

Sr. No.	Question
---------	----------

1. Marginal physical product (MPP) where P=production, and X=input, is equal to
 (A) $\Delta P / \Delta X$ (B) $\Delta X / \Delta P$
 (C) P/X (D) None of these
2. In which relation, an increase or a decrease in production of one product affect the production of the other inversely
 (A) Supplementary (B) Joint product
 (C) Competitive (D) Complementary
3. The World Trade Organization (WTO) is the successor to
 (A) ITO (B) GATT
 (C) UNCTAD (D) IMF
4. Which of the following is the apex bank for agricultural credit in India?
 (A) RBI (B) A. SIDBI
 (C) NABARD (D) A. SBI
5. A demand curve measures
 (A) Buyer's willingness to pay (B) Actual price a buyer must pay to get the product
 (C) Difference between a buyer's willingness to pay and the actual price of the product (D) All of these
6. Consumer surplus is
 (A) a buyer's willingness to pay plus the price (B) the price of the product minus the buyer's willingness to pay
 (C) when the buyer's willingness to pay and the price of the product are equal (D) a buyer's willingness to pay minus the price
7. According to the law of demand
 (A) there is a positive relationship between quantity demanded and price (B) as the price rises, demand will shift to the left
 (C) there is a negative relationship between quantity demanded and price (D) as the price rises, demand will shift to the right
8. Marginal utility signifies
 (A) utility from first unit (B) utility from last unit
 (C) utility from additional unit (D) utility from third unit
9. National Income means
 (A) Income of the Government (B) Money measure of the overall annual flow of goods and services in an economy
 (C) Value of the fixed wealth in an economy (D) Aggregate of the earnings of working class in an economy
10. Internal rate of return (IRR) is that rate at which Net Present value is
 (A) Positive (B) Negative
 (C) Zero (D) None of these

11. The residual left with the farmers after meeting his family consumption, farm requirements, social and religions payments is called as
 (A) Marketed surplus (B) Marketable surplus
 (C) Producer Surplus (D) Consumer Surplus
12. If the NPW is zero, then B/C ratio is
 (A) >1 (B) <1
 (C) $= 1$ (D) $= 0$
13. A market characterized by large number of sellers and buyers and homogenous product is known as
 (A) Monopoly (B) Oligopoly
 (C) Perfect (D) Monopolistic
14. Demand for goods which are needed for further production is called as
 (A) Derived Demand (B) Autonomous demand
 (C) Direct Demand (D) All of these
15. Which one of the following is not a measure to reduce the risk?
 (A) Diversification (B) Hedging
 (C) Contract sales (D) Monoculture
16. Marginal product is
 (A) Addition made to total production by the use of an additional input (B) Average production per unit of input use
 (C) Total addition to the production by addition input use (D) All of these
17. In which layer of the atmosphere there is a temperature inversion?
 (A) Troposphere (B) Stratosphere
 (C) Mesosphere (D) Ionosphere
18. Which layer of the atmosphere has lowest average temperature?
 (A) Troposphere (B) Stratosphere
 (C) Mesosphere (D) Ionosphere
19. The value of Environmental lapse rate is given as
 (A) $- 6.5^{\circ}\text{C} / \text{km}$ (B) $+ 6.5^{\circ}\text{C} / \text{km}$
 (C) $5.5^{\circ}\text{C} / \text{km}$ (D) $5.0^{\circ}\text{C} / \text{km}$
20. Wind direction is measured as –
 (A) From where it comes (B) Where it goes
 (C) It touches the face (D) A and C both are correct
21. Vertical distribution of microclimate is:
 (A) 10^{-2} to 10^1 m (B) 10^{-2} to 10^2 m
 (C) 10^{-2} to 10^3 m (D) 10^{-2} to 10^4 m
22. Name the most important weather element –
 (A) Temperature (B) Rainfall
 (C) Cloud Cover (D) Atmospheric Pressure
23. ‘Khaira disease’ (also known as iron rust) of rice is caused due to:
 (A) Excessive application of nitrogen (B) Deficiency of zinc
 (C) Bacterial infection (D) Iron deficiency

24. Lysine is a limiting amino acid in:
 (A) Cereals (B) Pulses
 (C) Oilseeds (D) Green vegetables
25. Which among the following herbicides is non-selective herbicide?
 (A) Paraquat (B) Alachlor
 (C) Butachlor (D) Atrazine
26. Berseem seed is treated with:
 (A) *Rhizobium meliloti* (B) *Rhizobium lupini*
 (C) *Rhizobium trifoli* (D) *Rhizobium Japonicum*
27. Conversion of ADP to ATP is known as:
 (A) Photolysis (B) Photo phosphorylation
 (C) Photosynthesis (D) Photorespiration
28. Deficiency of which essential plant nutrient leads to ‘pop pod in groundnut’:
 (A) Sulphur (B) Calcium
 (C) Phosphorus (D) Boron
29. Which among the following weeds causes dropsy disease in human beings:
 (A) *Pluchea lanceolata* (B) *Digera arvensis*
 (C) *Parthenium hysterophorus* (D) *Argemone mexicana*
30. Roots absorb water from soil:
 (A) Actively (B) Passively
 (C) Both actively and passively (D) None of these
31. Sunflower belongs to family:
 (A) *Cruciferae* (B) *Austraceae*
 (C) *Malvaceae* (D) *Poaceae*
32. Removal of uniform thin layer of soil by the action of water is referred as:
 (A) Splash erosion (B) Sheet erosion
 (C) Rill erosion (D) Gully erosion
33. Major source of water used by plants is:
 (A) Capillary water (B) Hygroscopic water
 (C) Gravitational water (D) Inter space water
34. *Parthenium hysterophorus* (Congress grass) can be controlled by:
 (A) *Chrysomella spp.* (B) *Dactylopius tomentosus*
 (C) *Zygomma bicolorata* (D) *Neochetina spp.*
35. Heavy shedding of buds and bolls occurs in cotton due to:
 (A) Nitrogen deficiency in soil (B) Phosphorus deficiency in soil
 (C) Magnesium deficiency in soil (D) Water stress at bud formation stage
36. Drip irrigation is most suited to:
 (A) Acid soil (B) Alkaline soil
 (C) Saline soil (D) All of these
37. The term ‘LEISA’ is related to:
 (A) Organic farming (B) Inorganic farming
 (C) Natural farming (D) All of these

38. Light intensity at which photosynthesis and respiration are equal is known as:
 (A) Light compensation point (B) Light saturation point
 (C) Net photosynthesis (D) None of these
39. Which type of maize is mainly grown in India?
 (A) Dent corn (B) Waxy corn
 (C) Flint corn (D) Sweet corn
40. Canola is a group of plants belonging to:
 (A) Mustard (B) Safflower
 (C) Castor (D) Vegetables
41. One ha cm of water is equal to:
 (A) 1000 tonnes of water (B) 100,000 litres of water
 (C) 10 tonnes of water (D) 10,000 litres of water
42. Under stress conditions, which amino acid is accumulated in plants:
 (A) Methionine (B) Tryptophan
 (C) Proline (D) Phenyl alanine
43. Stem nodulation occurs in green manure crop of:
 (A) *Aeschynomene afraspera* (B) *Crotalaria juncea*
 (C) *Sesabania aculeata* (D) *Vigna tunguiculata*
44. Stomata closing can be induced by:
 (A) Kaoline (B) Linseed oil
 (C) 2,4-D (D) PMA
45. Most damaging single influence on storage life of seeds is:
 (A) High moisture content (B) High temperature
 (C) Low moisture content (D) Both (A) and (B)
46. Instrument used for measuring solar radiation is:
 (A) Anemometer (B) Barograph
 (C) Pycrometer (D) Pyranometer
47. Attraction of water molecules towards soil particles is:
 (A) Adhesion (B) Surface tension
 (C) Capillary force (D) Cohesion
48. The critical slope for soil erosion is:
 (A) 1% (B) 2%
 (C) 3% (D) 5%
49. The instrument used for measuring depth of water table is known as:
 (A) Lysimeter (B) Piezometer
 (C) Odometer (D) Evaporimeter
50. Sesame belongs to family:
 (A) Poaceae (B) Papilionoideae
 (C) Pedaliaceae (D) Ceasalpinoideae
51. Water inside the plant moves through:
 (A) Phloem (B) Xylem
 (C) Fibre cells (D) All of these

52. While testing seed, the grow out test is conducted to determine:
 (A) Genetic purity (B) Seed viability
 (C) Physical purity (D) Yield potential
53. Optimum seed rate (kg/ha) of soybean is:
 (A) 50-60 (B) 70-80
 (C) 80-90 (D) 100-110
54. Which chemical causes Finger leaf disease in cotton?
 (A) 2,4-D (B) Mancozeb
 (C) Boron (D) Acephate
55. Cycocel is a:
 (A) Auxin (B) Abscisic acid
 (C) Cytokinin (D) Growth retardant
56. Which among the following is the most severe form of soil water erosion?
 (A) Rill (B) Gully
 (C) Sheet (D) Splash
57. Enzyme responsible for carboxylation in C_3 type plants is:
 (A) Ribulose diphosphate dehydrogenase (B) Phosphoenol pyruvic acid
 (C) Ribulose-1,5-biphosphate carboxylase (D) Glyceraldehyde dehydrogenase
58. Which among the following is a frost tolerant variety of raya
 (A) Kranti (B) RH 781
 (C) RH 0749 (D) Pusa Vijay
59. Contaminants in cotton are known as
 (A) Dirt (B) Inert matter
 (C) Motes (D) None of these
60. In north India, sugarcane is mostly used with how many buds?
 (A) Two bud setts (B) Three bud setts
 (C) Four bud setts (D) Single bud setts
61. Major groundnut producing state in India is:
 (A) Andhra Pradesh (B) Gujarat
 (C) Maharastra (D) Tamil Nadu
62. Photoperiodically, wheat is:
 (A) Short day plant (B) Day neutral plant
 (C) Long day plant (D) Intermediate
63. The inflorescence of sugarcane is known as:
 (A) Panicle (B) Arrow
 (C) Racemose (D) Tiller
64. Which among the following is a mycoherbicide
 (A) Collego (B) Valour
 (C) Bromacil (D) Metribuzin
65. Name of the insect Order in which (in general), the larval stage is phytophagous and adults are nectar feeder/sap suckers:
 (A) Orthoptera (B) Hemiptera
 (C) Neuroptera (D) Lepidoptera

66. Which insecticide formulation consists of active ingredient mixed with a liquid solvent that needs to be diluted with water prior to application?
 (A) Wettable powder (B) Emulsifiable concentrate
 (C) Water dispersible powder (D) Soluble powder
67. Which of the following characteristics do immature Lepidopteran and Coleopteran insects share?
 (A) They are all plant feeders (B) They are all found in the soil
 (C) They are all called nymphs (D) They all have biting and chewing mouthparts
68. Summer diapause is known as
 (A) Hibernation (B) Overwintering
 (C) Aestivation (D) None of these
69. The scientific name of the Italian honey bee is
 (A) *Apis mellifera* (B) *Apis indica*
 (C) *Apis dorsata* (D) *Apis florae*
70. The larval stage is predatory whereas the adults are pollinator in case of
 (A) Syrphid (B) Coccinellid
 (C) Chrysopa (D) All of these
71. The opening on an arthropod body surface that allows for air transfer is called:
 (A) Spiracle (B) Trachea
 (C) Tracheoles (D) Alveoli
72. What are located between the compound eyes which may be variable in number, but never exceed three in number? Function appears to aid the insect in determining light intensities - unable to form images
 (A) Labrum (B) Ocelli
 (C) Gena (D) Frons
73. Honey bees often sting
 (A) Single time (B) Two times
 (C) Multiple times (D) All of these
74. The body temperature of insects normally follows closely the temperature of the surrounding and hence, it is termed as
 (A) Hyperthermic (B) Warm blooded
 (C) Cold hardiness (D) Poikilothermic
75. Brown plant hopper is a major pest of
 (A) Cotton (B) Sunflower
 (C) Mustard (D) Paddy
76. The use of synthetic pyrethroids has caused serious outbreaks of
 (A) Bihar hairy caterpillar (B) Whitefly
 (C) Mango mealy bug (D) Mosquitoes
77. The common name of *Chilo partellus* is
 (A) Sugarcane stem borer (B) Sorghum shootfly
 (C) Paddy stem borer (D) Maize stem borer

78. Wings are absent in
 (A) Hymenoptera (B) Thysanura
 (C) Thysanoptera (D) Trichoptera
79. Mouth parts in thrips belong to the type
 (A) Chewing type (B) Biting type
 (C) Asymmetrical type (D) Sucking type
80. *Trichogramma chilonis* is
 (A) Predator of mustard aphid (B) Larval parasite of mealy bug
 (C) Egg parasitoid of sugarcane borers (D) Pupal parasitoid of cabbage butterfly
81. The systematic is the study of:
 (A) genetic makeup of reproductive insects (B) relationships between groups of any size
 (C) orders of insects only (D) morphological characters only
82. Pest which occurs in isolated locations is known as
 (A) Persistent pest (B) Seasonal pest
 (C) Sporadic pest (D) Occasional pest
83. Which is the pest of potato tuber in field and storage
 (A) Mealy bug (B) Cutworm
 (C) Potato aphid (D) Potato tuber moth
84. In insect population which have only one generation a year, the shape of population growth curve is:
 (A) S-shaped curve (B) J-shaped curve
 (C) Both A and B (D) None of these
85. The grazing food web begins with:
 (A) Detrivores (B) Carnivores
 (C) Heterotrophs (D) Autotrophs
86. Economic injury level is ----- economic threshold level.
 (A) Half of the (B) Equal to
 (C) Greater than (D) Less than
87. PRA stands for:
 (A) Participatory Rural Appraisal (B) Participatory Rapid Appraisal
 (C) Programme Review Appraisal (D) People's Rural Appraisal
88. National Agricultural Technology Project was started in the year:
 (A) 1996 (B) 1998
 (C) 1994 (D) 2000
89. According to Prof. Mildred Hurton, the first training group of human race is:
 (A) Family (B) Community
 (C) Country (D) Home

90. Lt. Col. Albert Mayer started a project called :
 (A) Gurgaon Project
 (B) Nilokheri Project
 (C) Etawah Pilot Project
 (D) Marthandom Project
91. The word communication is derived from:
 (A) Greek word
 (B) French word
 (C) Russian word
 (D) Latin word
92. In the preparation of audio-visual aids, the principle of ‘A’, ‘B’, ‘C’ signifies:
 (A) Attractiveness, Brevity, Concreteness
 (B) Attractiveness, Brevity, Colour
 (C) Attractiveness, Brevity, Clarity
 (D) Attitude, Brief, Communication
93. Which among the following is a method of identifying leader?
 (A) Socio-metric method
 (B) Self–designated method
 (C) Informants’ rating
 (D) All the above
94. Which among the following models of communication is called ‘Mathematical Theory of Communication’:
 (A) Berlo’s Model
 (B) Shannon and Weaver’s Model
 (C) Aristotle’s Model
 (D) Leagan’s Model
95. Single line of command was one of the main features of:
 (A) EPP
 (B) NAEP
 (C) NARP
 (D) T & V
96. Extension Education Institute for North India is located at:
 (A) Haryana
 (B) Punjab
 (C) UP
 (D) Bihar
97. Extension Programme is a statement of situation, objectives, problems and:
 (A) Motivation
 (B) Attitude
 (C) Reasons
 (D) Solution
98. Which among the following entrepreneurs is timid and cautious in nature:
 (A) Fabian
 (B) Drone
 (C) Imitative
 (D) Innovative
99. Which among the following is a technique of idea generation :
 (A) Seminar
 (B) Conference
 (C) Brain storming
 (D) Incubation
100. The concept of venture capital was originated in:
 (A) India
 (B) Japan
 (C) U.K.
 (D) U.S.A.
101. Temperate Forests of the Western Himalayas are the Climatic Climax of the following:
 (A) Abies spp
 (B) Cedrus spp.
 (C) Quercus spp.
 (D) Betula spp

102. The yield of forest is regulated on the basis of volume by using following:
 (A) Von Mantel's formula (B) Permanent allotment method
 (C) Annual coups (D) Periodic block method
103. Widely accepted Classification of Forest Types of India is based upon:
 (A) Climate (B) Physiography
 (C) Ecology (D) Composition
104. Field planting season for poplar tree is
 (A) Winter (B) Summer
 (C) Rainy (D) Throughout the year
105. Sulphate navel stores are by-products of the following pulping process:
 (A) Soda pulping (B) Sulphate pulping
 (C) Kraft pulping (D) None of the above
106. Ghatti gum is obtained from:
 (A) *Sterculia ureus* (B) *Astragalus spp*
 (C) *Anogeissus latifolia* (D) *Acacia arabica*
107. Maximum segregation is observed in:
 (A) F₁ (B) F₂
 (C) F₃ (D) F₄
108. Single seed descent method is a modification of:
 (A) Pedigree method (B) Bulk method
 (C) Mass selection (D) F₄
109. Vegetatively propagated crops are usually:
 (A) Homozygous (B) Heterozygous
 (C) Both A and B (D) Apomictic
110. The most commonly used breeding scheme is:
 (A) Back cross method (B) Bulk method
 (C) Pedigree method (D) Mass selection
111. Landraces are very good sources of genes for:
 (A) high yield (B) adaptability
 (C) Both (A) and (B) (D) None of these
112. Variation within a pureline is due to
 (A) Genetic causes (B) Environment
 (C) Both (A) and (B) (D) None of these
113. Transgenic plants are being cultivated in India in:
 (A) Brinjal (B) Wheat
 (C) Cotton (D) Soybean
114. Cotton and pigeonpea are:
 (A) Cross pollinated (B) Self pollinated
 (C) Often cross pollinated (D) Apomictic

115. Which of the following has been used for inducing male sterility in Bajra ?
 (A) Tift 23 A (B) *H. petiolaris*
 (C) Milo (D) *T. timopheevi*
116. TGMS and PGMS systems of male sterility are available in:
 (A) Wheat (B) Sorghum
 (C) Rice (D) Bajra
117. Centre of origin of *Gossypium herbaceum* is:
 (A) North America (B) South America
 (C) Africa (D) India
118. Golden rice is related to enhanced:
 (A) pro-vitamin A (B) Mg
 (C) Zn (D) Cu
119. Genetic disassortative mating will result in:
 (A) Reduced homozygosity (B) Increased homozygosity
 (C) More inbreeding depressions (D) None of these
120. One map unit is equal to:
 (A) 1% recombination between genes (B) 100% recombination between genes
 (C) 50% recombination between genes (D) 10% recombination between genes
121. If recombination occurs before the chromosome replication, percentage of parental type gametes will be:
 (A) 100 (B) 50
 (C) 25 (D) 0
122. Which of following mechanisms does not promotes cross pollination:
 (A) Dicliny (B) Chasmogamy
 (C) Dichogamy (D) Self-incompatibility
123. Which of the following can be considered a case of non- Mendelian inheritance ?
 (A) Extra-nuclear inheritance (B) Multiple alleles
 (C) Incomplete dominance (D) All of these
124. Upper limit of crossing over between two genes is:
 (A) 100 % (B) 50 %
 (C) 25 % (D) 75 %
125. Bacterial artificial chromosome may be used for the construction of:
 (A) c-DNA library (B) Genomic library
 (C) Tissue specific library (D) All of these
126. Experiment that unambiguously demonstrated that DNA is the genetic material was conducted by:
 (A) Watson and Crick (B) Hershey and Chase
 (C) Fred Griffith (D) Avery, MacLeod and McCarty

127. Which of the following is not an auxin:
 (A) Indole acetic acid (B) 2,4-D
 (C) Kinetin (D) Naphthalene acetic acid
128. Fusion of cytoplasm from two species and nuclear genes from any one species leads to the development of:
 (A) Cybrid (B) Somatic hybrid
 (C) Protoplast (D) None of these
129. Polymerase chain reaction (PCR) was invented by:
 (A) Rosalind Franklin (B) Arthur Korenburg
 (C) Watson and Crick (D) K Mullis
130. Which of the following is not a "direct gene transfer" method:
 (A) Liposome encapsulation (B) Microinjection
 (C) Agrobacterium (D) Particle bombardment
131. Which of the following fruits is a rich source of vitamin C?
 (A) Apple (B) Mango
 (C) Aonla (D) Papaya
132. Mulching is helpful in
 (A) Moisture conservation (B) Weed control
 (C) Both A & B (D) Neither A nor B
133. Which of the following varieties of apple is a pollinizer?
 (A) Red Chief (B) Golden Delicious
 (C) Royal Delicious (D) Red Delicious
134. Which of the following varieties of mango is suitable for high density planting?
 (A) Neelum (B) Langra
 (C) Alphonso (D) Amrapalli
135. Which fruit crop is suitable for arid regions?
 (A) Apple (B) Ber
 (C) Banana (D) Pineapple
136. Which system of planting is most suitable for sloppy lands in hilly areas?
 (A) Contour (B) Square system
 (C) Hexagonal (D) Rectangular
137. Spongy tissue is a physiological disorder of
 (A) Mango (B) Guava
 (C) Apple (D) Papaya
138. Which PGR is commonly used for rooting initiation in stem cuttings?
 (A) ABA (B) 2, 4-D
 (C) IBA (D) IAA
139. Which among the following is an aggregate fruit
 (A) Pineapple (B) Strawberry
 (C) Pomegranate (D) Grape

140. Among these fruit crops, the richest source of Fe is
 (A) Banana (B) Ber
 (C) Jamun (D) Karonda
141. Which of following fruit is most suitable for jelly making
 (A) Apple (B) Banana
 (C) Ber (D) Guava
142. Most of apple varieties have the chilling requirement of
 (A) 2000-3000 hrs. (B) 1000-1500 hrs
 (C) 100-500 hrs. (D) 500-1000 hrs.
143. Which of the following nematode is kidney shaped:
 (A) *Heterodera* (B) *Rotylenchus*
 (C) *Pratylenchus* (D) *Xiphinema*
144. A series of transverse depressions on the cuticle of nematode is:
 (A) Annulations (B) Appendages
 (C) Striae (D) None of these
145. Transmission of grape vine fan leaf virus is by nematode:
 (A) *Radopholus similis* (B) *Ditylenchus angustus*
 (C) *Anguina tritici* (D) *Xiphinema index*
146. Which of the following is nematicide:
 (A) Dinocap (B) Metalaxyl
 (C) Tridemorph (D) None of these
147. *Anguina tritici* causes:
 (A) Molya disease of wheat (B) Ear cockle disease of wheat
 (C) Root knot of vegetables (D) All of these
148. Which of the following is a piercing organ in nematode:
 (A) Haustorium (B) Appressorium
 (C) Stylet (D) None of these
149. *Sclerotinia sclerotiorum* survives in soil in the form of:
 (A) Oospore (B) Sclerotia
 (C) Basidiospore (D) Perithecia
150. Irish famine was caused due to:
 (A) Early blight of potato (B) Downy mildew of onion
 (C) Late blight of potato (D) Downy mildew of grapes
151. Rust and smut fungi belong to:
 (A) Zygomycota (B) Basidiomycota
 (C) Ascomycota (D) Oomycota
152. Whiptail of cauliflower is due to
 (A) Oxygen deficiency (B) Water deficiency
 (C) Mo deficiency (D) Zn deficiency

153. Citrus canker is caused by
 (A) Bacteria (B) Nematode
 (C) Fungi (D) Algae
154. Which one of the following is not a biological control agent:
 (A) *Trichoderma* (B) *Pseudomonas*
 (C) *Paecilomyces* (D) *Xanthomonas*
155. Gene for Gene hypothesis was given by
 (A) Anton de Bary (B) H.H. Flor
 (C) P. M.A. Millardet (D) T.J. Burrill
156. Cadang-Cadang disease of coconut is caused by
 (A) Fungi (B) Bacteria
 (C) Viroid (D) Nematode
157. Components of bordeaux mixture are
 (A) Lime, iron sulphate, water (B) Lime, ferrous sulphate, water
 (C) Lime, copper sulphate, water (D) Lime, calcium chloride, water
158. Transportation of potato tuber for seed purpose is not allowed from Darjeeling hills to North India due to the presence of
 (A) *Synchytrium endobioticum* (B) *Rhizoctonia solani*
 (C) *Sclerotinia rolsii* (D) *Sclerotinia sclerotiorum*
159. *Albugo candida* survives as
 (A) Ascospores (B) Basidiospores
 (C) Pycniospores (D) Oospores
160. Which one of the following chemical is most effective in managing downy mildew diseases:
 (A) Dinocap (B) Metalaxyl
 (C) Wettable sulphur (D) Tetracycline
161. Moko disease of banana is caused by
 (A) *Colletotrichum gloeosporioides* (B) *Pseudomonas musae*
 (C) *Colletotrichum musae* (D) *Ralstonia solanacearum*
162. Apothecium contains
 (A) Conidia (B) Basidiospores
 (C) Ascospores (D) Zoospores
163. Asexual fruiting bodies of anthracnose fungi are
 (A) Sporodochia (B) Cleistothecia
 (C) Sporangia (D) Acervuli
164. In *Venturia inaequalis*, the acsi and ascospores are formed in
 (A) Pseudothecium (B) Cleistothecium
 (C) Pycnium (D) Acervulus
165. Rust of rose is caused by
 (A) *Puccinia* spp. (B) *Uromyces* spp.
 (C) *Phakopsora* spp. (D) *Phragmidium* spp.

166. Premature leaf fall of apple is caused by
 (A) *Marssonina coronaria* (B) *Taphrina deformans*
 (C) *Venturia inaequalis* (D) None of these
167. Powdery mildew of mango is caused by
 (A) *Oplidium mangiferae* (B) *Erysiphe polygoni*
 (C) *Oidium mangiferae* (D) *Macrophoma mangiferae*
168. Blister blight of tea is caused by
 (A) *Cephaleuros mycoidea* (B) *Exobasidium vexans*
 (C) *Poria hypolateritia* (D) *Botryodiplodia theobromae*
169. Which one of the following is not a component of 'disease triangle'
 (A) Susceptible host (B) Suppressive soil
 (C) Favourable environment (D) Virulent pathogen
170. Stem gall of coriander is caused by
 (A) *Protomyces macrosporus* (B) *Agrobacterium tumefaciens*
 (C) *Taphrina deformans* (D) *Agrobacterium radiobacter*
171. Hypogeal type of seed germination occur in
 (A) French Bean (B) Pea
 (C) Bitter gourd (D) All of these
172. Varietal purity is checked by
 (A) Germination test (B) Vigour test
 (C) Grow out test (D) None of these
173. Seed priming improves the
 (A) Longevity of seed (B) Vigour of seed
 (C) Colour of the seed (D) All of these
174. Physical dormancy caused by hard seed coat is overcome by
 (A) Stratification (B) Scarification
 (C) Steeping (D) Fluid drilling
175. Desiccant used for drying of seed is
 (A) Cellulose (B) Wood ash
 (C) Silica gel (D) Activated clay
176. Safe seed moisture content for sealed storage is
 (A) 4-8 % (B) 8-12 %
 (C) < 4% (D) None of these
177. Acid soil can be amended with the help of
 (A) Lime (B) FYM
 (C) None (D) Both
178. Basalt is a _____ rock
 (A) Igneous (B) Sedimentary
 (C) Metamorphic (D) Mixture of all

179. Which of the following microbes involve in the nitrification process?
 (A) Nitrifactor (B) Nitrobacter
 (C) Both (D) None
180. The range of usefulness of tensiometers is between
 (A) 0-1.0 bar (B) 0-0.8 bar
 (C) 0-0.6 bar (D) 0-0.33 bar
181. Vascular – arbuscular mycorrhiza (VAM) is known for;
 (A) Nitrogen fixation (B) Uptake of phosphorus
 (C) Sulphur oxidation (D) None of these
182. Khaira disease of rice is caused due to deficiency of
 (A) Mn (B) Zn
 (C) Fe (D) N
183. Bone meal is well suited for
 (A) Alkaline soil (B) Neutral soil
 (C) Acid soil (D) All of these
184. Single superphosphate contains :
 (A) 20% P₂O₅ (B) 16-18 % P₂O₅
 (C) 10-46% P₂O₅ (D) 20-25% P₂O
185. Epipedon is a diagnostic
 (A) Surface horizon (B) Sub-surface horizon
 (C) Both A & B (D) None of these
186. At what PF wilting percentage arrives
 (A) 4.2 (B) 4.5
 (C) 5.0 (D) 6.0
187. Petrogenesis which is the study of the
 (A) Description of rocks (B) Origin of rocks
 (C) Texture of the rocks (D) Density of rocks
188. Three particles have diameters of 0.5, 1.5, and 0.15 mm. The three particles are
 (A) Sand, silt, and clay (B) Sand, gravel, and silt
 (C) Sand, sand and sand (D) Silt, silt, and clay
189. The root growth is drastically reduced when Oxygen Diffusion Rate (ODR) is decreases to about
 (A) 20 x 10⁻⁸ g/cm²/minute (B) 30 x 10⁻⁸ g/cm²/minute
 (C) 40 x 10⁻⁸ g/cm²/minute (D) 50 x 10⁻⁸ g/cm²/minute
190. The availability of plant nutrients are more at a pH range of 6-7 except
 (A) P (B) K
 (C) B (D) Mo
191. Montmorillonite has higher cation exchange capacity (CEC) in comparison to
 (A) Kaolinite (B) Illite
 (C) Both of these (D) None of these

192. In which soil structure infiltration, permeability and aeration are good
(A) Platy (B) Prism like
(C) Block like (D) Sphere like (granular)
193. The harmful effect of continuous application of sewage water over several years may result in enrichment of
(A) Cd (B) N
(C) P (D) Ca
194. Irrigation water quality is evaluated based upon
(A) Total salt content, sodium and specific ion toxicities (B) pH of the water
(C) Acidity of the water (D) Ca content of the water
195. Orange coloured varieties in carrot is rich source of
(A) Carotene (B) Lycopene
(C) Anthocyanine (D) None of these
196. Per hectare seed rate of broad bean is
(A) 20-30 kg (B) 30-40 kg
(C) 50-60 kg (D) 70-100 kg
197. Potato is mainly propagated by
(A) Tuber (B) Corm
(C) Seeds (D) Selts
198. Types of vegetable gardening followed on the Dal Lake of the Kashmir Valley is
(A) Floating garden (B) Hydroponics
(C) Kitchen garden (D) None of these
199. Which of the following is best for vegetable cultivation
(A) Sandy soil (B) Sandy loam soil
(C) Clay loam soil (D) Clay soil
200. Hybrid variety of chilli recommended for cultivation is
(A) Punjab Lal (B) CH-I
(C) Punjab Surkh (D) None of the above