option ID = 12418]
3. Leafy [Option ID = 12419]
4. Legume [Option ID = 12420]

6) Which of the following is drought tolerant potato variety?[Question ID = 3106][Question Description = 106_160_HOR_SEP22_Q06]

1. Kufri Mohan [Option ID = 12421]
2. Kufri Thar-2 [Option ID = 12422]

3. Kufri Karan [Option ID = 12423]
4. Kufri Kheda-1 [Option ID = 12424]

7) High value functional foods obtained from certain crop species and harvested at first true leaves stage (7-21 days old seedlings) are called as[Question ID = 3107][Question Description = 107_160_HOR_SEP22_Q07]

1. Macrogreens [Option ID = 12425]
2. Microgreens [Option ID = 12426]
3. Pre-cut greens [Option ID = 12427]
4. Herbal greens [Option ID = 12428]

8) What is the scientific name of Curry leaf?[Question ID = 3108][Question Description = 108_160_HOR_SEP22_Q08]

1. *Murraya koengii* [Option ID = 12429]
2. *Moringa oleifera* [Option ID = 12430]
3. *Celosia argentea* [Option ID = 12431]
4. *Pastinaca sativa* [Option ID = 12432]

9) According to APEDA, What is the India's share (approximately in percent) of export of fruits & vegetables in the global market ?

[Question ID = 3109][Question Description = 109_160_HOR_SEP22_Q09]

1. 5
[Option ID = 12433]
2. 3
[Option ID = 12434]
3. 1
[Option ID = 12435]
4. 7
[Option ID = 12436]

10) What is the seed rate (kg/ha) of Pole type Dolichos bean ?[Question ID = 3110][Question Description = 110_160_HOR_SEP22_Q10]

1. 45-50 [Option ID = 12437]
2. 35-40 [Option ID = 12438]
3. 10-15 [Option ID = 12439]
4. 20-30 [Option ID = 12440]

11) Which is the best index tissue for nutrient analysis in papaya?

[Question ID = 3111][Question Description = 111_160_HOR_SEP22_Q11]

1. Leaf [Option ID = 12441]
2. Petiole [Option ID = 12442]
3. Stem [Option ID = 12443]
4. Root [Option ID = 12444]

12) Which of the following pair of fruits has the tendency of climacteric fruit ripening?

[Question ID = 3112][Question Description = 112_160_HOR_SEP22_Q12]

1. Litchi and Grape [Option ID = 12445]
2. Pineapple and Citrus [Option ID = 12446]
3. Avocado and Apricot [Option ID = 12447]
4. Pomegranate and Cherry [Option ID = 12448]

13) Which of the following species played a seminal role in the origin of cultivated apples?[Question ID = 3113][Question Description = 113_160_HOR_SEP22_Q13]

1. *Malus sieversii* [Option ID = 12449]
2. *Malus sylvestris* [Option ID = 12450]
3. *Malus baccata* [Option ID = 12451]
4. *Malus prunifolia* [Option ID = 12452]

14) The term " chicken-tongue" is associated with[Question ID = 3114][Question Description = 114_160_HOR_SEP22_Q14]

1. Grape [Option ID = 12453]
2. *Garcinia* [Option ID = 12454]
3. Papaya [Option ID = 12455]
4. Litchi [Option ID = 12456]

15) What is the family of jackfruit (*Artocarpus heterophyllus* Lamrk)?

[Question ID = 3115][Question Description = 115_160_HOR_SEP22_Q15]

1. Myrtaceae [Option ID = 12457]
2. Moraceae [Option ID = 12458]
3. Bombaceae [Option ID = 12459]
4. Bromeliaceae [Option ID = 12460]

16) What are the permissible limits of somaclonal variation in tissue cultured plants?

[Question ID = 3116][Question Description = 116_160_HOR_SEP22_Q16]

1. 3 to 5 % [Option ID = 12461]
2. 5 to 8% [Option ID = 12462]
3. 8 to 12% [Option ID = 12463]
4. 12 to 15 % [Option ID = 12464]

17) What is the estimated genome size of the mango?[Question ID = 3117][Question Description = 117_160_HOR_SEP22_Q17]

1. ~275 MB [Option ID = 12465]
2. ~375 MB [Option ID = 12466]
3. ~439 MB [Option ID = 12467]
4. ~539 MB [Option ID = 12468]

18) The most commercial grape rootstock "Dog Ridge" is selected from[Question ID = 3118][Question Description = 118_160_HOR_SEP22_Q18]

1. *Vitis vinifera* [Option ID = 12469]
2. *Vitis parviflora* [Option ID = 12470]
3. *Vitis labrusca* [Option ID = 12471]
4. *Vitis champini* [Option ID = 12472]

19) The quality and grade of papain are measured by[Question ID = 3119][Question Description = 119_160_HOR_SEP22_Q19]

1. Refractor unit [Option ID = 12473]
2. Tyrosine unit [Option ID = 12474]
3. Spectro unit [Option ID = 12475]
4. Defacto unit [Option ID = 12476]

20) What is the genomic group of Grande Naine banana?[Question ID = 3120][Question Description = 120_160_HOR_SEP22_Q20]

1. AA [Option ID = 12477]
2. AB [Option ID = 12478]
3. AAA [Option ID = 12479]
4. AAB [Option ID = 12480]

21) What is the ideal temperature for cold storage of mature mangoes?

[Question ID = 3121][Question Description = 121_160_HOR_SEP22_Q21]

1. 5-6 °C
[Option ID = 12481]
2. 9-10 °C
[Option ID = 12482]
3. 12-13 °C
[Option ID = 12483]
4. 15-16 °C
[Option ID = 12484]

22) Which part of the oil palm fruit is used for palm oil extraction?[Question ID = 3122][Question Description = 122_160_HOR_SEP22_Q22]

1. Seed [Option ID = 12485]
2. Epicarp [Option ID = 12486]
3. Mesocarp [Option ID = 12487]
4. Endocarp [Option ID = 12488]

23) What is the desired dry matter content in potato tubers meant for chips making ?[Question ID = 3123][Question Description = 123_160_HOR_SEP22_Q23]

1. 18 per cent [Option ID = 12489]
2. 20 per cent [Option ID = 12490]
3. 15 per cent [Option ID = 12491]
4. 10 per cent [Option ID = 12492]

24) Which part of Safed Musli (*Chlorophytum borivilianum*) has higher commercial value and used for postharvest processing ?

[Question ID = 3124][Question Description = 124_160_HOR_SEP22_Q24]

1. Seeds [Option ID = 12493]
2. Leaves [Option ID = 12494]
3. Stem [Option ID = 12495]
4. Roots [Option ID = 12496]

25) Which fruit/vegetable crop has problem of soft nose and jelly seed disorder ?[Question ID = 3125][Question Description = 125_160_HOR_SEP22_Q25]

1. Mango [Option ID = 12497]
2. Tomato [Option ID = 12498]
3. Sapota [Option ID = 12499]
4. Pointed gourd [Option ID = 12500]

26) Which of the following is NOT used as desiccant for drying of ornamentals?

[Question ID = 3126][Question Description = 126_160_HOR_SEP22_Q26]

1. Silica gel [Option ID = 12501]
2. Boric acid [Option ID = 12502]
3. Potassium permanganate [Option ID = 12503]
4. Alum powder [Option ID = 12504]

27) Which among the following causes superficial scald in apple?

[Question ID = 3127][Question Description = 127_160_HOR_SEP22_Q27]

1. Pre-harvest calcium deficiency [Option ID = 12505]
2. Low temperature storage [Option ID = 12506]
3. Low oxygen level in storage [Option ID = 12507]
4. Infection by *Botrytis cinerea* [Option ID = 12508]

28) Which of the following is used as ethylene absorber in the packaging system?

[Question ID = 3128][Question Description = 128_160_HOR_SEP22_Q28]

1. Ferrous oxide [Option ID = 12509]
2. Hydrated lime [Option ID = 12510]
3. Silica gel [Option ID = 12511]
4. Potassium permanganate [Option ID = 12512]

29) Which among the following is a postharvest quarantine treatment of fresh horticultural produce?

[Question ID = 3129][Question Description = 129_160_HOR_SEP22_Q29]

1. Hot water treatment [Option ID = 12513]
2. De-greening treatment [Option ID = 12514]
3. Curing [Option ID = 12515]
4. Tinting [Option ID = 12516]

30) 'Kanji' is a beverage prepared from black carrot by[Question ID = 3130][Question Description = 130_160_HOR_SEP22_Q30]

1. Alcoholic fermentation [Option ID = 12517]
2. Acetic acid fermentation [Option ID = 12518]
3. Lactic acid fermentation [Option ID = 12519]
4. Enzymatic juice extraction [Option ID = 12520]

31) Which of the following foliage plant is used to make edge in the garden?

[Question ID = 3131][Question Description = 131_160_HOR_SEP22_Q31]

1. *Mathiola incana* [Option ID = 12521]
2. *Alyssum maritimum* [Option ID = 12522]
3. *Alternanthera amabilis* [Option ID = 12523]

4. *Zephyranthes rosea* [Option ID = 12524]

32) Which of the following is the first cultivar of rose developed by Dr. B. P. Pal for loose flower purpose?

[Question ID = 3132][Question Description = 132_160_HOR_SEP22_Q32]

1. Delhi White Pearl [Option ID = 12525]
2. Rose Sherbet [Option ID = 12526]
3. Pusa Alpana [Option ID = 12527]
4. Madhura [Option ID = 12528]

33) Who has given the concept of wild gardening?

[Question ID = 3133][Question Description = 133_160_HOR_SEP22_Q33]

1. Edwin Lutyens [Option ID = 12529]
2. G S Randhawa [Option ID = 12530]
3. Le Notre [Option ID = 12531]
4. William Robinson [Option ID = 12532]

34) Process of removing field heat from cut flowers in which temperature is brought down from 25-30 ° C to 1-2 ° C in less than an hour either through hydro-cooling or mechanical refrigeration is known as

[Question ID = 3134][Question Description = 134_160_HOR_SEP22_Q34]

1. Staking [Option ID = 12533]
2. Pre-cooling [Option ID = 12534]
3. Pulsing [Option ID = 12535]
4. Hardening [Option ID = 12536]

35) What is the chromosome number of Mohini, an aneuploid variety of rose?

[Question ID = 3135][Question Description = 135_160_HOR_SEP22_Q35]

1. $2n=23$ [Option ID = 12537]
2. $2n=21$ [Option ID = 12538]
3. $2n=22$ [Option ID = 12539]
4. $2n=24$ [Option ID = 12540]

36) Which of the following is a major loose flower crop grown in India?[Question ID = 3136][Question Description = 136_160_HOR_SEP22_Q36]

1. Gaillardia [Option ID = 12541]
2. Marigold [Option ID = 12542]
3. Ixora [Option ID = 12543]
4. Gomphrena [Option ID = 12544]

37) Which of the following is a warm season turf grass?[Question ID = 3137][Question Description = 137_160_HOR_SEP22_Q37]

1. *Agrostis palustris* [Option ID = 12545]
2. *Lolium multiflorum* [Option ID = 12546]
3. *Poa pratensis* [Option ID = 12547]
4. *Stenotaphrum secundatum* [Option ID = 12548]

38) Who has designed 'Mughal Garden' which is located at Pinjore, Haryana ?

[Question ID = 3138][Question Description = 138_160_HOR_SEP22_Q38]

1. Sher Shah Suri [Option ID = 12549]
2. Ibrahim Lodhi [Option ID = 12550]
3. Fidai Khan [Option ID = 12551]
4. Hyder Ali [Option ID = 12552]

39) 'Noorjahan' is an essential oil bearing variety of which flower crop?[Question ID = 3139][Question Description = 139_160_HOR_SEP22_Q39]

1. Tuberose [Option ID = 12553]
2. Rose [Option ID = 12554]
3. Carnation [Option ID = 12555]
4. Dahlia [Option ID = 12556]

40) Which of the following international organization is associated with protection of asexually reproduced ornamental plant varieties?

[Question ID = 3140][Question Description = 140_160_HOR_SEP22_Q40]

1. IAEA, Vienna [Option ID = 12557]
2. PPV&FRA, New Delhi [Option ID = 12558]
3. ISHS, Belgium [Option ID = 12559]
4. CIOPORA, Geneva [Option ID = 12560]

41) Which of the following is a hybrid variety of black pepper?

[Question ID = 3141][Question Description = 141_160_HOR_SEP22_Q41]

1. Panniyur-1 [Option ID = 12561]
2. Panniyur-2 [Option ID = 12562]
3. Panniyur-5 [Option ID = 12563]
4. Sreekara [Option ID = 12564]

42) Allspice is known for containing the flavour of which of the following combination?

[Question ID = 3142][Question Description = 142_160_HOR_SEP22_Q42]

1. Cinnamon, clove and bay leaf. [Option ID = 12565]
2. Cinnamon, clove and curry leaf. [Option ID = 12566]
3. Cinnamon, clove and nutmeg. [Option ID = 12567]
4. Cinnamon, clove and coriander. [Option ID = 12568]

43) Which of the following is NOT related to large cardamom?

[Question ID = 3143][Question Description = 143_160_HOR_SEP22_Q43]

1. Chirke and Foorkey [Option ID = 12569]
2. Ramsey and Gorsey [Option ID = 12570]
3. Seeds and Suckers [Option ID = 12571]
4. Seeds and rhizome [Option ID = 12572]

44) Which of the following is a shrub?[Question ID = 3144][Question Description = 144_160_HOR_SEP22_Q44]

1. Rosemary [Option ID = 12573]
2. Fennel [Option ID = 12574]
3. Fenugreek [Option ID = 12575]
4. Parsley [Option ID = 12576]

45) Which is the useful part of cinnamon?[Question ID = 3145][Question Description = 145_160_HOR_SEP22_Q45]

1. Leaves [Option ID = 12577]
2. Flower [Option ID = 12578]
3. Root [Option ID = 12579]
4. Bark [Option ID = 12580]

46) Isabgol crop generally sown during which month?

[Question ID = 3146][Question Description = 146_160_HOR_SEP22_Q46]

1. July to mid- August [Option ID = 12581]
2. November to mid- December [Option ID = 12582]
3. January to mid- February [Option ID = 12583]
4. April to mid- May [Option ID = 12584]

47) 'Coppicing' is related to which of the following crop?

[Question ID = 3147][Question Description = 147_160_HOR_SEP22_Q47]

1. Dioscorea [Option ID = 12585]
2. Cinchona [Option ID = 12586]
3. Shatavari [Option ID = 12587]
4. Belladonna [Option ID = 12588]

48) Heroin drug is prepared from which medicinal plant?[Question ID = 3148][Question Description = 148_160_HOR_SEP22_Q48]

1. Datura [Option ID = 12589]
2. Safed musli [Option ID = 12590]
3. Cannabis (marijuana) [Option ID = 12591]
4. Opium poppy [Option ID = 12592]

49) Central Drug Research Institute is located at[Question ID = 3149][Question Description = 149_160_HOR_SEP22_Q49]

1. New Delhi [Option ID = 12593]

2. Bengaluru [Option ID = 12594]
3. Palampur [Option ID = 12595]
4. Lucknow [Option ID = 12596]

50) Which is the economic part of long pepper?[Question ID = 3150][Question Description = 150_160_HOR_SEP22_Q50]

1. Leaves [Option ID = 12597]
2. Seed [Option ID = 12598]
3. Spike [Option ID = 12599]
4. Berry [Option ID = 12600]

Topic:- 16 Post Harvest Management_PHD

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

Assertion A : During curing, suberin deposit just below the damaged area of potato.

Reason R : Suberin is a group of fatty acids which provide protection to the tuber against water loss and infection.

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

[Question ID = 3351][Question Description = 101_163_HTH_SEP22_Q01]

1. Both A and R are true and R is the correct explanation of A
[Option ID = 13401]
2. Both A and R are true but R is NOT the correct explanation of A
[Option ID = 13402]
3. A is true but R is false
[Option ID = 13403]
4. A is false but R is true
[Option ID = 13404]

2) Apple is highly susceptible to

- A. Compression injury
- B. Vibration injury
- C. Impact injury
- D. Chilling injury

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

[Question ID = 3352][Question Description = 102_163_HTH_SEP22_Q02]

1. A, B and D only [Option ID = 13405]
2. A only [Option ID = 13406]
3. B only [Option ID = 13407]
4. A and C only [Option ID = 13408]

3) What will happen if packing material absorb the moisture from cut roses?[Question ID = 3353][Question Description = 103_163_HTH_SEP22_Q03]

1. Bent neck [Option ID = 13409]
2. Bud splitting [Option ID = 13410]
3. Bud opening [Option ID = 13411]
4. Bull head [Option ID = 13412]

4) Symptoms associated with chilling injury are[Question ID = 3354][Question Description = 104_163_HTH_SEP22_Q04]

1. Freezing injury and burn [Option ID = 13413]
2. Internal discoloration and electrolyte leakage [Option ID = 13414]
3. Electrolyte leakage and burning [Option ID = 13415]
4. Freeze burn and discoloration [Option ID = 13416]

5) Which one is NOT C₂H₄ oxidising agent?

[Question ID = 3355][Question Description = 105_163_HTH_SEP22_Q05]

1. Tetrazine [Option ID = 13417]
2. KMNO₄ [Option ID = 13418]
3. N₂O [Option ID = 13419]
4. O₃ [Option ID = 13420]

6) Match List I with List II

List I	List II
Compound	Chemical formula
A. Ethylene	I. $C_{40}H_{56}$
B. Acetylene	II. C_2H_4
C. Carotene	III. C_2H_2
D. Ascorbic acid	IV. $C_6H_8O_6$

Choose the correct answer from the options given below:

[Question ID = 3356][Question Description = 106_163_HTH_SEP22_Q06]

1. A-III, B-II, C-I, D-IV [Option ID = 13421]
2. A-III, B-II, C-IV, D-I [Option ID = 13422]
3. A-II, B-III, C-I, D-IV [Option ID = 13423]
4. A-I, B-II, C-IV, D-III [Option ID = 13424]

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

Assertion A : Disinfection of fruits and vegetables is achieved using ozoned water.

Reason R : Washing of fruits with ozonated water masks the aroma of fruits due to high temperature exposure.

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

[Question ID = 3357][Question Description = 107_163_HTH_SEP22_Q07]

1. Both A and R are true and R is the correct explanation of A [Option ID = 13425]
2. Both A and R are true but R is NOT the correct explanation of A [Option ID = 13426]
3. A is false but R is true [Option ID = 13427]
4. A is true but R is false [Option ID = 13428]

8) Given below are two statements

Statement I: Lycopene is self-oxidizing isomer of carotene.

Statement II: During processing, tomato products turn brown when it comes into contact of iron.

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

[Question ID = 3358][Question Description = 108_163_HTH_SEP22_Q08]

1. Both Statement I and Statement II are correct [Option ID = 13429]
2. Both Statement I and Statement II are incorrect [Option ID = 13430]
3. Statement I is correct but Statement II is incorrect [Option ID = 13431]
4. Statement I is incorrect but Statement II is correct [Option ID = 13432]

9) Find out the **WRONG** statement/statements from the following

- A. Vinegar contains about 5 percent acetic acid .
- B. Tomato paste should contain not less than 25 percent tomato solids.
- C. Candied fruit coated with sugar is called crystallized fruit.
- D. Weeping jelly phenomenon occurs due to over-cooking.

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

[Question ID = 3359][Question Description = 109_163_HTH_SEP22_Q09]

1. A, B and D only [Option ID = 13433]
2. A, C and D only [Option ID = 13434]
3. C and D only [Option ID = 13435]
4. D only [Option ID = 13436]

10) For which fruit, CA storage is commercially used in India ?

[Question ID = 3360][Question Description = 110_163_HTH_SEP22_Q10]

1. Mango (Alphanso) [Option ID = 13437]
2. Apple [Option ID = 13438]
3. Peach [Option ID = 13439]
4. Plum [Option ID = 13440]

11) Match List I with List II

List I	List II
Spoilage in canned food	Indications
A. Swell	I. Accumulation of carbondioxide gas
B. Hydrogen swell	II. Acid and tin plate reaction
C. Springer	III. Mild swell at one end
D. Flipper	IV. A can with mild positive pressure

Choose the correct answer from the options given below:

[Question ID = 3361][Question Description = 111_163_HTH_SEP22_Q11]

1. A-I, B-II, C-III, D-IV [Option ID = 13441]
2. A-II, B-I, C-III, D-IV [Option ID = 13442]
3. A-III, B-II, C-I, D-IV [Option ID = 13443]
4. A-IV, B-III, C-II, D-I [Option ID = 13444]

12) The Radura logo confirms that food has been treated with

[Question ID = 3362][Question Description = 112_163_HTH_SEP22_Q12]

1. Chlorine water [Option ID = 13445]
2. Ozonated water [Option ID = 13446]
3. Ionizing radiation [Option ID = 13447]
4. Electrolyte water [Option ID = 13448]

13) Given below are two statements

Statement I: Air embolism occurs when small bubbles of air are drawn into the cut flower stem during harvesting.

Statement II: The air emboli can be removed by placing the cut end into lukewarm water.

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

[Question ID = 3363][Question Description = 113_163_HTH_SEP22_Q13]

1. Both Statement I and Statement II are correct
[Option ID = 13449]
2. Both Statement I and Statement II are incorrect
[Option ID = 13450]
3. Statement I is correct but Statement II is incorrect
[Option ID = 13451]
4. Statement I is incorrect but Statement II is correct
[Option ID = 13452]

14) The red color of pericarp of litchi turns to brown, in this process the correct sequence of conversion events is

- A. Anthocyanidin
- B. anthocyanin
- C. O-phenol
- D. Brown pigmentation

Choose the *correct* answer from the options given below

[Question ID = 3364][Question Description = 114_163_HTH_SEP22_Q14]

1. A, B, C, D [Option ID = 13453]
2. B, A, C, D [Option ID = 13454]
3. A, C, B, D [Option ID = 13455]
4. C, A, B, D [Option ID = 13456]

15)

Given below are two statements

Statement I: Comparing to climacteric fruits, non-climateric fruits have lower respiration rate.

Statement II: Respiration rate of strawberry is very low.

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

[Question ID = 3365][Question Description = 115_163_HTH_SEP22_Q15]

1. Both Statement I and Statement II are correct [Option ID = 13457]
2. Both Statement I and Statement II are incorrect [Option ID = 13458]
3. Statement I is correct but Statement II is incorrect [Option ID = 13459]
4. Statement I is incorrect but Statement II is correct [Option ID = 13460]

16) Which is the commonly used material in embedded flower drying ?

[Question ID = 3366][Question Description = 116_163_HTH_SEP22_Q16]

1. Silica gel [Option ID = 13461]
2. Albumin gel [Option ID = 13462]
3. Hydro gel [Option ID = 13463]
4. Glycerin gel [Option ID = 13464]

17) What is the unit packaging weight of okra for export purpose?

[Question ID = 3367][Question Description = 117_163_HTH_SEP22_Q17]

1. 5-10 kg [Option ID = 13465]
2. 5-6 kg [Option ID = 13466]
3. 4-8 kg [Option ID = 13467]
4. 2-5 kg [Option ID = 13468]

18) Match List I with List II

List I	List II
Flower	Stage of harvesting
A. Gerbera	I. Paint brush stage
B. Carnation	II. When all florets are open
C. Anthurium	III. Outer petals are fully expanded
D. Orchid	IV. After folding of spathe is completed

Choose the correct answer from the options given below:

[Question ID = 3368][Question Description = 118_163_HTH_SEP22_Q18]

1. A-IV, B-III, C-II, D-I [Option ID = 13469]
2. A-III, B-II, C-I, D-IV [Option ID = 13470]
3. A-I, B-II, C-IV, D-III [Option ID = 13471]
4. A-III, B-I, C-IV, D-II [Option ID = 13472]

19) Which one is NOT the function of packaging material?

[Question ID = 3369][Question Description = 119_163_HTH_SEP22_Q19]

1. Contain [Option ID = 13473]
2. Inform [Option ID = 13474]
3. Pre-cool [Option ID = 13475]
4. Display [Option ID = 13476]

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

Assertion A: Bio-agents are having low popularity among users for controlling postharvest diseases.

Reason R : There is a concern among public for accepting antagonist microorganisms in their diet .

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

[Question ID = 3370][Question Description = 120_163_HTH_SEP22_Q20]

1. Both A and R are true and R is the correct explanation of A [Option ID = 13477]
2. Both A and R are true but R is NOT the correct explanation of A [Option ID = 13478]
3. A is true but R is false [Option ID = 13479]
4. A is false but R is true [Option ID = 13480]

21) The terms killing, sunning, sweating and conditioning are related to

[Question ID = 3371][Question Description = 121_163_HTH_SEP22_Q21]

1. Tea [Option ID = 13481]
2. Vanilla [Option ID = 13482]
3. Coffee [Option ID = 13483]
4. Black pepper [Option ID = 13484]

22) Match List I with List II

List I	List II
Crop	Particulars
A. Tea	I. Cineole
B. Black pepper	II. Fine picking
C. Cardamom	III. Chavicin
D. Cashew nut	IV. CNSL

Choose the correct answer from the options given below:

[Question ID = 3372][Question Description = 122_163_HTH_SEP22_Q22]

1. A-I, B-III, C-II, D-IV [Option ID = 13485]
2. A-II, B-III, C-I, D-IV [Option ID = 13486]
3. A-III, B-I, C-II, D-IV [Option ID = 13487]
4. A-I, B-II, C-III, D-IV [Option ID = 13488]

23) Among the L*, a*, b* color values., L* refers to

[Question ID = 3373][Question Description = 123_163_HTH_SEP22_Q23]

1. Green color [Option ID = 13489]
2. Red color [Option ID = 13490]
3. Lightness of color (black to white) [Option ID = 13491]
4. Yellow color [Option ID = 13492]

24) Enzymatic browning is NOT desired in the processing of

[Question ID = 3374][Question Description = 124_163_HTH_SEP22_Q24]

1. Tea [Option ID = 13493]
2. Coffee [Option ID = 13494]
3. Cocoa [Option ID = 13495]
4. Potato [Option ID = 13496]

25) What is the ideal temperature for cocoa bean roasting ?

[Question ID = 3375][Question Description = 125_163_HTH_SEP22_Q25]

1. 60-70° C [Option ID = 13497]
2. 70-80° C [Option ID = 13498]
3. 90-95° C [Option ID = 13499]
4. 100-140° C [Option ID = 13500]

26) Ethylene biosynthesis in fruits can be inhibited by

[Question ID = 3376][Question Description = 126_163_HTH_SEP22_Q26]

1. 1-Methyl cyclopropene [Option ID = 13501]
2. Potassium permanganate [Option ID = 13502]
3. Zeolite [Option ID = 13503]
4. Polyamines [Option ID = 13504]

27) What is the thickness of cling film used for packaging?

[Question ID = 3377][Question Description = 127_163_HTH_SEP22_Q27]

1. 2-5 micron [Option ID = 13505]
2. 15-20 micron [Option ID = 13506]
3. 30-35 micron [Option ID = 13507]
4. 50-55 micron [Option ID = 13508]

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

Assertion A : 'Blueing' occurs in red coloured rose with ageing.

Reason R : It occurs due to alkaline pH in the cell sap.

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

[Question ID = 3378][Question Description = 128_163_HTH_SEP22_Q28]

1. Both A and R are true and R is the correct explanation of A [Option ID = 13509]
2. Both A and R are true but R is NOT the correct explanation of A [Option ID = 13510]
3. A is true but R is false [Option ID = 13511]
4. A is false but R is true [Option ID = 13512]

29) According to 'Codex standard for quick frozen peas', what is the tolerance limit for blond peas in a lot?

[Question ID = 3379][Question Description = 129_163_HTH_SEP22_Q29]

1. 2% [Option ID = 13513]
2. 5% [Option ID = 13514]
3. 7% [Option ID = 13515]
4. 12% [Option ID = 13516]

30) Arrange the steps of HACCP in appropriate sequence.

- A. Identify the critical control points
- B. Establish the monitoring procedures
- C. Identify and assess the hazards
- D. Establish corrective actions
- E. Identify the critical limits

Choose the *correct* answer from the options given below

[Question ID = 3380][Question Description = 130_163_HTH_SEP22_Q30]

1. A, D, B, C, E [Option ID = 13517]
2. B, A, D, E, C [Option ID = 13518]
3. E, D, A, C, B [Option ID = 13519]
4. C, A, E, B, D [Option ID = 13520]

31) Given below are two statements

Statement I: Kalipak is prepared from ripe arecanut fruit.

Statement II: Kottapak is prepared from husk of arecanut fruit.

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

[Question ID = 3381][Question Description = 131_163_HTH_SEP22_Q31]

1. Both Statement I and Statement II are true [Option ID = 13521]
2. Both Statement I and Statement II are false [Option ID = 13522]
3. Statement I is true but Statement II is false [Option ID = 13523]
4. Statement I is false but Statement II is true [Option ID = 13524]

32) Match List I with List II

List I	List II
Chemical compound	Food additive
A. Cyclamate	I. Antioxidant
B. Sorbic acid	II. Flavour enhancer
C. Monosodium glutamate	III. Sweetening agent
D. Propyl gallate	IV. Preservative

Choose the correct answer from the options given below:

[Question ID = 3382][Question Description = 132_163_HTH_SEP22_Q32]

1. A - II, B - I, C - III, D - IV [Option ID = 13525]
2. A - I, B - III, C - II, D - IV [Option ID = 13526]
3. A - III, B - IV, C - II, D - I [Option ID = 13527]
4. A - IV, B - III, C - I, D - II [Option ID = 13528]

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

Assertion A : Critical threshold temperature below which chilling injury occurs in a commodity varies with stage of maturity.

Reason R : Below critical threshold temperature, reorganization of membrane lipids occur in the commodity from solid gel to liquid crystalline state.

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

[Question ID = 3383][Question Description = 133_163_HTH_SEP22_Q33]

1. Both A and R are true and R is the correct explanation of A [Option ID = 13529]
2. Both A and R are true but R is NOT the correct explanation of A [Option ID = 13530]
3. A is true but R is false [Option ID = 13531]
4. A is false but R is true [Option ID = 13532]

34) At what stage, black peppers are harvested for extraction of oleoresin?

[Question ID = 3384][Question Description = 134_163_HTH_SEP22_Q34]

1. 6 months after flowering [Option ID = 13533]
2. 15-20 days before full maturity [Option ID = 13534]
3. Fully mature stage [Option ID = 13535]
4. Fully ripe stage [Option ID = 13536]

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

Assertion A : Strawberry jam is an intermediate moisture food.

Reason R : Strawberry jam contains minimum 25 percent fruit pulp.

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

[Question ID = 3385][Question Description = 135_163_HTH_SEP22_Q35]

1. Both A and R are true and R is the correct explanation of A [Option ID = 13537]
2. Both A and R are true but R is NOT the correct explanation of A [Option ID = 13538]
3. A is true but R is false [Option ID = 13539]
4. A is false but R is true [Option ID = 13540]

36) Which among the following is used for juice extraction from halved citrus fruit?[Question ID = 3386][Question Description = 136_163_HTH_SEP22_Q36]

1. Plunger-type press [Option ID = 13541]
2. Basket press [Option ID = 13542]
3. Screw-type press [Option ID = 13543]
4. Rack and cloth press [Option ID = 13544]

37) Given below are two statements

Statement I: Seven-eighth cooling times are commercially used for dehydro-freezing.

Statement II: Pre-cooling rate reduces exponentially as the temperature difference between produce and air falls.

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

[Question ID = 3387][Question Description = 137_163_HTH_SEP22_Q37]

1. Both Statement I and Statement II are true [Option ID = 13545]
2. Both Statement I and Statement II are false [Option ID = 13546]
3. Statement I is true but Statement II is false [Option ID = 13547]
4. Statement I is false but Statement II is true [Option ID = 13548]

38) Match List I with List II

List I	List II
Fruit/ vegetable	Major pigment
A. Papaya	I. Violaxanthin
B. Watermelon	II. Pelargonidin 3-glucoside
C. Orange	III. Lycopene
D. Red pepper	IV. Caricaxanthin
E. Syzygium(Jamun)	V. Capsanthin

Choose the correct answer from the options given below:

[Question ID = 3388][Question Description = 138_163_HTH_SEP22_Q38]

1. A - I, B - II, C - III, D - V, E - IV
[Option ID = 13549]
2. A - II, B - III, C - IV, D - V, E - I
[Option ID = 13550]
3. A - III, B - IV, C - V, D - I, E - II
[Option ID = 13551]
4. A - IV, B - III, C - I, D - V, E - II
[Option ID = 13552]

39) Given below are two statements

Statement I: Methoxyl content in pectin is an important factor in controlling setting time of pectin.

Statement II: Acetyl group present in pectin inhibits jelly formation.

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

[Question ID = 3389][Question Description = 139_163_HTH_SEP22_Q39]

1. Both Statement I and Statement II are true [Option ID = 13553]
2. Both Statement I and Statement II are false [Option ID = 13554]
3. Statement I is true but Statement II is false [Option ID = 13555]
4. Statement I is false but Statement II is true [Option ID = 13556]

40) Which of the following vegetable has extremely high respiration rate?

[Question ID = 3390][Question Description = 140_163_HTH_SEP22_Q40]

1. Broccoli [Option ID = 13557]
2. Potato [Option ID = 13558]
3. Pepper [Option ID = 13559]
4. Cauliflower [Option ID = 13560]

41) Arrange the processing steps of cashew in appropriate sequence.

- A. Grading
- B. Shelling
- C. Roasting
- D. Packing
- E. Peeling

Choose the *correct* answer from the options given below

[Question ID = 3391][Question Description = 141_163_HTH_SEP22_Q41]

1. A, D, C, B, E [Option ID = 13561]
2. C, E, A, B, D [Option ID = 13562]
3. B, E, C, A, D [Option ID = 13563]
4. C, B, E, A, D [Option ID = 13564]

42) Which of the following ash gourd (*Benincasa hispida*) varieties are suitable for making petha sweets?

- A. Pusa Ujwal
- B. Kashi Saumya
- C. Kashi Dhawal
- D. Kashi Ujwal
- E. Arka Shreyas

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

[Question ID = 3392][Question Description = 142_163_HTH_SEP22_Q42]

1. B, D and E only [Option ID = 13565]
2. A and E only [Option ID = 13566]
3. C and D only [Option ID = 13567]
4. B and C only [Option ID = 13568]

43) In which finger on a bunch, Calliper grade of banana is measured ?

[Question ID = 3393][Question Description = 143_163_HTH_SEP22_Q43]

1. Middle finger at the lower most hand [Option ID = 13569]
2. Last finger at the top most hand [Option ID = 13570]
3. Middle finger on the second hand from top [Option ID = 13571]
4. Last finger at the lower most hand [Option ID = 13572]

44) In vapour heat treatment, innermost fruit pulp temperature of mango is maintained at [Question ID = 3394][Question Description = 144_163_HTH_SEP22_Q44]

1. 40.5 degree celcius [Option ID = 13573]
2. 47.5 degree celcius [Option ID = 13574]
3. 52.5 degree celcius [Option ID = 13575]
4. 55.5 degree celcius [Option ID = 13576]

45) Which of the following fruit is washed using alum solution?

[Question ID = 3395][Question Description = 145_163_HTH_SEP22_Q45]

1. Papaya [Option ID = 13577]
2. Banana [Option ID = 13578]
3. Sapota [Option ID = 13579]
4. Pineapple [Option ID = 13580]

46) Match List I with List II

List I	List II
Commodity	Adulteration
A. Saffron	I. Chicory
B. Cinnamon	II. Papaya seed
C. Black pepper	III. Silk of maize cob
D. Coffee	IV. Cassia

Choose the correct answer from the options given below:

[Question ID = 3396][Question Description = 146_163_HTH_SEP22_Q46]

1. A - III, B - I, C - IV, D - II [Option ID = 13581]
2. A - II, B - IV, C - I, D - III [Option ID = 13582]
3. A - IV, B - III, C - I, D - II [Option ID = 13583]
4. A - III, B - IV, C - II, D - I [Option ID = 13584]

47) The major monosaccharides present in isabgol husk are

- A. Rhamnose
- B. Glucose
- C. Mannose
- D. Xylose
- E. Arabinose

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

[Question ID = 3397][Question Description = 147_163_HTH_SEP22_Q47]

1. A, C and E only [Option ID = 13585]
2. D and E only [Option ID = 13586]
3. B and D only [Option ID = 13587]
4. A, B and D only [Option ID = 13588]

48) Given below are two statements

Statement I: Vincristine and vinblastine present in periwinkle (*Catharanthus roseus*) are two glycosides.

Statement II: Level of vincristine is more in leaves than roots.

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

[Question ID = 3398][Question Description = 148_163_HTH_SEP22_Q48]

1. Both Statement I and Statement II are true [Option ID = 13589]
2. Both Statement I and Statement II are false [Option ID = 13590]
3. Statement I is true but Statement II is false [Option ID = 13591]
4. Statement I is false but Statement II is true [Option ID = 13592]

49) Bleaching of cardamom is done by

- A. Hydrogen peroxide
- B. Potassium metabisulphite
- C. Sodium nitroprusside
- D. Sodium benzoate
- E. Citric acid

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

[Question ID = 3399][Question Description = 149_163_HTH_SEP22_Q49]

1. A and D only [Option ID = 13593]
2. C and E only [Option ID = 13594]

3. A and B only [Option ID = 13595]
4. B and C only [Option ID = 13596]

50) ASTA units are associated with[Question ID = 3400][Question Description = 150_163_HTH_SEP22_Q50]

1. Colour of paprika [Option ID = 13597]
2. Flavour of vanilla [Option ID = 13598]
3. Nonenzymatic browning [Option ID = 13599]
4. Pungency of chilli [Option ID = 13600]

