

15 Plantation and Aromatic Crops 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 borivillianum*) 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 Golsey [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:- 15 Plantation Spices Medicinal AC_PHD

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

Assertion A : Patchouli is an herbaceous annual plant which yields patchouli oil.

Reason R : Indonesia is the largest producer of patchouli oil in the world which possesses many medicinal properties.

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

[Question ID = 3301][Question Description = 101_196_SPM_SEP22_Q01]

1. Both A and R are true and R is the correct explanation of A [Option ID = 13201]
2. Both A and R are true but R is NOT the correct explanation of A [Option ID = 13202]
3. A is true but R is false [Option ID = 13203]
4. A is false but R is true [Option ID = 13204]

2) What is the drying recovery of the black pepper?[Question ID = 3302][Question Description = 102_196_SPM_SEP22_Q02]

1. 33 % [Option ID = 13205]
2. 25 % [Option ID = 13206]
3. 40 % [Option ID = 13207]
4. 29 % [Option ID = 13208]

3) Given below are two statements

Statement I: In black pepper, cuttings are raised mainly from main shoots.

Statement II: Cuttings from lateral branches are used to develop bush pepper plants.

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

[Question ID = 3303][Question Description = 103_196_SPM_SEP22_Q03]

1. Both Statement I and Statement II are true [Option ID = 13209]
2. Both Statement I and Statement II are false [Option ID = 13210]
3. Statement I is true but Statement II is false [Option ID = 13211]
4. Statement I is false but Statement II is true [Option ID = 13212]

4) The aromatic volatile component of spices is

[Question ID = 3304][Question Description = 104_196_SPM_SEP22_Q04]

1. Spice oil [Option ID = 13213]
2. Spice gel [Option ID = 13214]
3. Spice paste [Option ID = 13215]
4. Spice fat [Option ID = 13216]

5) Given below are two statements

Statement I: In garlic, long days are very favourable for the formation of bulbs.

Statement II: Garlic requires well drained loamy soils, rich in humus, with fairly good content of potash.

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

[Question ID = 3305][Question Description = 105_196_SPM_SEP22_Q05]

1. Both Statement I and Statement II are true [Option ID = 13217]
2. Both Statement I and Statement II are false [Option ID = 13218]
3. Statement I is true but Statement II is false [Option ID = 13219]
4. Statement I is false but Statement II is true [Option ID = 13220]

6) Given below are two statements

Statement I: Pepper mint requires temperate to subtropical climate for its growth and development and can also withstand frost .

Statement II: It prefers long day conditions and requires an annual rainfall ranging from 100-130 cm.

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

[Question ID = 3306][Question Description = 106_196_SPM_SEP22_Q06]

1. Both Statement I and Statement II are false [Option ID = 13221]
2. Both Statement I and Statement II are true [Option ID = 13222]
3. Statement I is true but Statement II is false [Option ID = 13223]
4. Statement I is false but Statement II is true [Option ID = 13224]

7) Match List I with List II

List I	List II
Crop	Family
A. Tamarind	I. Myristicaceae
B. Malabar tamarind	II. Myrtaceae
C. Allspice	III. Clausiaceae
D. Nutmeg	IV. Fabaceae

Choose the correct answer from the options given below:

[Question ID = 3307][Question Description = 107_196_SPM_SEP22_Q07]

1. A-II, B-IV, C-III, D-I [Option ID = 13225]
2. A-IV, B-II, C-III, D-I [Option ID = 13226]
3. A-IV, B-III, C-II, D-I [Option ID = 13227]
4. A-II, B-III, C-I, D-IV [Option ID = 13228]

8) Match List I with List II

List I	List II
Disease	Crop
A. Soft rot	I. Nutmeg
B. Phytophthora foot rot	II. Ginger
C. Powdery mildew	III. Black pepper
D. Wet rot	IV. Coriander

Choose the correct answer from the options given below:

[Question ID = 3308][Question Description = 108_196_SPM_SEP22_Q08]

1. A -II, B -III, C -IV, D -I [Option ID = 13229]
2. A -IV, B -II, C -III, D -I [Option ID = 13230]
3. A - IV, B -II, C -I, D -III [Option ID = 13231]
4. A -IV, B -III, C -II, D -I [Option ID = 13232]

9) Which is TRUE about cardamom?

- A. Cardamom is propagated both sexually and asexually.
- B. Sexual propagation is recommended when large number of planting material is to be produced.
- C. Application of 2,4-D @ 50 ppm increases plant height.
- D. Economic life span of cardamom crop is 10-15 years.

Choose the correct answer from the options given below:

[Question ID = 3309][Question Description = 109_196_SPM_SEP22_Q09]

1. A, B and C only
[Option ID = 13233]
2. B, C and D Only
[Option ID = 13234]
3. A, B and D Only
[Option ID = 13235]
4. A, C and D Only
[Option ID = 13236]

10) Which of the following are TRUE about Dill?

- A. Belongs to family apiaceae.
- B. The major constituent of Dill seed oil is carvone.
- C. Indian Dill has highest content of carvone.
- D. Land race of Dill from Andhra Pradesh is known as Ghoda Sowa.

Choose the correct answer from the options given below:

[Question ID = 3310][Question Description = 110_196_SPM_SEP22_Q10]

1. Only A and C are true

[Option ID = 13237]

2. Only B and C are true

[Option ID = 13238]

3. Only C and D are true

[Option ID = 13239]

4. Only A and B are true

[Option ID = 13240]

11) Given below are two statements

Statement I: The genus *Ocimum* has been broadly classified in to two groups viz. Basilicum and Sanctum.

Statement II: Basilicum species are mostly herbaceous perennials having small flowers and non-mucilaginous seeds.

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

[Question ID = 3311][Question Description = 111_196_SPM_SEP22_Q11]

1. Both Statement I and Statement II are true [Option ID = 13241]

2. Both Statement I and Statement II are false [Option ID = 13242]

3. Statement I is true but Statement II is false [Option ID = 13243]

4. Statement I is false but Statement II is true [Option ID = 13244]

12) Given below are two statements

Statement I: Vetiver can be propagated by tillers and slips.

Statement II: Tillers take longer time for growing and therefore, slips are the better planting material for propagation.

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

[Question ID = 3312][Question Description = 112_196_SPM_SEP22_Q12]

1. Both Statement I and Statement II are true [Option ID = 13245]

2. Both Statement I and Statement II are false [Option ID = 13246]

3. Statement I is true but Statement II is false [Option ID = 13247]

4. Statement I is false but Statement II is true [Option ID = 13248]

13) Match List I with List II

List I	List II
Common name	Scientific name
A. East Indian Lemon grass	I. <i>Cymbopogon citratus</i>
B. West Indian Lemon grass	II. <i>Cymbopogon flexuosus</i>
C. North Indian Lemon grass	III. <i>Cymbopogon nardus</i>
D. Ceylon citronella grass	IV. <i>Cymbopogon pendulus</i>

Choose the correct answer from the options given below:

[Question ID = 3313][Question Description = 113_196_SPM_SEP22_Q13]

1. A -II, B -I, C -IV, D -III [Option ID = 13249]

2. A -IV, B -II, C -III, D -I [Option ID = 13250]

3. A -IV, B -I, C -III, D -II [Option ID = 13251]

4. A -IV, B -III, C -I, D -II [Option ID = 13252]

14) Which of the following is pollinating agent in cardamom?

[Question ID = 3314][Question Description = 114_196_SPM_SEP22_Q14]

1. Bumble bees [Option ID = 13253]

2. Honey bees [Option ID = 13254]

3. Hoverflies [Option ID = 13255]
4. Wind [Option ID = 13256]

15) What is the proportion of resin content in Asafoetida?

[Question ID = 3315][Question Description = 115_196_SPM_SEP22_Q15]

1. 40-60% [Option ID = 13257]
2. 20-30% [Option ID = 13258]
3. 10-17 % [Option ID = 13259]
4. 5-10% [Option ID = 13260]

16) Which of the following is true cinnamon?[Question ID = 3316][Question Description = 116_196_SPM_SEP22_Q16]

1. *C. verum* [Option ID = 13261]
2. *C. burmanni* [Option ID = 13262]
3. *C. loureirii* [Option ID = 13263]
4. *C. tamala* [Option ID = 13264]

17) Match List I with List II

List I	List II
Crop	Variety
A. Celery	I. Ford Hook Emperor
B. Ajowain	II. Pant Madhurika
C. Fenugreek	III. Pant Ragini
D. Fennel	IV. Pant Ruchika

Choose the correct answer from the options given below:

[Question ID = 3317][Question Description = 117_196_SPM_SEP22_Q17]

1. A -I , B -III , C -IV , D -II [Option ID = 13265]
2. A -IV , B -II , C -III , D -I [Option ID = 13266]
3. A -I , B -IV , C -III , D -II [Option ID = 13267]
4. A -II , B -III , C -I , D -IV [Option ID = 13268]

18) Match List I with List II

List I	List II
Major constituent	Crop
A. Limonene	I. Coriander
B. Linalool	II. Celery
C. Anithole	III. Fenugreek
D. Diosgenin	IV. Fennel

Choose the correct answer from the options given below:

[Question ID = 3318][Question Description = 118_196_SPM_SEP22_Q18]

1. A -II, B -I, C -IV, D -III [Option ID = 13269]
2. A -II, B -IV, C -I, D -III [Option ID = 13270]
3. A -I, B -III, C -II, D -IV [Option ID = 13271]
4. A -II, B -III, C -I, D -IV [Option ID = 13272]

19) Which type of acid is found in Garcinia?[Question ID = 3319][Question Description = 119_196_SPM_SEP22_Q19]

1. Mallic acid [Option ID = 13273]
2. Acetic acid [Option ID = 13274]
3. Citric acid [Option ID = 13275]
4. Tartaric acid [Option ID = 13276]

20) Given below are two statements

Statement I: Saffron is as precious as gold because of its wide range usage in medicine and religious rituals.

Statement II: Saffron thrives well in cold regions with warm or subtropical climate and it starts blooming during April-May.

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

[Question ID = 3320][Question Description = 120_196_SPM_SEP22_Q20]

1. Both Statement I and Statement II are true [Option ID = 13277]
2. Both Statement I and Statement II are false [Option ID = 13278]
3. Statement I is true but Statement II is false [Option ID = 13279]
4. Statement I is false but Statement II is true [Option ID = 13280]

21) Which of the following are TRUE about vanilla?

- A. Vanilla grows well in intense light or heavy shade.
- B. Vanilla is commercially propagated through stem cuttings.
- C. It is successfully cultivated as an intercrop.
- D. Hand pollination is commonly done in vanilla.

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

[Question ID = 3321][Question Description = 121_196_SPM_SEP22_Q21]

1. A, B and D only [Option ID = 13281]
2. B, C and D Only [Option ID = 13282]
3. A, B and C only [Option ID = 13283]
4. A, C and D Only [Option ID = 13284]

22) The fruit bearing branches of black pepper are called as

[Question ID = 3322][Question Description = 122_196_SPM_SEP22_Q22]

1. Plagiotropes
[Option ID = 13285]
2. Orthotropes
[Option ID = 13286]
3. Geotropes
[Option ID = 13287]
4. Phototropes
[Option ID = 13288]

23) In how many weeks after harvest seeds of clove lose their viability?[Question ID = 3323][Question Description = 123_196_SPM_SEP22_Q23]

1. One [Option ID = 13289]
2. Two [Option ID = 13290]
3. Three [Option ID = 13291]
4. Four [Option ID = 13292]

24) Which of the following is the chief constituents of geranium oil?[Question ID = 3324][Question Description = 124_196_SPM_SEP22_Q24]

1. Geraniol and citronellol [Option ID = 13293]
2. Thymol and eugenol [Option ID = 13294]
3. Geraniol and linalool [Option ID = 13295]
4. Linalool and thymol [Option ID = 13296]

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

Assertion A: South East Asia is a major ginger producing region and China is the largest producer of ginger in the world.

Reason R: Ginger improves memory power and is beneficial against nerve disorders.

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

[Question ID = 3325][Question Description = 125_196_SPM_SEP22_Q25]

1. Both A and R are correct and R is the correct explanation of A [Option ID = 13297]
2. Both A and R are correct but R is NOT the correct explanation of A [Option ID = 13298]
3. A is correct but R is not correct [Option ID = 13299]
4. A is not correct but R is correct [Option ID = 13300]

26) Which chemical is added to prevent the coagulation of rubber latex ?

[Question ID = 3326][Question Description = 126_196_SPM_SEP22_Q26]

1. Formalin [Option ID = 13301]
2. Potassium sulfite [Option ID = 13302]
3. Ethrel [Option ID = 13303]

4. Potassium sulfate [Option ID = 13304]

27) Oil palm is characterized by

- A. Crude palm oil is extracted from mesocarp
- B. Palm kernel oil is extracted from kernel
- C. Tenera is the ruling hybrid grown all over the world
- D. It starts bearing bunches after 8-10 years of planting
- E. Rhinoceros beetle is used to enhance the pollination in oil palm

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

[Question ID = 3327][Question Description = 127_196_SPM_SEP22_Q27]

- 1. A and B only [Option ID = 13305]
- 2. B and D only [Option ID = 13306]
- 3. A, B and C only [Option ID = 13307]
- 4. A, B, C, D and E [Option ID = 13308]

28) Match List I with List II

List I	List II
Crop botanical name	Common name
A. <i>Hevea brasiliensis</i>	I. Indian rubber
B. <i>Manihot glaziovii</i>	II. Panama rubber
C. <i>Ficus elastica</i>	III. Cera rubber
D. <i>Castilla elastica</i>	IV. Para rubber

Choose the correct answer from the options given below:

[Question ID = 3328][Question Description = 128_196_SPM_SEP22_Q28]

- 1. A-IV, B-II, C-I, D-III [Option ID = 13309]
- 2. A-II, B-I, C-III, D-IV [Option ID = 13310]
- 3. A-III, B-IV, C-II, D-I [Option ID = 13311]
- 4. A-IV, B-III, C-I, D-II [Option ID = 13312]

29) Given below are two statements

Statement I: A medicinal plant coleus contains an alkaloid that is used as mosquito repellent.

Statement II: Coleonol is the main alkaloid present in coleus which is used as mosquito repellent.

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

[Question ID = 3329][Question Description = 129_196_SPM_SEP22_Q29]

- 1. Both Statement I and Statement II are correct [Option ID = 13313]
- 2. Both Statement I and Statement II are incorrect [Option ID = 13314]
- 3. Statement I is correct but Statement II is incorrect [Option ID = 13315]
- 4. Statement I is incorrect but Statement II is correct [Option ID = 13316]

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

Assertion A: Use of mined gypsum is allowed in organic farming which help to enhance crop yield.

Reason R: Gypsum is a good source of both calcium and sulfur, which is required for good yield crop.

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

[Question ID = 3330][Question Description = 130_196_SPM_SEP22_Q30]

- 1. Both A and R are correct and R is the correct explanation of A [Option ID = 13317]
- 2. Both A and R are correct but R is NOT the correct explanation of A [Option ID = 13318]
- 3. A is correct but R is not correct [Option ID = 13319]
- 4. A is not correct but R is correct [Option ID = 13320]

31) What is the name of the natural mutant of arecanut which is used for the genetic improvement, especially to develop dwarf hybrids?

[Question ID = 3331][Question Description = 131_196_SPM_SEP22_Q31]

- 1. Swarnamangala [Option ID = 13321]
- 2. Sumangala [Option ID = 13322]

3. Hirehalli Dwarf [Option ID = 13323]
4. Thirthahalli [Option ID = 13324]

32) Which statements are TRUE for the palmyrah palm?

- A. Male flowers are embedded in sessile
- B. Female flowers are fingers
- C. Extraction of sap from the male inflorescence is called Aripandai and Vallupanai
- D. Extraction of sap from the female inflorescence is called Thattupalai and Kaivetty
- E. Tapping can be done for longer period in female palm

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

[Question ID = 3332][Question Description = 132_196_SPM_SEP22_Q32]

1. A and B only [Option ID = 13325]
2. B and C only [Option ID = 13326]
3. A, B and C only [Option ID = 13327]
4. C, D and E only [Option ID = 13328]

33) Match List I with List II

List I	List II
Crop	Family
A. Cocoa	I. Piperaceae
B. Rubber	II. Sterculiaceae
C. Cashew	III. Euphorbiaceae
D. Betelvine	IV. Anacardiaceae

Choose the correct answer from the options given below:

[Question ID = 3333][Question Description = 133_196_SPM_SEP22_Q33]

1. A-II, B-I, C-IV, D-III [Option ID = 13329]
2. A-II, B-III, C-I, D-IV [Option ID = 13330]
3. A-II, B-III, C-IV, D-I [Option ID = 13331]
4. A-III, B-II, C-IV, D-I [Option ID = 13332]

34) Sequence the Indian States based on cultivated area under medicinal plants in descending order

- A. Karnataka
- B. Madhya Pradesh
- C. Rajasthan
- D. Uttar Pradesh

Choose the *correct* answer from the options given below

[Question ID = 3334][Question Description = 134_196_SPM_SEP22_Q34]

1. A, C, D, B [Option ID = 13333]
2. C, A, D, B [Option ID = 13334]
3. C, D, B, A [Option ID = 13335]
4. A, C, B, D [Option ID = 13336]

35) Match List I with List II

List I	List II
Type of secondary metabolite	Example
A. Monoterpenes	I. Diosgenin
B. Diterpenes	II. Pyrethroids
C. Triterpenes	III. Rubber latex
D. Polyterpenes	IV. Forskolin

Choose the correct answer from the options given below:

[Question ID = 3335][Question Description = 135_196_SPM_SEP22_Q35]

1. A-II, B-IV, C-III, D-I [Option ID = 13337]
2. A-II, B-IV, C-I, D-III [Option ID = 13338]
3. A-II, B-I, C-IV, D-III [Option ID = 13339]

4. A-IV, B-I, C-II, D-III [Option ID = 13340]

36) What is the chemical formula of narcotine?

[Question ID = 3336][Question Description = 136_196_SPM_SEP22_Q36]

1. $C_{17}H_{19}NO_3$ [Option ID = 13341]
2. $C_{18}H_{21}NO_3$ [Option ID = 13342]
3. $C_{21}H_{23}NO_5$ [Option ID = 13343]
4. $C_{22}H_{23}NO_7$ [Option ID = 13344]

37) Given below are two statements

Statement I: The *Dioscorea* species is only monoecious in nature.

Statement II: The male and female flowers of *Dioscorea* species born on the axillary spikes of the leaf axils.

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

[Question ID = 3337][Question Description = 137_196_SPM_SEP22_Q37]

1. Both Statement I and Statement II are true [Option ID = 13345]
2. Both Statement I and Statement II are false [Option ID = 13346]
3. Statement I is true but Statement II is false [Option ID = 13347]
4. Statement I is false but Statement II is true [Option ID = 13348]

38) Given below are two statements

Statement I: *Asparagus racemosus* is a climber having tuberous roots.

Statement II: Shatavari contains steroids, alkaloids and flavonoids which are used in the preparation of drug.

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

[Question ID = 3338][Question Description = 138_196_SPM_SEP22_Q38]

1. Both Statement I and Statement II are correct [Option ID = 13349]
2. Both Statement I and Statement II are incorrect [Option ID = 13350]
3. Statement I is correct but Statement II is incorrect [Option ID = 13351]
4. Statement I is incorrect but Statement II is correct [Option ID = 13352]

39) The characteristics of TPD (tapping panel dryness) disorder of rubber are

- A. Partial or complete dry up of the tree
- B. Development of tumors and necrotic bark tissues along the bark
- C. The affected soft bark becomes light brown in colour
- D. High yielding commercial clone RRIL- 203 is not affected by TPD

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

[Question ID = 3339][Question Description = 139_196_SPM_SEP22_Q39]

1. A and B only [Option ID = 13353]
2. B and C only [Option ID = 13354]
3. A, B and C only [Option ID = 13355]
4. C and D only [Option ID = 13356]

40) Which medicinal plant is also known as Deadly Nightshade?

[Question ID = 3340][Question Description = 140_196_SPM_SEP22_Q40]

1. *Rauvolfia serpentina* [Option ID = 13357]
2. *Digitalis lanata* [Option ID = 13358]
3. *Atropa belladonna* [Option ID = 13359]
4. *Papaver somniferum* [Option ID = 13360]

41) Match List I with List II

List I	List II
Name of Board	Function under which ministry
A. National Medicinal Plants Board	I. Ministry of Commerce & Industry
B. Coffee Board of India	II. Ministry of Micro, Small and Medium Enterprises
C. Coconut Development Board	III. Ministry of AYUSH
D. Coir Board	IV. Ministry of Agriculture and Farmers' Welfare

Choose the correct answer from the options given below:

[Question ID = 3341][Question Description = 141_196_SPM_SEP22_Q41]

1. A-III, B-I, C-IV, D-II [Option ID = 13361]
2. A-III, B-IV, C-I, D-II [Option ID = 13362]
3. A-III, B-I, C-II, D-IV [Option ID = 13363]
4. A-I, B-II, C-III, D-IV [Option ID = 13364]

42) Match List I with List II

List I	List II
Alkaloid	Crop
A. Sennosides	I. <i>Papaver somniferum</i>
B. Caffeine	II. <i>Gloriosa superba</i>
C. Codeine	III. <i>Cassia angustifolia</i>
D. Colchicine	IV. <i>Coffee species</i>

Choose the correct answer from the options given below:

[Question ID = 3342][Question Description = 142_196_SPM_SEP22_Q42]

1. A-III, B-IV, C-II, D-I [Option ID = 13365]
2. A-III, B-I, C-II, D-IV [Option ID = 13366]
3. A-II, B-III, C-IV, D-I [Option ID = 13367]
4. A-III, B-IV, C-I, D-II [Option ID = 13368]

43) *Phytophthora* spp. cause a serious disease quick wilt/leaf rot in which of the following crop?

[Question ID = 3343][Question Description = 143_196_SPM_SEP22_Q43]

1. Tea [Option ID = 13369]
2. Coffee [Option ID = 13370]
3. Betelvine [Option ID = 13371]
4. Rubber [Option ID = 13372]

44) Which among the followings are the groups of cocoa varieties?

- A. Amazon
- B. Amelonado
- C. Trinitario
- D. Criollo
- E. Forastero

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

[Question ID = 3344][Question Description = 144_196_SPM_SEP22_Q44]

1. A and B only [Option ID = 13373]
2. B and C only [Option ID = 13374]
3. C, D and E only [Option ID = 13375]
4. A, B, C, D and E [Option ID = 13376]

45) International Coconut Gene Bank for South Asia is situated in which district of Karnataka?

[Question ID = 3345][Question Description = 145_196_SPM_SEP22_Q45]

1. Chikkamagaluru [Option ID = 13377]
2. Kodagu [Option ID = 13378]
3. Udupi [Option ID = 13379]
4. Dakshina Kannada [Option ID = 13380]

46) Which among the followings are the characteristics of Black Wattle plant?

- A. It belongs to family Fabaceae
- B. It does not flower
- C. Its botanical name is *Acacia mearnsii*
- D. Fruits are main economic part
- E. Native of India

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

[Question ID = 3346][Question Description = 146_196_SPM_SEP22_Q46]

1. A and C only [Option ID = 13381]
2. B and D only [Option ID = 13382]
3. D and E only [Option ID = 13383]
4. C, D and E only [Option ID = 13384]

47) Which medicinal plant is known as Indian ginseng?

[Question ID = 3347][Question Description = 147_196_SPM_SEP22_Q47]

1. *Withania somnifera* [Option ID = 13385]
2. *Rauvolfia serpentina* [Option ID = 13386]
3. *Cinchona officinalis* [Option ID = 13387]
4. *Piper longum* [Option ID = 13388]

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

Assertion A: Sarpagandha roots generally harvested 2-3 years after planting.

Reason R: Roots should be dug out when the plants have shed their leaves to get higher content of alkaloids in the roots.

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

[Question ID = 3348][Question Description = 148_196_SPM_SEP22_Q48]

1. Both A and R are correct and R is the correct explanation of A. [Option ID = 13389]
2. Both A and R are correct but R is NOT the correct explanation of A [Option ID = 13390]
3. A is correct but R is not correct [Option ID = 13391]
4. A is not correct but R is correct [Option ID = 13392]

49) Given below are two statements

Statement I: Isabgol requires a cool climate with dry sunny weather during maturity.

Statement II: Rainfall during maturity of the seed increases the colloidal content in seed-husk.

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

[Question ID = 3349][Question Description = 149_196_SPM_SEP22_Q49]

1. Both Statement I and Statement II are correct [Option ID = 13393]
2. Both Statement I and Statement II are incorrect [Option ID = 13394]
3. Statement I is correct but Statement II is incorrect [Option ID = 13395]
4. Statement I is incorrect but Statement II is correct [Option ID = 13396]

50) Which cultivar of arecanut is the earliest in flowering that takes about 2.5 to 3 years for flowering?

[Question ID = 3350][Question Description = 150_196_SPM_SEP22_Q50]

1. VTLAH -1 [Option ID = 13397]
2. Kalpasree [Option ID = 13398]
3. Sumangala [Option ID = 13399]
4. Sreemangala [Option ID = 13400]