059/2025

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.

059/2025

Maximum : 100 marks

Time : 1 hour and 30 minutes

1. In iron-toxic laterite soils of Kerala, which of the following silica sources is recommended as soil amendment to improve rice yields?

(A) Rice husk ash @ 500 kg ha^{-1} (B) Sodium silicate @ 250 kg ha^{-1}

(C) Fine silica @ 100 kg ha^{-1} (D) All of the above

2. What is the general fertilizer recommendation for high-yielding, medium-duration rice varieties in wetland conditions as per KAU Package of Practices?

(A) 90:45:45 kg $N:P_2O_5:K_2O$ ha^{-1} (B) 110:45:45 kg $N:P_2O_5:K_2O$ ha^{-1}

(C) 70:35:35 kg $N:P_2O_5:K_2O$ ha^{-1} (D) 120:60:60 kg $N:P_2O_5:K_2O$ ha^{-1}

3. What does LEISA stand for in the context of sustainable farming practices?

(A) Low Energy Intensive Sustainable Agriculture

(B) Local Environmental Integrated Sustainable Agriculture

(C) Low External Input Sustainable Agriculture

(D) None of the above

4. Which of the following sweet potato variety is biofortified?

(A) Bhu Sona (B) Sree Arun

(C) Sree Nandini (D) All the above

5. Which of the following is a principle of Conservation Agriculture?

(i) Permanent organic soil cover

(ii) Minimum soil disturbance

(iii) Species diversification

(iv) Intensive tillage

(A) Only (i) and (ii) (B) Only (i) and (iii)

(C) (i), (ii) and (iii) only (D) All of the above

6. Growing perennial, annual, biennial crops of different heights, structures and rooting patterns at the same time on the same land is called :

(A) Multi-storey cropping
(B) Strip cropping
(C) Crop rotation
(D) Intercropping

7. Which of the following correctly defines Water Use Efficiency (WUE) and its unit?

(A) Water Use Efficiency is the amount of water used per kg of crop yield; unit is mm/kg
(B) Water Use Efficiency is crop yield per unit of water used; unit is kg/ha-mm
(C) Water Use Efficiency is the ratio of rainfall to irrigation; unit is %
(D) Water Use Efficiency is the evapotranspiration per hectare; unit is mm/ha

8. _____ is considered as the upper limit of water availability to plants.

(A) Permanent wilting point
(B) Field capacity
(C) Hygroscopic coefficient
(D) Saturation point

9. Which of the following plants is known to produce the allelochemical juglone, which inhibits the growth of nearby plants?

(A) Eucalyptus
(B) Parthenium
(C) Black Walnut
(D) Lantana

10. Which of the following is/are highly mobile nutrients in soil?

(i) NO_3^-
(ii) $H_2PO_4^-$
(iii) K^+

(A) Only (i)
(B) Only (ii)
(C) Only (i) and (ii)
(D) All of the above

11. Which of the following statements about Foundation Seed is correct?

(A) It is produced by farmers for immediate commercial sale.
(B) It is the first-generation seed derived from breeder seed.
(C) It is a type of genetically modified seed.
(D) It can be used to produce breeder seed.

12. Match the following crops with their respective seed certification standards in terms of genetic purity:

	Crop and Class		Standards for Minimum Genetic Purity (%)
(i)	Tomato Hybrid – Certified Seed	(a)	95
(ii)	Castor – Certified Seed	(b)	99
(iii)	Finger millet – Foundation Seed	(c)	85
(iv)	Maize hybrid – Certified Seed	(d)	90

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

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

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

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

13. During field inspection of certified seed production in cowpea, the maximum permitted off-types is :

(A) 0.05% (B) 0.10%

(C) 0.20% (D) 0.50%

14. Assertion (A) : In seed certification, isolation distance for maize is kept higher than for rice.

Reason (R) : Maize is a cross-pollinated crop while rice is predominantly self-pollinated.

(A) Both (A) and (R) are true and (R) is the correct explanation of (A).

(B) Both (A) and (R) are true, but (R) is not the correct explanation of (A).

(C) (A) is true, but (R) is false

(D) (A) is false, but (R) is true

15. Which of the following pairs is correctly matched?

	Seed Class		Tag Colour
(i)	Breeder Seed	–	Golden Yellow
(ii)	Foundation Seed	–	Azure blue
(iii)	Truthfully labelled Seed	–	White
(iv)	Certified Seed	–	Opal Green

(A) (i) and (iii) (B) Only (i)

(C) Only (ii) (D) (ii) and (iv)

16. Which of the following institutions has the power to advise the Central Government on matters related to seed development under the Seed Act?

(A) State Seed Certification Agency

(B) Central Seed Certification Board

(C) Seed Testing Laboratories

(D) Seeds Control Authority

17. A seed producer of sunflower is found violating the provisions of the Seeds Control Order, 1983. What action/actions may be taken? *(Choose the action/actions which is/are applicable)*

(i) Seizure of stock

(ii) Criminal prosecution under the Essential Commodities Act

(iii) Immediate revocation of breeder license

(iv) Issuance of license to regularize activity

(A) Only (i)

(B) Only (i) and (iii)

(C) Only (i) and (ii)

(D) All

18. Arrange the following legislations and acts in the order of their implementation :

(i) Seed Act

(ii) Seed Bill

(iii) Seeds Control Order

(iv) Intellectual Property Rights under PPV and FR Act

(A) (i), (iv), (iii), (ii)

(B) (iii), (i), (ii), (iv)

(C) (iv), (iii), (i), (ii)

(D) (i), (iii), (iv), (ii)

19. Assertion (A) : The isolation distance in maize seed production can be reduced if border rows of the same pollen parent planted.

Reason (R) : Border rows act as a physical and genetic buffer, reducing cross-pollination from external sources.

(A) (A) is true, but (R) is false.

(B) (A) is false, but (R) is true.

(C) Both (A) and (R) are true and (R) is the correct explanation of (A).

(D) Both (A) and (R) are true, but (R) is not the correct explanation of (A).

20. Which of the following statements correctly explains the relationship between Seed Certification Agencies and Seed Testing Laboratories?

(A) Both operate under the Central Seed Committee and are functionally independent.

(B) Seed Testing Laboratories issue certificates while Certification Agencies only conduct field inspections.

(C) Seed Certification Agencies use results from Seed Testing Labs as a part of final certification decision.

(D) Seed Testing Laboratories approve seed varieties for commercial release.

21. If there are two identical individuals A and B in the market, each with individual demand for commodity X as given in the table below, the market demand QD_x is :

P_x (Rs.)	Qd_1	Qd_2	QD_x
8	0	0	
4	4	4	
0	8	8	

(A) 0, 4, 8

(B) 0, 8, 16

(C) 8, 4, 0

(D) 0, 32, 0

22. A Giffen good violates the law of demand due to :

(A) Positive marginal utility

(B) Substitution effect dominating income effect

(C) Strong income effect outweighing substitution effect

(D) Constant marginal utility

23. _____ are the biggest markets from area point of view.

(A) Regional markets

(B) National markets

(C) World markets

(D) Wholesale markets

24. A strategy where a company sets a high price initially and lowers it over time is called :

(A) Penetration pricing

(B) Skimming pricing

(C) Competitive pricing

(D) Cost-plus pricing

25. If an indifference curve is horizontal (assume X is measured along the horizontal axis and Y along the vertical axis) this would mean that the consumer is saturated with :

(A) Commodity X only

(B) Commodity Y only

(C) Both commodity X and commodity Y

(D) Neither commodity X nor commodity Y

26. A small farmer with low income may have :

(A) Marketable surplus higher than marketed surplus

(B) Marketed surplus higher than marketable surplus

(C) No difference between the two

(D) Neither marketable nor marketed surplus

27. The individual demand curve for a commodity represents :

(A) A maximum boundary of the individuals intentions

(B) A minimum boundary of the individuals intentions

(C) Both a maximum and minimum boundary of the individuals intentions

(D) Neither a maximum nor a minimum boundary of the individuals intentions

28. A company segments, its market based on how often customers use a product. This is an example of :

(A) Geographic segmentation

(B) Demographic segmentation

(C) Behavioral segmentation

(D) Psychographic segmentation

29. If the MU of the last unit of X consumed is twice the MU of the last unit of Y consumed the consumer is in equilibrium only if

(A) The price of X is twice the price of Y

(B) The price of X is equal to the price of Y

(C) The price of X is one half of the price of Y

(D) Any of the above

30. A health food company targets consumers who enjoy yoga, meditation and plant-based diets. This is an example of :

(A) Demographic segmentation
(B) Psychographic segmentation
(C) Geographic segmentation
(D) Behavioral segmentation

31. DNA is composed of a backbone of sugar and phosphate. The ring-shaped monosaccharide molecule in DNA structure is

(A) Ribose
(B) Ribulose
(C) Adenine
(D) Uracil

32. The correct statement about amino acid methionine is

(A) Methionine does not contain sulphur.
(B) Methionine is not an essential amino acid in human diet.
(C) Methionine is deficient in pulses.
(D) Methionine is deficient in cereals.

33. The incorrect statement about coconut oil is :

(A) Cholesterol is present in coconut oil.
(B) Short chain fatty acids namely Lauric acid and Myristic acid are present in it.
(C) Lauric acid from coconut oil is used to make soaps and detergents.
(D) Coconut oil contains both saturated and unsaturated fatty acids.

34. The start codon for protein synthesis in mRNA is

(A) The first three nucleotides at 5' end
(B) The last three nucleotides at 3' end
(C) AUG
(D) UGA

35. Read the following statements about vitamins and answer accordingly :

Statement (1) : Deficiency of Thiamine leads to Beriberi.

Statement (2) : Removal of rice bran by polishing leads to loss of Thiamine.

Statement (3) : Thiamine is a Vitamin.

(A) Only statement (1) is correct

(B) Only statement (2) is correct

(C) Only statement (3) is correct

(D) Only statement (3) is wrong

36. The oxygen that animals (plants as well) breathe in, goes to

(A) Water splitting complex of chloroplast to release more oxygen.

(B) Electron transport chain of mitochondria and water is formed.

(C) Krebs cycle for the release of CO_2

(D) All the above

37. Identify the correct answer about nitrogen assimilation in plants :

(A) The first formed amino acid during the assimilation is Glutamine.

(B) Nitrogenase is the enzyme involved in the process.

(C) Methionine is the first formed amino acid in N assimilation.

(D) Urea is the byproduct of N assimilation.

38. The pathway involved in the breakdown of fatty acids is :

(A) Photorespiration

(B) Beta-oxidation

(C) Glycolysis

(D) Lipoylation

39. Identify the incorrect statement about photosynthesis :

(A) The first sugar (carbohydrate) produced from Calvin cycle is 3-Phosphoglycerate.

(B) All C4 plants parallelly runs C3 pathway for carbon fixation.

(C) Dark reaction pathway requires light for activation.

(D) The first sugar (carbohydrate) produced from Calvin cycle is glucose.

40. A farmer sprayed abscisic acid on his crop for improving drought tolerance. What would be the outcome?

(A) Water use efficiency remains the same

(B) Biomass will increase

(C) Yield will reduce

(D) Yield will increase

41. Which of the following second messengers gets diffused in the plane of the Plasma membrane?

(A) Diacylglycerol

(B) Ca^{2+}

(C) Cyclic AMP

(D) Inositol Triphosphate

42. The antibiotics puromycin, neomycin and chloramphenicol inhibit translation by

(A) Binding and cleaving mRNA

(B) Binding and blocking tRNA molecules

(C) Binding with the ribosome

(D) None of the above

43. Make the right combination of Nobel Laureate and the Nobel-Winning finding :

(i) Andrew Fire and Craig Mello

(ii) Harald Zur Hausen

(iii) Alfred Gilman and Martin Rodbell

(iv) Richard Roberts and Phillip Sharp

(a) HPV causing Cervical Cancer

(b) Split genes

(c) RNA interference

(d) G proteins' role in signal transduction

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

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

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

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

44. Various enzymes are involved in transcription, translation and replication. Which statement is incorrect?

(i) Telomerase is a ribonucleoprotein.

(ii) Primase is a type of RNA polymerase.

(iii) Helicases act as molecular motors.

(A) (i) and (iii)

(B) Only (i)

(C) Only (iii)

(D) None of the above

45. Select the correct statement with regard to cancerous cells :

(A) They consume most of the glucose to produce lactate instead of ATP.

(B) Warburg effect explains a certain behaviour of cancer cells.

(C) Most cancers originate from a single aberrant cell but a single mutation rarely does transform a normal cell into cancerous.

(D) All of the above

46. Polymerases of different types are involved in DNA replication. These enzymes generally contain different domains with different functions. Which statement is correct with regard to these polymerases?

(i) Both the α subunit of Pol III enzyme and the Klenow fragment have polymerase activity.

(ii) Both Pol III core and Klenow fragment have a 5′–3′ exonuclease activity.

(iii) The Klenow fragment is part of Pol I, the main DNA replicating enzyme in bacteria.

(A) Only (i)

(B) Only (ii)

(C) Only (iii)

(D) None of the above

47. Mitochondrion is a major cell organelle. Which of the following is not correct about mitochondria?

(A) The mitochondrial inner membrane is richer in terms of proteins compared to outer membrane.

(B) Mannose 6 phosphate signal is a protein tag meant to carry mitochondrial proteins to the mitochondria.

(C) The mitochondrial matrix contains enzymes, ribosomes and DNA.

(D) None of the above

48. Choose the wrong statement from the following :

(A) The term telomere was introduced by Hermann J Muller.

(B) T-loops are special structures seen in giant chromosomes.

(C) The production of two functional centromeres is a key step in the transition from metaphase to anaphase.

(D) Two components necessary for centromere function are α satellite sequence and CENP-B boxes

49. Transposons are significant in the evolution of organisms. Select the incorrect statement about transposons :

(A) LI is a LINE and Alu is a SINE

(B) Alu are more abundant than LI

(C) Group II introns utilize a retrotransposition mechanism

(D) None of the above

50. Transcription is a complex phenomenon. Select the correct statement :

(A) Stimulation of transcription by enhancers is strictly dependent on their orientation and position.

(B) bZIP and bHLH domains are motifs found in the transcription activating domains of activators.

(C) The fungal toxin α-amanitin has inhibitory effect on RNA Polymerase II.

(D) The proximal promoter in Class II promoters contains TATA box, TFII B recognition element, the initiator, the downstream promoter element, the downstream core element and the motif ten element.

51. DNA polymerase with proof reading activity used in PCR should definitely possess the following activity :

(A) 5′-3′ exonuclease (B) 3-5′ exonuclease

(C) 5′-3′ endonuclease (D) 3′-5′ endonuclease

52. Which of the following molecular markers can distinguish homozygous and heterozygous:

(i) SSR
(ii) RFLP
(iii) RAPD
(iv) ISSR

(A) (i) and (iii) (B) (i) and (ii)

(C) All of them (D) (iii) and (iv)

53. After cleaving the sequence, the nature of the ends created by the type II endonuclease is _____.

(A) The ends created are always single stranded

(B) The ends created are always double stranded

(C) Either the ends are single stranded or they are double stranded

(D) One end is single stranded and one end is double stranded

54. In blue-white screening, what do blue colonies represent?

(A) Cells that have not taken up the plasmid vector

(B) Cells with recombinant plasmids containing a new insert

(C) Cells containing empty plasmid vectors

(D) Cells with a non-functional *lac*Z gene.

55. The FISH technique is used for :

(A) Identifying an enzyme activity in a cell

(B) Amplifying specific segments of DNA

(C) Locating and visualizing a specific DNA sequence

(D) Karyotyping

56. Velvet rose is a commercial variety produced by :

(A) Protoplast fusion (B) Somaclonal variation

(C) Embryo culture (D) Haploid culture

57. The process of formation of callus from a leaf tissue is _____.

(A) Dedifferentiation (B) Redifferentiation

(C) Morphogenesis (D) Organogenesis

58. Which technique is suitable for sterilizing tissue culture medium?

(A) Moist heat sterilization (B) Dry heat sterilization

(C) Radiation (D) All the above

59. A patent is granted in India for a period of :

(A) 20 years from the date of filing

(B) 20 years from the date of the grant

(C) 20 years from the time of publishing in the patent journal

(D) None of the above

60. Which of the following cannot be considered a bioethics principle?

(A) Maleficence (B) Autonomy

(C) Justice (D) Beneficence

61. What does GIS stand for?

(A) Global Imaging System

(B) Geographical Information Source

(C) Geographic Information System

(D) Global Information Scanner

62. Which gas is primarily responsible for acid rain?

(A) Oxygen (B) Nitrogen

(C) Methane (D) Sulfur dioxide

63. The main objective of the Forest (Conservation) Act is to :

(A) Conserve forests and regulate their non-forest use

(B) Facilitate deforestation for development

(C) Increase forest-based industries

(D) Promote urban expansion

64. Minamata disease is an example of :

(A) Waterborne bacterial infection

(B) Bioaccumulation and biomagnification of toxic substances

(C) Radiation poisoning

(D) Viral epidemic

65. The process in which plants absorb contaminants through their roots and store them in their tissues is called :

(A) Phytodegradation (B) Phytovolatilization

(C) Photostabilization (D) Phytoextraction

66. What does the term "Carbon Footprint" refer to?

(A) The amount of carbon in the soil

(B) The total amount of greenhouse gases emitted directly or indirectly by human activities

(C) Carbon deposits in fossil fuels

(D) The physical footprint of carbon particles

67. Which of the following is a major component of the biofilm matrix?

(A) Cellulose

(B) Proteins only

(C) Extra cellular polymeric substances

(D) Lipids

68. Which of the following activities can generate carbon credits?

(A) Planting trees and using clean technologies

(B) Burning coal

(C) Deforestation

(D) Constructing highways

69. What type of treatment process is a trickling filter classified under?

(A) Primary treatment (B) Secondary treatment

(C) Chemical treatment (D) Tertiary treatment

70. Which of the following types of waste is considered hazardous?

(A) Medical waste from hospitals (B) Plastic wrappers

(C) Vegetable peels (D) Paper products

71. Which of the following best defines forestry?

(A) Study of shrubs and herbs in grasslands

(B) Management and conservation of forest ecosystems for human benefit

(C) The planting of crops for food security

(D) Preservation of marine biodiversity

72. Which branch of forestry focuses on raising trees outside traditional forests, such as on farms or urban areas?

(A) Silviculture
(B) Social Forestry
(C) Forest Ecology
(D) Forest Engineering

73. What is the main objective of silviculture?

(A) Harvesting non-timber forest produce
(B) Planning wildlife corridors
(C) Raising and tending forest crops
(D) Enhancing ecotourism

74. According to the India State of Forest Report (ISFR), which state has the highest forest cover by area?

(A) Kerala
(B) Madhya Pradesh
(C) Sikkim
(D) Gujarat

75. Who is known as the father of scientific forestry in India?

(A) Dietrich Brandis
(B) Salim Ali
(C) M.S. Swaminathan
(D) Gifford Pinchot

76. Which of the following features helps in identifying *Acacia auriculiformis*?

(A) Compound leaves and thornless stem
(B) Phyllodes and yellow spike inflorescence
(C) Simple leaves with winged petiole
(D) Opposite leaves and blue flowers

77. Which climatic factor has the most direct influence on forest evapotranspiration?

(A) Wind speed
(B) Soil texture
(C) Topographic aspect
(D) Parent rock

78. In soil formation, what role does the parent rock play?

(A) Acts as a source of organic matter
(B) Regulates pH and mineral content
(C) Influences evaporation
(D) Controls temperature variation

79. Which kind of thinning is done at regular intervals regardless of tree quality?

(A) Free thinning
(B) Mechanical thinning
(C) Selection thinning
(D) Crown thinning

80. In forest succession, which stage is characterized by shade-tolerant climax species?

(A) Initial colonization stage
(B) Herbaceous dominance
(C) Pioneer phase
(D) Climax stage

81. Consider the statements for clear felling system followed by artificial system,

Statement I : Casurina plantations
Statement II : Cryptomeria and Cupressuus plantations of West Bengal
Statement III : Nilambur Technique for teak

Choose the correct statement/s :

(A) Statement I, II and III
(B) Only Statement II and III
(C) Only Statement I and III
(D) Only Statement I and II

82. Consider the statements for Clear strip Silvicultural system,

Statement I : Clear strip system results in production of even aged crop
Statement II : Clear strip system does not deteriorate the site and maintains the aesthetic beauty of the area
Statement III : Protection of regeneration in strips is easy and cheap

Choose the correct statement/s :

(A) Statement I, II and III
(B) Only Statement II and III
(C) Only Statement I and III
(D) Only Statement I and II

83. Consider the statements for Uniform Silvicultural system,

Statement I : It is shelter wood system
Statement II : Canopy is opened uniformly opened up to obtain uniform regeneration
Statement III : Objective of retaining trees is to supply of seed for regeneration and shelter against adverse climatic factors

Choose the correct statement/s :

(A) Statement I, II and III
(B) Only Statement I and III
(C) Only Statement II and III
(D) Only Statement I

84. Consider the following statements for fast growth in plantation forestry,

Statement I : depends on productive capacity of the site

Statement II : depends on age at which the maximum volume produce occurs to suit the quality and size of the material

Statement III : depends on purpose for planting, specifications for industrial use

Statement IV : depends on age at which a species defects and become prone to other damages like wind stress or susceptibility to pests and diseases.

Choose the correct statement/s :

(A) Statement I, II, III and IV
(B) Only Statement I and II
(C) Only Statement II and III
(D) Only Statement III and IV

85. Consider the following statements for selection silvicultural system,

Statement I : results in the production of selection forest in which trees of all ages are mixed together on each unit of area

Statement II : selection system conserves soil and moisture to the fullest extent possible

Statement III : forest produced by selection system susceptible to insect and pest attack and adverse climatic factors

Statement IV : forest produced by selection system, promotes the invasion of grass and weeds

Choose the correct statement/s :

(A) Statement I, II, III and IV
(B) Only Statement I and II
(C) Only Statement II and III
(D) Only Statement III and IV

86. Consider the following statements for Natural regeneration by coppice,

Statement I : Coppice shoots adventitious buds

Statement II : Adventitious buds are stimulated to produce new shoots by injury

Statement III : All tree species have the same coppicing power

Statement IV : Most of Indian conifers are good coppicers

Choose the correct statement/s :

(A) Statement I, II, III and IV
(B) Only Statement I and II
(C) Only Statement II and III
(D) Only Statement III and IV

87. Consider the following statements for Natural regeneration in Teak Forests,

Statement I : Teak forests occur in Madhya Pradesh, Maharashtra, Kerala, Andhra Pradesh and Karnataka

Statement II : Natural regeneration is easier in Teak than in Sal

Statement III : Natural regeneration in many areas consists of seedlings, seedling coppice, stool coppice

Statement IV : Dry type of teak requires different treatment than moist type, fire is beneficial in the moist teak forest but it is harmful in the dry type

Choose the correct statement/s :

(A) Statement I, II, III and IV
(B) Only Statement I and II
(C) Only Statement II and III
(D) Only Statement III and IV

88. Consider the following statements for Indian irregular shelter wood silviculture system

Statement I : Crop to be regenerated is opened up irregularly

Statement II : Resultant crop obtained is uneven aged crop

Statement III : Though retention of well grown poles and young immature trees up to 40 cm diameter

Statement IV : Danger of loss of soil fertility

Choose the correct statement/s :

(A) Statement I, II, III and IV
(B) Only Statement I and II
(C) Only Statement II and III
(D) Only Statement III and IV

89. Consider the following statements for High forest silviculture system

Statement I : Regeneration is normally of seedling origin

Statement II : Rotation is generally long

Statement III : High forests are further classified as concentrated and diffused system of regeneration

Choose the correct statement/s :

(A) Statement I, II and III
(B) Only Statement I and II
(C) Only Statement II and III
(D) Only Statement III and I

90. Consider the following statements for Wedge silviculture system,

Statement I : is form of strip system

Statement II : Cutting section is located in middle

Statement III : Strips usually 2 to 5 m wide and made at intervals of 80 m

Statement IV : System was developed by Eberhard in Germany and adopted in windy areas

Choose the correct statement/s :

(A) Statement I, II, III and IV
(B) Only Statement I and II
(C) Only Statement II and III
(D) Only Statement III and IV

91. The minimum length of protection given by a shelter-belt is about _____ times its height.

(A) 15 (B) 25

(C) 20 (D) 10

92. As per the Land Capability Classification, which class of land is not suitable for agriculture but suitable for forestry and grassland?

(i) LCC III

(ii) LCC IV

(iii) LCC V

(iv) LCC VII

(A) (i) only (B) (iii) only

(C) (ii) and (iii) only (D) (iii) and (iv) only

93. The local names for shifting cultivation pronounced in India – Pick the odd one out:

(A) Podu (B) Ray

(C) Jhum (D) Batra

94. Traditional silvipasture system in semi-arid tracts of Tamil Nadu is commonly known as :

(A) Protein bank

(B) Hedge gardens

(C) Korangadu

(D) Alley cropping

95. Pick the regulation services of agroforestry :

(A) Soil Conservation

(B) Honey Production

(C) Religious Values

(D) Recreational Services

96. The cropping pattern followed in India :

(i) Kharif

(ii) Rabi

(iii) Zaid

(iv) Kharif and Rabi only

(A) (i) only (B) (ii) only

(C) (iv) only (D) (i), (ii) and (iii)

97. The silvi-agriculture system of agroforestry is :

(i) Improved fallows

(ii) Protein bank

(iii) Multiple tree gardens

(iv) Wind breaks

(A) (i) and (iii) only (B) (ii) and (iv) only

(C) (i), (iii) and (iv) (D) (ii) and (iii) only

98. Hedge gardens is an example of _____ method of temporal arrangement.

(A) Coincidence (B) Concomitant

(C) Intermittent (D) Interpolated

99. The concept of Diagnosis and Design was attributable to :

(A) ICRAF (B) ICFRE

(C) ICAR (D) CAFRI

100. _____ is an allelochemical present in the leaves of *Leucaena leucocephala*.

(A) Quercetin (B) Juglone

(C) Mimosine (D) Cineole

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