

078/2025

Question Booklet  
Alpha Code

A

Question Booklet  
Serial Number

Total No. of questions : 100

Time : 1 Hour 30 Minutes

Maximum : 100 Marks

**INSTRUCTIONS TO CANDIDATES**

1. The question paper will be given in the form of a Question Booklet. There will be four versions of question booklets with question booklet alpha code viz. A, B, C & D.
2. The Question Booklet Alpha Code will be printed on the top left margin of the facing sheet of the question booklet.
3. The Question Booklet Alpha Code allotted to you will be noted in your seating position in the Examination Hall.
4. If you get a question booklet where the alpha code does not match to the allotted alpha code in the seating position, please draw the attention of the Invigilator IMMEDIATELY.
5. The Question Booklet Serial Number is printed on the top right margin of the facing sheet. If your question booklet is un-numbered, please get it replaced by new question booklet with same alpha code.
6. The question booklet will be sealed at the middle of the right margin. Candidate should not open the question booklet, until the indication is given to start answering.
7. Immediately after the commencement of the examination, the candidate should check that the question booklet supplied to him contains all the 100 questions in serial order. The question booklet does not have unprinted or torn or missing pages and if so he/she should bring it to the notice of the Invigilator and get it replaced by a complete booklet with same alpha code. This is most important.
8. A blank sheet of paper is attached to the question booklet. This may be used for rough work.
9. **Please read carefully all the instructions on the reverse of the Answer Sheet before marking your answers.**
10. Each question is provided with four choices (A), (B), (C) and (D) having one correct answer. Choose the correct answer and darken the bubble corresponding to the question number using Blue or Black Ball-Point Pen in the OMR Answer Sheet.
11. **Each correct answer carries 1 mark and for each wrong answer 1/3 mark will be deducted. No negative mark for unattended questions.**
12. No candidate will be allowed to leave the examination hall till the end of the session and without handing over his/her Answer Sheet to the Invigilator. Candidates should ensure that the Invigilator has verified all the entries in the Register Number Coding Sheet and that the Invigilator has affixed his/her signature in the space provided.
13. Strict compliance of instructions is essential. Any malpractice or attempt to commit any kind of malpractice in the Examination will result in the disqualification of the candidate.



**078/2025**

Maximum : 100 marks

Time : 1 hour and 30 minutes

1. First reported herbicide resistant weed in the world :

- |                             |                           |
|-----------------------------|---------------------------|
| (A) <i>Amaranthus sp</i>    | (B) <i>Phalaris minor</i> |
| (C) <i>Senecio vulgaris</i> | (D) <i>Rumex dentatus</i> |

2. Match the following :

- |                              |   |
|------------------------------|---|
| (i) Contingent drought       | (a) Unable to absorb water from soil even when water is available   |
| (ii) Invisible drought       | (b) Annual precipitation is less than normal for a prolonged period |
| (iii) Meteorological drought | (c) Due to abnormal failure of rainfall                             |
| (iv) Physiological drought   | (d) Rainfall is inadequate to meet evapotranspiration needs         |

- (A) (i)-(a), (ii)-(d), (iii)-(b), (iv)-(c)  
(B) (i)-(b), (ii)-(d), (iii)-(c), (iv)-(a)  
(C) (i)-(d), (ii)-(b), (iii)-(a), (iv)-(c)  
(D) (i)-(c), (ii)-(d), (iii)-(b), (iv)-(a)

3. Match the following :

- |                             |   |
|-----------------------------|---|
| (i) Graded bunding          | (a) Inverted contour bunding                              |
| (ii) Bench terracing        | (b) Recharge of ground water                              |
| (iii) Conservation ditching | (c) Slopes ranging from 16-33%                            |
| (iv) Check dams             | (d) In high rainfall areas for removing excess rain water |

- (A) (i)-(a), (ii)-(b), (iii)-(c), (iv)-(d)  
(B) (i)-(c), (ii)-(d), (iii)-(a), (iv)-(b)  
(C) (i)-(b), (ii)-(c), (iii)-(a), (iv)-(d)  
(D) (i)-(d), (ii)-(c), (iii)-(a), (iv)-(b)

4. Which of the following statement is/are correct?
- (i) If LER is  $> 1$ , intercropping is advantageous compared to pure cropping
  - (ii) In relay cropping, there is a short span of overlapping between two crops in sequence
  - (iii) In parallel cropping, there is mutual competition and can't express their full yield potential
  - (iv) Conservation agriculture promotes maintenance of a permanent soil cover, minimum soil disturbance and diversification of plant species
- (A) (i), (ii) and (iii) (B) (i), (ii) and (iv)  
(C) (ii), (iii) and (iv) (D) (i), (ii), (iii) and (iv)
5. Capillary water is held between tension :
- (A)  $1/3$  atm to 15 atm (B)  $1/3$  atm to 31 atm  
(C) 10 atm to 15 atm (D) 31 atm to 60 atm
6. Calculate the total urea requirement of rice variety KAU Pournami cultivated in one acre :
- (A) 65.21 kg (B) 78.26 kg  
(C) 152.17 kg (D) 195.65 kg
7. Match the following :
- |                            |                               |
|----------------------------|-------------------------------|
| (i) Awnless barnyard grass | (a) <i>Cyperus rotundus</i>   |
| (ii) Quack grass           | (b) <i>Phalaris minor</i>     |
| (iii) Nut grass            | (c) <i>Agropyron repens</i>   |
| (iv) Canary grass          | (d) <i>Echinochloa colona</i> |
- (A) (i)-(c), (ii)-(d), (iii)-(a), (iv)-(b)  
(B) (i)-(d), (ii)-(a), (iii)-(b), (iv)-(c)  
(C) (i)-(d), (ii)-(c), (iii)-(a), (iv)-(b)  
(D) (i)-(c), (ii)-(b), (iii)-(a), (iv)-(d)
8. Depth of irrigation is 5 cm for an IW/CPE ratio of 0.75. If mean per day pan evaporation is 5mm, work out irrigation interval :
- (A) 7 days (B) 10 days  
(C) 13 days (D) 15 days

9. Which of the following statement is/are correct?
- (i) Calcium ammonium nitrate is a neutral fertilizer
  - (ii) Boron uptake is limited by excess lime
  - (iii) Excess phosphorus encourage Zn deficiency
  - (iv) Basic slag is a citric acid insoluble phosphatic fertilizer
- (A) (i) and (iii) (B) (ii) and (iii)  
(C) (i), (ii) and (iii) (D) (i), (ii) and (iv)
10. Example of a broad spectrum herbicide :
- (A) bispyribac sodium (B) carfentrazone  
(C) cyhalofopbutyl (D) fenoxapropethyl
11. Select the non- mineral essential elements required for plants :
- (A) N and Mn (B) C and O  
(C) Ca and H (D) Mn and Zn
12. Which are low lime requiring plants?
- (A) Rice, ragi, barley (B) Tea, coffee, pineapple  
(C) Cotton, sugarcane, cowpea (D) Wheat, tobacco, sweet potato
13. The first reactions to occur when an aerobic soil is flooded and becomes anaerobic is :
- (i) Depletion of oxygen and oxidation of  $\text{NH}_4$  to  $\text{NO}_3$
  - (ii) Depletion of oxygen and reduction of  $\text{NO}_3$
  - (iii) Depletion of oxygen and reduction of  $\text{Fe}_3$
  - (iv) Depletion of oxygen and increase in  $\text{CO}_2$
- (A) only (ii) and (iv) (B) only (i) and (iii)  
(C) only (ii) and (iii) (D) all the above
14. Which statement is true?
- (A) A pH of 2 is twice as acidic as pH 5
  - (B) A pH of 2 is twice as basic as pH 5
  - (C) A pH of 2 is 1000 times acidic as pH 5
  - (D) A pH of 2 is three times acidic than pH 5

15. Major minerals present in Oxisols are :
- (A) Kaolinite and illite
  - (B) Kaolinite and sesqui oxide
  - (C) Kaolinite and montmorillonite
  - (D) Kaolinite and chlorite
16. White alkali soils are :
- (A) Sodic soils
  - (B) Saline soils
  - (C) Black soils
  - (D) All the above
17. Which one of the following is a cold manure?
- (A) Chicken manure
  - (B) Pig manure
  - (C) Goat manure
  - (D) Horse manure
18. Select the wrong statements :
- (i) Calcium, magnesium and sulphur are the secondary nutrients
  - (ii) Magnesium is a component of nitroreductase enzyme
  - (iii) Nitrogen is converted into nitrate by earthworms
  - (iv) Gibbsite is aluminium hydrous oxide
- (A) only (i) and (ii)
  - (B) only (i) and (iii)
  - (C) only (ii) and (iii)
  - (D) only (i) and (iv)
19. What happens to bulk density of soil when organic matter is added to the soil?
- (i) Bulk density is decreased
  - (ii) Bulk density is increased
  - (iii) Particle density is decreased
  - (iv) Porosity is increased
- (A) only (i) and (ii)
  - (B) only (i) and (iv)
  - (C) only (ii) and (iii)
  - (D) only (ii) and (iv)

- 20.** Site specific integrated nutrient management adopts the use of :
- (i) GPS
  - (ii) GIS
  - (iii) Remote sensing
- (A) only (i) and (ii) (B) only (i) and (iii)  
(C) only (ii) and (iii) (D) all the above
- 21.** Which of the following statements are INCORRECT?
- (i) Mandibles of honeybees are blunt
  - (ii) Hypopharynx is modified as stylets in Hemipteran bugs
  - (iii) Lacinia is modified as proboscis in butterflies
  - (iv) Galea and lacinia are parts of maxilla
- (A) Only (i) (B) Only (i) and (ii)  
(C) Only (ii) and (iii) (D) Only (i) and (iii)
- 22.** The gall in rice caused by rice gall midge is the modification of :
- (A) Leaf (B) Leaf sheath  
(C) Stem (D) Petiole
- 23.** Which of the following statements are CORRECT?
- (i) Presence of trichomes in leaves confer resistance to plants by antixenosis
  - (ii) Presence of gossypol in cotton confer resistance by antixenosis
  - (iii) The ability of a rice variety to produce more tillers after the infestation of rice stem borer is tolerance
  - (iv) Biotype development occurs in varieties with antibiosis as the resistance mechanism
- (A) only (i) and (ii) (B) Only (i), (ii) and (iii)  
(C) Only (i), (iii) and (iv) (D) Only (i) and (iii)

24. Choose the CORRECT statement/s from the following :

- (i) Gummy exudation from banana pseudostem is due to *Cosmopolites sordidus*
- (ii) Warty appearance on guava fruits is due to tea mosquito bug
- (iii) Wilting of tender shoots of brinjal is due to *Leucinodes orbonalis*
- (iv) Marginal yellowing of bittergourd leaves is due to whitefly attack

- (A) Only (i) and (iv) are correct
- (B) Only (i) and (ii) are correct
- (C) Only (ii) and (iv) are correct
- (D) Only (ii) and (iii) are correct

25. Which of the following can be used for the management of nematodes?

- (i) *Pseudomonas flourescens*
- (ii) *Trichoderma spp.*
- (iii) *Pochonia chlamydosporia*
- (iv) *Paecilomyces lilacinus*

- (A) Only (iv) is correct
- (B) Only (iii) and (iv) are correct
- (C) Only (ii), (iii) and (iv) are correct
- (D) All options (i), (ii), (iii) and (iv) are correct

26. Which among the following is NOT a predator?

- (A) *Telenomus rowani*
- (B) *Cheilomenes sexmaculata*
- (C) *Chrysoperla zastrowi sillemi*
- (D) *Dipha aphidivora*

27. Which of the following symptoms are correctly matched with the insect pest?

- (A) Needle like rolling and drying of leaf tips – Rice hispa
- (B) Exudation of brownish liquid from coconut trunk – Red palm weevil
- (C) Dead heart in ginger – *Udaspes folus*
- (D) Cutting of rice leaf tips and rolling of leaves – *Spodoptera Mauritia*

28. Which of the following insecticide is a muscle poison?

- (A) Dimethoate
- (B) Deltamethrin
- (C) Acetamiprid
- (D) Chlorantraniliprole

29. Which of the following insect pests can be successfully managed by biocontrol agents?
- (i) *Paracoccus marginatus*
  - (ii) Sugarcane woolly aphid
  - (iii) Whitefly in cotton
  - (iv) Coconut black headed caterpillar
- (A) Only (i), (ii) and (iv) are correct                      (B) Only (ii) and (iv) are correct
- (C) Only (i) and (iv) are correct                              (D) Only (iii) and (iv) are correct
30. Wing flexion is absent in :
- (A) Lepidoptera    (B) Ephemeroptera
- (C) Hemiptera    (D) Thysanoptera
31. *Phytophthora palmivora* is characterized by :
- (i) Globose or ovoid or ellipsoid or pear shaped papillate caducous terminal sporangia with short pedicel
  - (ii) Simple sympodial sporangiophores
  - (iii) Chlamydospores not produced
- (A) Only (i)
- (B) Only (ii)
- (C) Both (i) and (ii)
- (D) All of the above ((i), (ii) and (iii))
32. The principle of exclusion in plant disease management is achieved through :
- (i) Quarantine measures
  - (ii) Inspection and certification
  - (iii) Eradication of vectors
  - (iv) Seed treatment
- (A) Only (i)
- (B) Both (i) and (ii)
- (C) (i), (ii) and (iii)
- (D) All of the above ((i), (ii), (iii) and (iv))

33. Write the correct sequence of symptom development in pink disease of rubber :
- (A) Cob web stage - cracking of bark and yellowing of foliage - latex exudation - pustular stage - necator stage - corticium stage
  - (B) Cob web stage - latex exudation - pustular stage - cracking of bark and yellowing of foliage - necator stage - corticium stage
  - (C) Cob web stage - latex exudation - cracking of bark and yellowing of foliage - pustular stage - necator stage - corticium stage
  - (D) Cob web stage - latex exudation - necator stage - cracking of bark and yellowing of foliage - pustular stage - corticium stage
34. Fungal pathogen resistant to carbendazim is also resistant to :
- (A) Thiophanate methyl
  - (B) Kresoxim-methyl
  - (C) Acibenzolar-S-methyl
  - (D) Tebuconazole
35. Rod shaped, gram positive, aerobic plant pathogenic bacterium with or without flagellum is :
- (A) *Agrobacterium*
  - (B) *Clavibacter*
  - (C) *Erwinia*
  - (D) *Xanthomonas*
36. White ear head that cannot be pulled from the base of rice plants with greyish brown lesion on neck are characteristic of damage caused by :
- (A) Ragged stunt
  - (B) Stem borer
  - (C) Neck blast
  - (D) Rat
37. Flood fallowing for atleast 6 weeks is an effective strategy for the management of \_\_\_\_\_ in banana.
- (A) Moko wilt
  - (B) Pseudostem weevil
  - (C) Fusarium wilt
  - (D) Both (A) and (C)
38. Tolerance or resistance of a plant to one virus strain is induced by systemic infection with a second is commercially exploited in the case of :
- (A) *Tobacco mosaic virus*
  - (B) *Citrus tristeza virus*
  - (C) *Cauliflower mosaic virus*
  - (D) Both (A) and (B)

39. Statement I : Yellowing of plants, vascular discoloration of stem and reddish appearance in the pith extending towards roots is observed in plants infected with *Fusarium*.
- Statement II : Reddish-brown lesion on stem near the soil line that girdle the stem resulting in hollow pith and drooping of the plants is observed in plants infected with *Rhizoctonia*.
- (A) Only statement I is correct  
 (B) Only statement II is correct  
 (C) Statement I is correct and statement II is incorrect  
 (D) Both statement I and statement II are correct
40. *Tomato spotted wilt virus* is transmitted by:
- (A) *Frankliniella Accidentalis* in persistent propagative manner  
 (B) *Frankliniella Accidentalis* in non-persistent manner  
 (C) *Bemisia tabaci* in persistent-circulative manner  
 (D) *Bemisia tabaci* in persistent-propagative manner
41. Which of the following is not correct about law of independent assortment?
- (A) Two alleles of each of the genes segregate independent of each other  
 (B) It produces four types of gametes in a dihybrid  $F_1$  in the ratio of 1 : 1 : 1 : 1  
 (C) It generates genetic variation and new gene combinations  
 (D) Genes located on different chromosomes only show independent segregation
42. Inactivation of M phase kinase, following the onset of M phase, begins with which of the following?
- (A) Phosphorylation (B) Cyclin destruction  
 (C) Dephosphorylation (D) All of the above
43. UV light causes mutations by which of the following mechanisms?
- (A) Induction of thymine dimers (B) Ionization  
 (C) Single strand breaks in DNA (D) Depurination
44. Characters governed by polygenes (multiple factors) but showing discrete variation are called :
- (A) Qualitative characters (B) Quantitative characters  
 (C) Quasi- quantitative characters (D) None of the above

45. The selection in which a different 'Phenotypic optima' is selected for, so that the population ultimately consists of two or more recognizable forms is called as :
- (A) Stabilized selection (B) Disruptive selection  
(C) Directional selection (D) Natural selection
46. Which of the following statements is correct about Inbreeding?
- (i) Inbred lines yield more than open pollinated varieties  
(ii) Results in the appearance of lethal and sub lethal alleles  
(iii) Decrease in homozygosity with increase in variation  
(iv) Increased reproductive ability
- (A) (i) and (ii) are correct (B) (ii), (iii) and (iv) are correct  
(C) Only (ii) is correct (D) Only (i) is correct
47. Presence of B line in A line is called as :
- (A) Rogue (B) Pollen shedders  
(C) Off type (D) All the above
48. The breeding method which aims to enhance genetic yield potential by modifying individual traits to their predefined optimum levels is called :
- (A) Conventional Breeding (B) Population improvement  
(C) Mutation breeding (D) Ideotype breeding
49. Arrange the activities of germplasm conservation in correct order :
- (i) multiplication and distribution  
(ii) cataloguing  
(iii) collection  
(iv) evaluation  
(v) utilization  
(vi) conservation
- (A) (iii), (iv), (ii), (vi), (i), (v) (B) (iii), (vi), (iv), (ii), (i), (v)  
(C) (iii), (iv), (vi), (i), (ii), (v) (D) (iii), (ii), (vi), (i), (iv), (v)

50. Which of the following is an application of embryo culture?
- Recovery of haploid plants from interspecific crosses
  - Shortening the Breeding cycle
  - Overcoming dormancy
  - All the above
51. Identify the incorrect statement with reference to Maize seed production :
- Protandry nature favours self pollination in maize
  - Cob sorting is important operation to maintain genetic purity
  - Shedding tassel is the genetic contaminant
  - The effect of foreign pollen on kernel colour in the same generation is known as Zenia effect
52. The colour of the seed tag specified for Foundation seed:
- |           |            |
|-----------|------------|
| (A) White | (B) Blue   |
| (C) Green | (D) Yellow |
53. Statement :
- For sale of seed, labelling is compulsory but certification is voluntary
  - Certificates are given by the Seed Certification Agency and labels are prepared by the producer.
- Explanation
- As per the statement 'a' of this question, labelling is compulsory because this will be useful to regulate sale price of seed which are sold in the market.
- Statement (a) and (b) are correct. Explanation is also correct for statement (a)
  - Statement (a) and (b) are correct Explanation is incorrect
  - Statement (a) alone is correct Explanation is also correct
  - Statement (b) alone is correct Explanation is incorrect
54. Statement :
- Seed standards are uniform throughout the country.
  - Seed Inspector performs field inspection.
  - Seed certification fee vary from state to state.
- Which of the above statements are correct?
- |                         |                   |
|-------------------------|-------------------|
| (A) (i) and (ii)        | (B) (i) and (iii) |
| (C) (i), (ii) and (iii) | (D) (i) only      |

55. How many number of field counts need to be taken for 18 acres during seed crop field inspection?

- |       |        |
|-------|--------|
| (A) 8 | (B) 10 |
| (C) 7 | (D) 9  |

56. As per Indian Seeds Act, 1966 :

- |                            |                                       |
|----------------------------|---------------------------------------|
| (a) Section 5 of Seed Act  | 1. Certification Agency               |
| (b) Section 3 of Seed Act  | 2. Power to notify kind and varieties |
| (c) Section 8 of Seed Act  | 3. Penalty                            |
| (d) Section 19 of Seed Act | 4. Central Seed Committee             |

- |     |     |     |     |     |
|-----|-----|-----|-----|-----|
|     | (a) | (b) | (c) | (d) |
| (A) | 2   | 4   | 3   | 1   |
| (B) | 4   | 2   | 3   | 1   |
| (C) | 2   | 4   | 1   | 3   |
| (D) | 4   | 2   | 1   | 3   |

57. Identify the correct sequence with reference to different phases of seed certification :

- (A) Receipt and scrutiny of application / field inspection / verification of seed source / post-harvest supervision of seed crops / labelling, tagging, sealing / seed sampling and testing
- (B) Receipt and scrutiny of application / field inspection / verification of seed source / post-harvest supervision of seed crops / seed sampling and testing / labelling, tagging, sealing
- (C) Receipt and scrutiny of application / verification of seed source / field inspection / post-harvest supervision of seed crops / seed sampling and testing / labelling, tagging, sealing
- (D) Receipt and scrutiny of application / field inspection / verification of seed source / seed sampling and testing / post-harvest supervision of seed crops / labeling, tagging, sealing

58. Which of the following condition at which the seed producer need not to submit separate sowing report?

- (A) Different crop varieties
- (B) If the seed farm area exceeds 10 ha
- (C) If the seed farm fields are separated by more than 30 meters
- (D) If sowing or planting dates differ by more than 7 days

**59.** Highlights of The Seed Bill, 2004 :

- (i) Only notified kind and varieties of seeds have to be registered.
- (ii) Every seed producer and dealer has to be registered with the State government.
- (iii) Self certification of seeds by accredited agencies.
- (iv) Maintenance of a National Register of Varieties.

- (A) All are correct
- (B) Only (i), (ii) and (iii) are correct
- (C) (i) is incorrect
- (D) (iii) is incorrect

**60.** Crops Minimum Germination standards for Foundation seeds

- |     |          |    |    |
|-----|----------|----|----|
| (a) | Paddy    | 1. | 60 |
| (b) | Cowpea   | 2. | 70 |
| (c) | Soyabean | 3. | 75 |
| (d) | Chillie  | 4. | 80 |

- |     |     |     |     |     |
|-----|-----|-----|-----|-----|
|     | (a) | (b) | (c) | (d) |
| (A) | 1   | 2   | 4   | 3   |
| (B) | 3   | 4   | 1   | 2   |
| (C) | 2   | 1   | 3   | 4   |
| (D) | 4   | 3   | 2   | 1   |

**61.** Which of the following statement is/are correct regarding FSS (Alcoholic Beverages) Regulations, 2018?

- (i) Alcoholic beverage containing not more than 8.0 % abv is called low alcoholic beverage
- (ii) Alcoholic beverage may contain additives, enzymes and processing aids
- (iii) Alcoholic beverage can be labelled as “matured”, if matured for a period of not less than one year
- (iv) Sugar may be added for rounding off of the alcoholic beverage.

- (A) only (i) and (ii)
- (B) only (ii) and (iii)
- (C) only (iii) and (iv)
- (D) all the above

**62.** AGB is an extra bold grade of :

- (A) cardamom
- (B) pepper
- (C) nutmeg
- (D) none of the above

- 63.** Which of the following statement is / are not correct?
- (i) Ringing is a pruning technique practiced to increase fruit bud formation
  - (ii) Notching is the partial removal of bark from below a dormant lateral bud
  - (iii) Coppicing is the removal of main tree trunk
- (A) (i) (B) (ii)  
(C) (iii) (D) none of the above
- 64.** Neelum variety of mango is a :
- (A) Heavy bearer (B) Regular bearer  
(C) Late season variety (D) All the above
- 65.** Which of the following statement regarding varieties is / are incorrect?
- (i) Poornima is a cashew hybrid with export grade nuts and high shelling percentage
  - (ii) Vellayani Thejus is a chilli variety having low pungency and high oleoresin
  - (iii) Keramadhura is a coconut genotype suited for both tender nut and copra
- (A) only (i) (B) only (ii)  
(C) only (iii) (D) None of the above
- 66.** Which of the following statement is / are correct regarding aromatherapy?
- (i) Liniments are usually applied to painful areas
  - (ii) Arrowroot is a good base for natural aromatic body powders
  - (iii) Bees wax is the most common natural emulsifier used
- (A) Only (i) and (ii) (B) Only (i) and (iii)  
(C) Only (ii) and (iii) (D) (i), (ii) and (iii)
- 67.** “The Pink book” published by FSSAI is a guide for :
- (A) Detecting adulteration
  - (B) Analysis of nutritional value
  - (C) Safe and nutritious food at home
  - (D) All the above

68. Which of the following statement is / are correct regarding post harvest management?

- (i) Curing is done for strengthening skin of tuber crops
- (ii) Time required for degreening depends on natural colour break and maturity
- (iii) Certain wax formulations do not impart glossiness to fruits

- (A) Only (i) and (ii)
- (B) Only (ii) and (iii)
- (C) All the above
- (D) None of the above

69. Whip grafting is otherwise known as :

- (A) Splice grafting
- (B) Inarching
- (C) Cleft grafting
- (D) Stone grafting

70. Which of the following statement is / are not correct?

- (i) Coconut haustorium is not suitable for babies affected by lactose intolerance.
- (ii) Coconut testa is rich in anthocyanins.
- (iii) Coconut haustorium is a rich source of phenolics.

- (A) Only (i)
- (B) Only (ii)
- (C) Only (i) and (ii)
- (D) Only (i) and (iii)

71. A vegetable with very low respiration rate is:

- (A) Radish
- (B) Onion
- (C) Brinjal
- (D) Mushroom

72. Browning in cauliflower is due to deficiency of:

- (A) Calcium
- (B) Potassium
- (C) Boron
- (D) Molybdenum

73. Scientific name of winter melon is:

- (A) *Cucumis melo*
- (B) *Benincasa hispida*
- (C) *Citrullus lanatus*
- (D) *Cucumis sativus*

74. A tomato variety with pear shaped fruits:

- (A) Punjab Chhuhara
- (B) Marglobe
- (C) Mukthi
- (D) Best of all

75. World Vegetable center is located at:
- |              |             |
|--------------|-------------|
| (A) Thailand | (B) Vietnam |
| (C) Taiwan   | (D) Italy   |
76. Which of the following is protandrous?
- |                 |            |
|-----------------|------------|
| (A) Cauliflower | (B) Chilli |
| (C) Carrot      | (D) Tomato |
77. Ben oil is extracted from seeds of:
- |               |            |
|---------------|------------|
| (A) Drumstick | (B) Tomato |
| (C) Pumpkin   | (D) Okra   |
78. Arka Tanvi is a hybrid of:
- |                    |            |
|--------------------|------------|
| (A) Yard long bean | (B) Tomato |
| (C) Amaranthus     | (D) Chilli |
79. Grow out test is conducted to determine \_\_\_\_\_ of a seed lot.
- |               |                     |
|---------------|---------------------|
| (A) Viability | (B) Genetic purity  |
| (C) Health    | (D) Physical purity |
80. A grain amaranth species:
- |                                |
|--------------------------------|
| (A) <i>Amaranthus dubius</i>   |
| (B) <i>Amaranthus caudatus</i> |
| (C) <i>Amaranthus lividus</i>  |
| (D) <i>Amaranthus tricolor</i> |
81. A demand curve depicts the relation between price and quantity. A movement along the same demand curve occurs in which of the following cases?
- |                           |                        |
|---------------------------|------------------------|
| (A) Contraction of demand | (B) Increase in demand |
| (C) Decrease in demand    | (D) All of the above   |

82. The consumers' surplus is estimated as:
- (i) What the consumer is willing to pay **minus** what he actually pays
  - (ii) Total utility gained **minus** Total amount spend
  - (iii) Total utility gained **minus** Marginal utility
  - (iv) What the consumer is willing to pay **minus** Marginal utility gained
- (A) Only (i) and (ii) (B) Only (i) and (iv)  
(C) Only (ii) and (iv) (D) None of the above
83. Optimum choice of enterprise in farm management is made based on the principle of:
- (A) Equimarginal returns (B) Principle of opportunity costs  
(C) Both (A) and (B) (D) None of the above
84. The stage of production function responsible for more production by using more units of inputs for profit maximisation:
- (A) Stage I (B) Stage II  
(C) Stage II and III (D) Stage I and II
85. Which of the following statement is **not** correct with respect to monopolistic competition?
- (A) Large number of buyers and sellers dealing with differentiated goods  
(B) The demand curve or average revenue curve is a downward sloping curve  
(C) The same price does not rule in the market throughout  
(D) Large number of buyers and sellers dealing with homogeneous goods
86. Consider two countries A and B engaged in trade. Though A can produce both dairy product and machinery cheaper than B, yet A imports dairy products from B and exports machinery. This is a paradox to which fundamental principal of international trade.
- (A) Heckler-Ohlien theory (B) Comparative cost theory  
(C) Modern theory of trade (D) None of the above
87. Choose the correctly matched statement from the following to select an investment project:
- (A) BCR – should be negative to select the project for investment  
(B) IRR – should be less than the opportunity cost of capital  
(C) NPW – should be positive to select the project for investment  
(D) All of the above

88. Which of the following is not a component of market structure?
- (A) Concentration of market power
  - (B) Market sharing and price setting policy
  - (C) Degree of integration
  - (D) Degree of product differentiation
89. Marginal revenue along with marginal cost helps to determine:
- (A) Profit maximising output
  - (B) Profit per unit
  - (C) Total cost
  - (D) Total revenue
90. A tax regime which is based on the principle of falling marginal utility of money and which aims to reduce inequalities in wealth to some extent is:
- (A) Proportional tax
  - (B) Regressive tax
  - (C) Progressive tax
  - (D) Degressive tax
91. Name the institution that serves as the apex public policy think tank of the Government of India entrusted with the mandates of overseeing the adoption and monitoring of Sustainable Development Goals (SDGs) in the country, and promoting competitive and cooperative federalism among States and UTs.
- (A) National Institute of Public Finance and Policy
  - (B) National Institution for Transforming India
  - (C) National Bank for Agriculture and Rural Development
  - (D) Indian Institute of Public Administration
92. Which of the following agencies are **not** involved with the implementation of Central Sector Scheme Formation and Promotion of 10,000 new Farmer Producer Organizations (FPOs) in India?
- (A) Small Farmers Agri-Business Consortium (SFAC)
  - (B) National Cooperative Development Corporation (NCDC)
  - (C) National Bank for Agriculture and Rural Development (NABARD)
  - (D) Regional Rural Banks (RRB)

93. Which among the following innovation attribute/s negatively influence/s the rate of innovation adoption by farmers?
- (i) Compatibility  
(ii) Complexity  
(iii) Trialability
- (A) Only (i) and (iii) (B) Only (ii)  
(C) Only (iii) (D) All of the above (i), (ii) and (iii)
94. Among the statements below which one DOES NOT pertain to RKVY-RAFTAR
- (A) It is Rashtriya Krishi Vikas Yojna - Remunerative Approaches for Agriculture and Allied Sector Rejuvenation  
(B) It is a scheme of the Ministry of Agriculture and Farmers' Welfare (MoA & FW), Govt. of India to strengthen agricultural marketing  
(C) It aims at strengthening infrastructure in agriculture and allied sector to promote agripreneurship and agribusiness by providing financial support and nurturing the incubation ecosystem  
(D) Agri Business Incubator (R-ABI) forms an important component of the scheme
95. Which among the following committees are involved with the enactment of the three-tier structure of the Indian administration for rural development called Panchayati Raj?
- (i) Ashok Mehta Committee  
(ii) G V K Rao Committee  
(iii) L M Singhvi Committee
- (A) Only (i) and (iii) (B) Only (ii)  
(C) Only (iii) (D) All of the above ((i), (ii) and (iii))
96. Read the following statements: Assertion (I) and Reason (II). Choose one of the correct alternatives given below:
- Assertion (I) : Extension Education follows androgogic principles of education  
Reason (II) : Extension Education is a non formal type of education catering to adults
- (A) Both Assertion (I) and Reason (II) are true and Reason (II) is the correct explanation of Assertion (I)  
(B) Both Assertion (I) and Reason (II) are true and Reason (II) is the NOT correct explanation of Assertion (I)  
(C) Assertion (I) is true but Reason (II) is False  
(D) Assertion (I) is False but Reason (II) is True

**97.** Popularisation of the technology of drones in the agriculture sector need to focus on programs based on learning by doing. Which one of the following suits the purpose?

- |                            |                            |
|----------------------------|----------------------------|
| (A) National Demonstration | (B) Result demonstration   |
| (C) Method demonstration   | (D) Focus Group Discussion |

**98.** Which of the following is not correctly matched?

- | A                             |   | B                                       |  |
|-------------------------------|---|---|--|
| (A) Package programme         | – | Intensive Agricultural District Program |  |
| (B) Food Corporation of India | – | Maintenance of buffer stock             |  |
| (C) Block Chain technology    | – | Traceability                            |  |
| (D) Media Mix                 | – | Folk media                              |  |

**99.** Read the following statements: Assertion (I) and Reason (II). Choose one of the correct alternatives given below:

Assertion (I) : The focus of Self-Help Groups (SHG) is exclusively on rural poor women.

Reason (II) : Rural poor women have no sustainable access to credit, land, and other livelihood resources

- (A) Both Assertion (I) and Reason (II) are true and Reason (II) is the correct explanation of Assertion (I)
- (B) Both Assertion (I) and Reason (II) are true and Reason (II) is the NOT correct explanation of Assertion (I)
- (C) Assertion (I) is true but Reason (II) is False
- (D) Assertion (I) is False but Reason (II) is True

**100.** Define, Measure, Analyze, Improve, and Control (DMAIC) are the basic components of which of the following management tools.

- (A) Six Sigma
- (B) Management by Objective
- (C) Total Quality Management
- (D) Scientific Management

**SPACE FOR ROUGH WORK**

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