

DSSB SO Horticulture Previous Year Question Paper

SECTION - A

i) General Awareness

1. Which of the following statements is true about biodiversity hotspots?

hotspot" in 1988.

2. To qualify as a hotspot a region must meet two strict criteria: it must contain at least 1,500 species of vascular plants (>0.5% of the world's total) as endemics, and it has to have lost at least 70% of its original habitat. (A) Only the statement 1 is true (B) Only the statement 2 is true (C) Both the statements 1 and 2 are true (D) None of the above

2. What is the main objective of the Pradhan Mantri JI-VAN Yojana of the Central Government? (A) To provide financial assistance to marginal farmers in the country (B) To provide financial support to Integrated Bioethanol Projects using lignocellulosic biomass and other renewable feedstock (C) To provide financial assistance to women entrepreneurs in the country (D) All the above

3. What is the main objective of the Udyam Sakhi Portal of the Central Government? (A) To provide platform for entrepreneurship learning tools, incubation facility, training programs for fund raising, providing mentors, technical assistance etc., for women entrepreneurs in the country (B) To provide platform for training programs for fund raising, providing mentors and technical assistance for Foreign investors in the country (C) To provide platform for Foreign direct investment in the country (D) All the above

4. Consider the following statements about e-Shakthi initiative of the Government of India:

1. e-Shakti is a pilot project of National Bank for Agriculture and Rural Development (NABARD) for digitization of Self-Help Groups (SHGs).
2. It was initiated to address certain concerns like improving the quality of bookkeeping of SHGs and to enable banks to take informed credit decisions about the group through a Management Information System (MIS). (A) Only the statement 1 is true (B) Only the statement 2 is true (C) Both the statements 1 and 2 are true (D) None of the above

5. Consider the following statements about the International Union for Conservation of Nature (IUCN):

1. The International Union for Conservation of Nature (IUCN) is a membership Union uniquely composed of both government and civil society organizations.
2. Created in 1948, IUCN has evolved into the world's largest and most diverse environmental network. (A) Only the statement 1 is true (B) Only the statement 2 is true (C) Both the statements 1 and 2 are true (D) None of the above

Council (WGC):

1. India is the world's largest consumer of gold.
 2. India has the 2nd largest gold reserve in the world with the current holding pegged at 983 tonnes. (A) Only the statement 1 is true (B) Only the statement 2 is true (C) Both the statements 1 and 2 are true (D) None of the above
7. Which of the following Indian State given below having the longest coastal border length? (A) Goa (B) Gujarat (C) Tamil Nadu (D) None of the above
8. Ghoomar is a traditional folk dance form of which of the following State? (A) Rajasthan (B) Karnataka (C) Odisha (D) None of the above
9. Which of the following is regarded the last Veda? (A) Rig veda (B) Sama veda (C) Atharva veda (D) None of the above
10. 'No first use' doctrine, is associated with (A) Cyber warfare (B) Nuclear weapons (C) Biological warfare (D) None of the above
11. The scientific study of rocks is called as (A) Petrology (B) Pediatrics (C) Pedagogy (D) None of the above
12. Which among the following countries that India doesn't share its border frontier? (A) Bhutan (B) Nepal (C) Myanmar (D) None of the above
13. The book 'A Plea for Reconstruction of Indian Polity' was written by (A) Jayaprakash Narayan (B) Jawaharlal Nehru (C) V. D. Savarkar (D) None of the above
14. Consider the following statements about UV rays emitting from Sun:
1. There are two types of UV rays UVA and UVB.
 2. UVA penetrates deep into the skin, causing Melanoma and premature ageing and UVB causes sunburns like basal cell carcinoma and squamous cell carcinoma. (A) Only the statement 1 is true (B) Only the statement 2 is true (C) Both the statements 1 and 2 are true (D) None of the above
15. What is the chemical name of laughing gas? (A) Nitrous oxide (B) Nitrogen di-oxide (C) Nitric acid (D) None of the above
16. Graphite and diamonds are basically made up of atoms of (A) Nitrogen (B) Carbon (C) Silver (D) None of the above

India? (A) Nari Shakthi Puraskar (B) Indira Gandhi National Women Award (C) Mahila Sashaktikaran Puraskar (D) None of the above

18. What was the slogan for National Girl Child Day 2019? (A) Empowering Girls for a Better Tomorrow (B) Save Girl Child (C) Save Girl Child Save Society (D) None of the above

19. Which of the following Committee in the late 1990s recommended consolidation through a process of merging strong banks? (A) Narasimham Committee (B) Santalam Committee (C) Kelkar Committee (D) None of the above

20. Who is the present Finance Minister of India? (A) Nirmala Sitaraman (B) Ram Vilas Paswan (C) Smriti Irani (D) None of the above

ii) General Intelligence and Reasoning Ability

21. Find the next term in the series: 12, 6, 11, 6, 10, 6, ? (A) 8 (B) 9 (C) 10 (D) 11

22. Choose the correct alternative from the given ones that WORLD, XPSME, ?, ZRUOG. (A) YQTNF (B) YRTNF (C) YTQNF (D) YQNTF

23. Which number among the following does not belong to the series? 8, 27, 50, 125, 216, 343. (A) 8 (B) 50 (C) 27 (D) 125

24. Find out the alternative which will replace the question mark? Vaccination: Disease:: Maintenance: ? (A) Paint (B) Breakdown (C) Expense (D) Oiling

25. Find the odd number pair from the given alternatives: (A) 140-45 (B) 110-35 (C) $\$100 \rightarrow 30\$$ (D) 80-25

26. In a certain code, 'this is the tree' is written as 2153, 'the green tree' is written as 573 and 'tree of life' is written as 309. Which symbol stand for 'the'? (A) 2 (B) 3 (C) 5 (D) 0

27. In a certain code, SECTOR is written as RDDUNQ and BRINGS is written as AQJOFR. How is COURSE written in that code? (A) BNVSRD (B) DNVSRD (C) BNVQRD (D) DPTQTF

28. J is the sister of T. T is married to D. D is the father of R. M is the son of H. T is the mother-in-law of H. D has only one son and no daughter. J is married to

Grandson (D) Son

29. Sonam is walking facing west, then turns 90° in clockwise direction and then turns 90° in clockwise direction again. In which direction is she finally moving? (A) South (B) North (C) East (D) West

30. Namitha travels 14 m in west direction, she turns right and travels 14 m. Again, she turns towards left and travels 10 m. Then, she turns again left and travels 14 m. What distance is she from her original position? (A) 10 m (B) 24 m (C) 28 m (D) 38 m

31. Which of the answer figures illustrates the relationship between: Delhi, Sri Lanka, Asia? (A) (B) (C) (D)

32. How many such pairs of letters are there in the word 'BANGLE' each of which has as many letters between them in the word (in both forward and backward directions) as they have between them in English alphabetical series? (A) More than three (B) Two (C) One (D) Three

33. BS4 M@K%9+AL\$R3U5H &#ZV22W7QX6. How many such numbers are there in the above arrangement, each of which is immediately followed by a letters and also immediately preceded by a symbol? (A) One (B) Two (C) Three (D) None

34. Lakshmi is elder than Meenu. Leela is elder than Meenu but younger than Lakshmi. Lata is younger than both Meenu and Hari but Hari is younger than Meenu. Who is the youngest? (A) Lakshmi (B) Meenu (C) Leela (D) Lata

35. Statement: $S < T$ & $O = R$; $T < V$. Conclusion: I. $V > S$; II. $R < V$. (A) Both conclusions I and II are false (B) Neither conclusion I nor II is true (C) Both conclusions I and II are true (D) Only conclusion I is true

36. Statements: No number is a digit. All digits are fractions. Some fractions are integers. Conclusions: I. At least some digits are integers. II. All number being integers is a possibility. (A) Only conclusion I follows (B) Only conclusion II follows (C) Either conclusion I or conclusion II follows (D) Neither conclusion I nor conclusion II follows

37. Should all those students who fail in one or two subjects in 12th standard final exam be allowed to take admission in degree courses and continue their study subject to their successfully passing in the supplementary examination? Arguments: I. Yes, this will help the students to complete their education without a break of one year. II. Yes, this is a forward looking strategy to help the students and motivate them for higher studies. III. No, such students do not

12th standard final examination. (A) Only I strong (B) Only II is strong (C) Only III is strong (D) Either II or III are strong

38. Study the statements and the conclusion and point out which statement studied together will bring the conclusion. Statements: I. Price rise in natural phenomenon. II. If production increases prices fall. III. High prices affect the poor. Conclusions: If production rises the poor feel relieved. (A) Only I and III (B) Only I and II (C) Only II and III (D) Data insufficient

39. Which two months in a year have the same calendar? (A) June, October (B) April, November (C) April, July (D) October, December

40. Ashish leaves his house at 20 minutes to seven in the morning, reaches Kunal's house in 25 minutes, they finish their breakfast in another 15 minutes and leave for their office which takes another 35 minutes. At what time do they leave Kunal's house to reach their office? (A) 7.40 a.m. (B) 7.20 a.m. (C) 7.45 a.m. (D) 8.15 a.m

iii) Arithmetical and Numerical Ability

41. If the largest three-digit number is subtracted from the smallest five-digit number, then the remainder is (A) 1 (B) 9000 (C) 9001 (D) 90001

42. $\frac{1}{0.04}$ is equal to (A) $\frac{1}{40}$ (B) $\frac{2}{5}$ (C) 2.5 (D) 25

43. $1\frac{3}{4} + 5\frac{1}{3} + 3\frac{2}{5} = ?$ (A) $9\frac{2}{5}$ (B) $9\frac{29}{60}$ (C) $10\frac{2}{5}$ (D) $10\frac{29}{60}$

44. $(\frac{\sqrt{625}}{11}) \times \frac{14}{\sqrt{25}} \times \frac{11}{\sqrt{196}}$ is equal to (A) 5 (B) 6 (C) 8 (D) 11

45. The average of first five multiples of 3 is (A) 3 (B) 9 (C) 12 (D) 15

46. The difference between a number and its three fifth is 50. What is the number? (A) 75 (B) 100 (C) 125 (D) None of these

47. If 3 vertices of a parallelogram ABCD are $A(1, 2, 3)$, $B(-1, -2, -1)$ and $C(2, 3, 2)$ (taken in order), then the 4th vertex D is (A) $(4, -7, 6)$ (B) $(-4, 7, 6)$ (C) $(3, 7, 6)$ (D) $(4, 7, 6)$

48. Choose the missing term. R, U, X, A, D, ? (A) F (B) G (C) H (D) I

49. Find the missing term. D-4, F-6, H-8, J-10, ?, ? (A) K-12, M-13 (B) L-12, M-14 (C) L-12, N-14 (D) K-12, M-14

on 574/7 logic, though document cuts off options] (B) 82 (C) 97 (D) 113

51. Choose the number which is different from others in the group. (A) 25 (B) 36 (C) 78 (D) 144

52. Rohan ranks seventh from the top and twenty sixth from the bottom in a class. How many students are there in the class? (A) 31 (B) 32 (C) 33 (D) 34

53. If '+' means '-', 'x' means ' $\div$ ', ' $\div$ ' means '+' and '-' means 'x', then which of the following will be the value of the expression $252 \times 9 - 5 + 32 \div 92$? (A) 95 (B) 168 (C) 192 (D) 200

54. The value of $i \cdot (j \times k) + j \cdot (i \times k) + k \cdot (i \times j) =$ (A) 1 (B) -1 (C) 0 (D) 3

55. The value of λ for which the 2 vectors $2i - j + 2k$ and $3i + \lambda j + k$ are perpendicular is (A) -8 (B) 8 (C) 2 (D) 4

56. Find the missing character. Table: (F, 1, 0); (A, J, K); (E, M, ?) (A) P (B) R (C) T (D) V

57. If $(64)^2 - (36)^2 = 20z$, the value of z is (A) 70 (B) 120 (C) 140 (D) 180

58. The simplest form of $\frac{1095}{1168}$ (A) $\frac{13}{16}$ (B) $\frac{15}{16}$ (C) $\frac{17}{26}$ (D) $\frac{25}{26}$

59. Evaluate $2.5 \div 0.0005$. (A) 50 (B) 500 (C) 5000 (D) None of these

60. $\frac{11}{4} = \frac{77}{?}$ (A) 28 (B) $\frac{77}{28}$ (C) 44 (D) 308

SECTION - A (Continued)

iv) Hindi Language and Comprehension

(Note: These questions test knowledge of Hindi grammar and vocabulary, translated here into English for your review).

61. Which of the following words is NOT a synonym for 'Lion' (सिंह)? (A) Mrigraj (मृगराज) (B) Vanraj (वनराज) (C) Shardul (शार्दूल) (D) Vaji (वाजी)

62. The antonym of 'Saday' (सदय - Kind/Merciful) is: (A) Dayalu (दयालु) (B) Nirday (निर्दय) (C) Patthar Dil (पत्थर दिल) (D) Kathor (कठोर)

meaning is called: (A) Avyayibhav (अव्ययीभाव) (B) Dvigu (द्विगु) (C) Tatpurush (तत्पुरुष) (D) Bahuvrihi (बहुव्रीहि)

64. How many types of compounds (Samas) are there? (A) 3 (B) 4 (C) 5 (D) 6

65. How many types of sentences are there from the perspective of structure or form? (A) 3 (B) 2 (C) 4 (D) None of these

66. In which type of sentence is there one main clause and the rest are subordinate clauses? (A) Mixed sentence (मिश्र वाक्य) (B) Simple sentence (सरल वाक्य) (C) Compound sentence (संयुक्त वाक्य) (D) Connective sentence (संयोजक वाक्य)

67. Altogether, how many types of declinable (Vikari) and indeclinable (Avikari) words are there? (A) 2 (B) 4 (C) 6 (D) 8

68. Suffixes that are added to the end of nouns, pronouns, adjectives, and adverbs (excluding verbs) to change their meaning are called _____ suffixes. (A) Taddhit (तद्धित) (B) Kridant (कृदन्त) (C) Krit Pratyay (कृत प्रत्यय) (D) None of these

69. How many types of adverbs (Kriya Visheshon) are there based on meaning? (A) 2 (B) 3 (C) 4 (D) 5

70. Which prefix (Upasarg) is used in the word 'Ullanghan' (उल्लंघन)? (A) Ul (उल) (B) U (उ) (C) Ut (उत्) (D) Na (न)

71. When a person does not perform a task themselves but inspires someone else to do it, it is called a _____ verb. (A) Compound verb (संयुक्त क्रिया) (B) Causal verb (प्रेरणार्थक क्रिया) (C) Intransitive verb (अकर्मक क्रिया) (D) Transitive verb (सकर्मक क्रिया)

72. How many types of pronouns (Sarvanam) are there? (A) 6 (B) 5 (C) 7 (D) 8

73. Indeclinable words that join two words, phrases, or sentences together are called: (A) Conjunction (समुच्चय बोधक अव्यय) (B) Interjection (विस्मयादि बोधक अव्यय) (C) Prepositional (संबंध सूचक अव्यय) (D) None of these

74. Which of the following is NOT a synonym for 'Desire' (इच्छा)? (A) Abhilasha (अभिलाषा) (B) Kamna (कामना) (C) Yatna (यातना) (D) Manorath (मनोरथ)

75. State the literal meaning of 'Padbandh' (पदबंध). (A) A bound group of many words (अनेक पदों का बंधा समूह) (B) A group of many sentences (अनेक वाक्यों का

these

76. The meaning of the idiom 'To step on embers' (अंगारों पर पैर रखना) is: (A) To suffer (कष्ट झेलना) (B) To knowingly invite trouble (जान बूझकर विपत्ति मोल लेना) (C) To speak harsh words in anger (क्रोध में आकर कठोर शब्द कहना) (D) None of these

77. The abstract noun of the word 'To fly' (उड़ना) is: (A) Udaan (उड़ान) (B) Udaap (उड़ाप) (C) Udahar (उड़ाहर) (D) Udai (उड़ाई)

78. The correct meaning of the word-pair 'Kuch-Kooch' (कुच-कूच) is: (A) Breast-Army (उरोज-सेना) (B) Army-Breast (सेना-स्तन) (C) Breast-Departure (उरोज-प्रस्थान) (D) Breast-Bud (स्तन-कली)

79. Which of the following does NOT mean 'Lotus' (कमल)? (A) Jalaj (जलज) (B) Kak (काक) (C) Saroj (सरोज) (D) Pankaj (पंकज)

80. Which compound (Samas) is present in 'Panchamrit' (पंचामृत)? (A) Tatpurush (तत्पुरुष) (B) Dvandva (द्वन्द्व) (C) Karmadharaya (कर्मधारय) (D) Dvigu (द्विगु)

v) English Language and Comprehension

81. Greenland is _____ largest island in the Atlantic ocean. (A) a (B) an (C) the (D) no article required

82. He is known as _____ Bhishma of our times. (A) an (B) the (C) a (D) none of these

83. We enjoy listening to the twittering birds as we walk _____ the woods. (A) since (B) on (C) ahead (D) through

84. The cricketers walked _____ the field to check the pitch. (A) towards (B) against (C) at (D) besides

85. You'll be coming early tomorrow, _____? (A) will you (B) can you (C) won't you (D) couldn't you

86. Let us go slow on the matter, _____? (A) shall we (B) do we (C) won't we (D) mustn't we

underlined word 'accuracy') (A) urgency (B) emergency (C) openness (D) precision

88. Prejudices prevail among the meanest of people. (Synonym of underlined word 'prevail') (A) triumph (B) last (C) erase (D) fail

89. John was haughty but his sister Jane was _____. (Antonym of underlined word 'haughty') (A) proud (B) imperious (C) disdainful (D) humble

90. While he failed as an artist, he _____ as a businessman. (Antonym of underlined word 'failed') (A) miscarried (B) flunked (C) flourished (D) gave out

91. He has _____ (fly) to Bangalore. (A) fled (B) flew (C) flowed (D) flown

92. After the incident, she _____ her head in shame. (hang) (A) hanged (B) hung (C) hanging (D) hang

93. Either she or her sisters _____ responsible for this. (be) (A) be (B) are (C) is (D) was

94. The producer and director _____ decided to start a new film. (form of 'have') (A) have (B) had (C) has (D) have been

95. Amarnath comes from East Punjab. (Identify the form of sentence) (A) Declarative sentence (B) Complex sentence (C) Compound sentence (D) Imperative sentence

96. He went to Madras, got his visa and came back. (Identify the form of sentence) (A) Complex sentence (B) Compound sentence (C) Simple sentence (D) None of these

97. He liked what I suggested. (Identify the form of sentence) (A) Simple sentence (B) Compound sentence (C) Complex sentence (D) Interrogative sentence

98. Though I am (A) / elder than my brother by (B) / five years, (C) / he is more successful in life than I. (D) *(Identify the part with error)*

99. Your handwriting (A) / is undoubtedly (B) / the worse in (C) / the class. (D) *(Identify the part with error)*

100. It began to rain (A) / and I had not (B) / unfortunately taken my (C) / raincoat with me. (D) *(Identify the part with error)*

SECTION 2

Post Specific Subject-Related Questions

101. The association mycorrhizae is: (A) Relationship of algae and fungi (B) Relationship of fungi and higher plants (C) Relationship of algae and higher plants (D) None of these
102. Father of Botany is: (A) Lamarck (B) Darwin (C) C. Linnaeus (D) Theophrastus
103. Chitin is present in the cell wall of: (A) Fungi (B) Bacteria (C) Protozoa (D) Algae
104. Phytoplankton: (A) Form the basis of most marine food chain (B) Include the multicellular green, red and brown algae (C) Are mutualistic symbionts that provide food for coral reef communities (D) Are unicellular protozoans
105. Five kingdom classification system of plant was proposed by Whittaker in the year: (A) 1859 (B) 1758 (C) 1862 (D) 1969
106. Possession by two or more species of a similar or identical character state that has not been derived by both species from their common ancestor is called: (A) Homoplasy (B) Homology (C) Homozygote (D) Homeotic mutation
107. *Rauvolfia serpentina* belonging to family: (A) Apocynaceae (B) Solanaceae (C) Liliaceae (D) Fabaceae
108. The Species that invade a bare area are called: (A) Keystone species (B) Extinct species (C) Pioneer species (D) Rare species
109. Tips of ecological pyramid is occupied by: (A) Producers (B) Herbivores (C) Carnivores (D) Omnivores
110. Polyembryony is useful in the propagation of: (A) Mango (B) Wheat (C) Jowar (D) Paddy
111. The terminal cell of the 2-celled proembryo divides by longitudinal wall and the basal cell and terminal cell both contribute to the development of embryo in: (A) Onagrad type (B) Asterad type (C) Solanad type (D) Caryophyllad type
112. Quiescent centre is found in plants at: (A) Root tip (B) Cambium (C) Shoot tip (D) Tip
113. Synthesis of ATP in mitochondria requires: (A) NADP (B) Oxygen (C) FMN (D) Pyruvic acid

Glyoxysomes (D) Peroxisomes

115. Mannitol is: (A) Amino acid (B) Amino alcohol (C) Sugar alcohol (D) Sugar acid

116. Which one of the following is a micronutrients in plants? (A) Magnesium (B) Zinc (C) Potassium (D) Calcium

117. Rubisco stands for: (A) Ribulose Bisphosphate carboxylase/oxygenase (B) Ribulose phosphate carboxylase oxygenase (C) Ribulose phosphate carboxylic oxygenase (D) None of the above

118. Deforestation has an alarming effect: (A) Soil erosion (B) Weed control (C) Sunlight (D) Increase in grazing area

119. The economic product of tobacco plant is: (A) Flower (B) Leaves (C) Stems (D) Roots

120. UPOV stands for: (A) Union for Protection of Vulnerable Species (B) International Union for the Protection of New Varieties of Plant (C) National Union for Protection of Variety (D) International Union for Protection of a Vulnerable Variety

121. The nitrifying bacteria are: (A) Photoautotrops (B) Chemoautotrophs (C) Chemoheterotrophs (D) Saprotrophs

122. The _____ is a Negative Association among soil organism. (A) Mutualism (B) Neutralism (C) Commensalism (D) Antagonism

123. In Biotechnology, DNA Sequence data can be protected by: (A) Patent (B) Secret code (C) Designs (D) Copyrights

124. Which is not the criteria to issue a patents for innovation? (A) Novelty (B) Usefulness (C) Inventiveness (D) Specification

125. Indian Head Patents Office is located in: (A) Kolkata (B) Mumbai (C) Chennai (D) Bangalore

126. Opium is obtained from: (A) Dried leaves (B) Root (C) Latex of unripe capsule (D) Seed

127. A company maintains competitive edge over competitors with an agreement enforced through: (A) Patents (B) Copyrights (C) Trade secrets (D) None of these

patents (B) Deposit patents, plant patents, divisional patents (C) Utility patents, design patents, plant patents (D) Deposit patents, utility patents, divisional patents

129. Which form of DNA helix is predominantly present in cell? (A) A-Form (B) Z-form (C) B-form (D) T-form

130. Latex vessels occurs in: (A) Xylum (B) Cambium (C) Bark (D) Cortex

131. Thalamus of hypogynous ovary is: (A) Concave (B) Convex (C) Biconcave (D) Biconvex

132. Axenic culture is: (A) Pure culture of a microbe without any nutrients (B) Pure culture without any contamination (C) Culture of tissue (D) Culture of Gene

133. IPRs are protected by: (A) Patents (B) Geographical indications (C) Designs (D) All of the above

134. Reserpine, a drug is extracted from: (A) Rauvolfia serpentina (B) Mangifera indica (C) Atropa belladonna (D) Digitalis purpurea

135. Curcumin is extracted from: (A) Turmeric (B) Ginger (C) Tulsi (D) Vinca rosea

136. The term leptome is used for: (A) xylem (B) phloem (C) endodermis (D) pericycle

137. Who is father of Ethnobotany? (A) Richard Schultes (B) Carl Linnaeus (C) Bentham and Hooker (D) Weston LA Barre

138. In which of the following technique, DNA from different sources are isolated and digested with restriction endonuclease? (A) RFLP (B) AFLP (C) SSR (D) RAPD

139. The initial codons are: (A) AUG (B) GUG (C) Both (A) and (B) (D) None of the above

140. Transfer of information from DNA to mRNA is called: (A) Transcription (B) Translation (C) Transduction (D) Migration

141. The genes that shuffle from one location to another are called: (A) Walking genes (B) Running genes (C) Jumping genes (D) None of the above

Yeast (C) Blue-green algae (D) None of the above

143. *Ocimum sanctum* belongs to the family: (A) Meliaceae (B) Acanthaceae (C) Liliaceae (D) Lamiaceae

144. The Succulent plants grows in: (A) Tundra (B) Deserts (C) Tropical rain forest (D) Temperate deciduous forests

145. In two dimensional electrophoresis, Proteins are separated: (A) First by their pI value and then by their mass (B) First by their mass and then by their pI value (C) Only on the basis of their charge (D) Only on the basis of their mass

146. The plant *Indigofera tinctoria* yielding a blue dye (nil) belonging to which of the following family? (A) Malvaceae (B) Liliaceae (C) Compositae (D) Papilionaceae

147. Acharya Jagadish Chandra Bose Indian Botanic Garden is located in: (A) Mumbai (B) Calcutta (C) Chennai (D) Delhi

148. Which of the following occurs during meiosis but not during mitosis? (A) Chromosomes align at the metaphase plate (B) Chromosomes condense (C) Chromosomes migrates to opposite poles (D) Synapsis of homologous chromosomes

149. Semi-conservative mode of DNA replication was proved by: (A) Watson and Crick (B) H. Khorana (C) Lederberg (D) Meselson and Stahl

150. What is the Central dogma? (A) Genetic information flows from RNA to DNA to protein (B) Genetic information flows from RNA to protein to DNA (C) Genetic information flows from DNA to RNA to protein (D) Genetic information flows from DNA to protein to RNA

151. Semi-solid transparent product prepared from clear extract of pectin containing fruit is: (A) Jam (B) Jelly (C) Marmalade (D) Squash

152. Quickest method of developing lawn is by: (A) Seed (B) Dibbling (C) Turfing (D) None of the above

153. Most expensive spice in the world is: (A) Juniper (B) Thyme (C) Asafoetida (D) Saffron

154. The aromatic plant used to provide delicate fragrance for floral decoration / bouquets is: (A) *Davana* (B) Lemon grass (C) Patchouli (D) Citronella

Mango (D) Bael

156. Which of the following is an example for day-neutral plant? (A) Onion (B) Sweet potato (C) Radish (D) Tomato

157. Flower crop resistant to ethylene injury (sleepiness) is: (A) Rose (B) Carnation (C) Anthurium (D) Gerbera

158. Objective of pre-cooling is: (A) To remove field heat (B) To fresh the product (C) To improve the quality (D) None of these

159. Judicious removal of plant part to obtain better and qualitative yield is termed as: (A) Budding (B) Grafting (C) Pruning (D) Layering

160. Which of the following is monoembryonic Citrus species? (A) Citrus reticulata (B) Citrus sinensis (C) Citrus aurantifolia (D) Citrus grandis

161. Soil crusting is a problem in: (A) Aridisols (B) Inceptisols (C) Vertisols (D) Alfisols

162. Inflorescence type present in Cashew crop is: (A) Pistillate (B) Andro monoecious (C) Poly gamomonoecious (D) Cyme

163. Aroma in Onion is due to the presence of: (A) Allyl Propyl disulphide (B) Diallyl disulphide (C) Allyl isothiocyanate (D) Dimethyl pyrazine

164. Arabian Jasmine species is: (A) Jasminum sambac (B) Jasminum grandiflorum (C) Jasminum multiflorum (D) Jasminum arborescence

165. Which of the following is used for disinfection measure in Mango? (A) High temperature and humidity (B) Low concentration of ethylene (C) Hydro cooling (D) Vapour Heat Treatment (VHT)

166. Tillage results in: (A) Decreased bulk density (B) No change in bulk density (C) Increased bulk density (D) None of these

167. Which of the following is used as a maturity index for Cabbage? (A) Tapping (B) Solidity (C) Aroma (D) Netting

168. Which of the following is not correct with respect to Eukaryotes? (A) DNA organised with histone proteins (B) True nucleus is absent (C) Cell division occurs by mitosis (D) Protoplasm is typically vacuolate

absent (B) Chloroplasts are absent (C) Animal cells lack vacuole (D) All the above

170. Which of the following is considered as power house of the cell? (A) Endoplasmic reticulum (B) Ribosomes (C) Mitochondria (D) Chloroplasts

171. Stroma and grana membranes are present in: (A) Ribosomes (B) Chloroplasts (C) Endoplasmic reticulum (D) None of these

172. Which of the following is affected first under water stress conditions? (A) Photosynthesis (B) Cell division and elongation (C) Protein synthesis (D) Transpiration

173. Value of Correlation Coefficient is: (A) More than +1 (B) Less than 1 (C) Lies between -1 and +1 (D) None of the above

174. Breeder seed is the progeny of: (A) Foundation seed (B) Registered seed (C) Nucleus seed (D) Certified seed

175. Which of the following is considered as stratification treatment given to seeds for breaking dormancy? (A) Pre-chilling (B) Pre-heating (C) Hot water treatment (D) All of these

176. Ecological study of individual organism is known as: (A) Pedology (B) Ecology (C) Synecology (D) Autecology

177. The plant that is characteristic component of mangrove vegetation is: (A) Lichen (B) Rhizophora (C) Alpines (D) None of these

178. Velocity of flow of water is explained by: (A) Darcy law (B) Christiansen formula (C) Blassius equation (D) William and Hazen equation

179. Parturition in cattle is known as: (A) Kidding (B) Lambing (C) Calving (D) Farrowing

180. Parturition in pigs is known as: (A) Kidding (B) Calving (C) Lambing (D) Farrowing

181. Regeneration of whole plant from callus and suspension cultures in the nutrient medium is: (A) Meristem culture (B) Embryo culture (C) Anther culture (D) Cell culture

Single cross hybrid (B) Three way cross hybrid (C) Double cross hybrid (D)
Double top cross hybrid

183. Disease caused by viruses is: (A) Blight (B) Blast (C) Bunchy top of banana (D) Downey mildew

184. Powdery mildew disease is controlled by spray of: (A) Copper fungicides (B) Mercuric fungicides (C) Sulphur fungicides (D) Carbamates

185. Which of the following types of pesticide formulation is mainly used in storage structures/seed godowns? (A) Solid formulations (B) Liquid formulations (C) Gaseous formulations (D) All of the above

186. Which of the following considered as main transmitters of viruses to plants? (A) Bees (B) Aphids (C) Leafhoppers (D) Beetles

187. Which of the following is considered as an essential step in the exchange of gases during respiration and photosynthesis? (A) Diffusion (B) Osmosis (C) Plasmolysis (D) Imbibition

188. Which one of the following is a neutral fertiliser? (A) Urea (B) Ammonium sulphate (C) Single super phosphate (D) Calcium ammonium nitrate

189. Potassium in Muriate of Potash (MOP) is present in the form of: (A) KCl (B) CaHPO_4 (C) K_2SO_4 (D) KPO_4

190. The form of nitrogen that is specific to denitrification is: (A) Amide (B) Ammonium (C) Nitrite (D) Nitrate

191. Varalaxmi is a hybrid developed in: (A) Rice (B) Cotton (C) Brinjal (D) Brassica

192. Contour cultivation is done: (A) Even topographic land (B) Along the slope of the field (C) Across the slope of the field (D) None of these

193. Golden Rice is rich in: (A) Vitamin A (B) Vitamin B (C) Vitamin C (D) Vitamin D

194. A millet crop is: (A) Sugarcane (B) Bajra (C) Barley (D) Jute

195. Adhali crop of sugarcane takes a period of maturity of: (A) 8 months (B) 12 months (C) 18 months (D) 24 months

196. Intercultivation operations are meant for: (A) Thinning (B) Roughing (C) Maintaining optimum plant stand (D) Destroying weeds

Sugarcane

198. Botanical name of six row barley is: (A) *Hordeum irregular* (B) *Hordeum distichon* (C) *Hordeum vulgare* (D) None of these

199. Dapog method of raising seedlings is related to: (A) Sugarcane (B) Tobacco (C) Paddy (D) Jute

200. Dwarfing gene in rice is: (A) Norin-10 (B) Branchytic - 2 (C) Dee-gee-woo-gen (D) Opaque - 2