

AGRICULTURE

1. The number of Agro-Climatic Zones in India is
(1) 10 (2) 15
(3) 20 (4) 25
2. The quantity of urea needed for applying 120 kg nitrogen to rice will be
(1) 240 kg (2) 250 kg
(3) 260 kg (4) 270 kg
3. Which of the following manure is considered as bio-fertiliser?
(1) Farm yard manure
(2) Compost
(3) Green manure
(4) Blue green algae
4. The average yield of sugarcane in Northern India is low as compared to Southern India because of
(1) Varietal variability
(2) Soil fertility status
(3) Climatic conditions
(4) Crop management
5. Phalaris minor weed is an associated weed with crop
(1) Wheat (2) Maize
(3) Rice (4) Chick pea
6. Sugandha-9 is a variety of which crop?
(1) Maize (2) Rice
(3) Moong (4) Paa
7. The botanical name of Berseem is
(1) *Trifolium alexandrinum*
(2) *Trifolium repens*
(3) *Trifolium pratense*
(4) *Trifolium incarnatum*
8. The period between maximum tillering and panicle initiation is known as
(1) Transplanting stage
(2) Seeding stage
(3) Vegetative/Ag phase stage
(4) Tillering stage

9. The time of planting of main crop of potato in Northern plain is
(1) First fortnight of October
(2) Second fortnight of October
(3) First fortnight of November
(4) Second fortnight of November
10. Which herbicide is recommended for the control of weeds in Urd/cowpea?
(1) Atrazine (2) 2, 4-D
(3) Simazine
(4) Fluchloralin
11. Maize crop planted at a spacing of 90 x 20 cm, will have plants/ha _____
(1) 70,000 (2) 80,000
(3) 90,000 (4) 1,00,000
12. Which crop is used for green manure?
(1) Guaracha (2) Mustard
(3) Toria (4) Sunflower
13. Paddy variety suitable for salt affected areas is
(1) NDR - 250
(2) Pant Dhan - 4
(3) CSR - 31
(4) Sarja - 82
14. The crop rotation occupying highest area in U.P. is
(1) Rice - Wheat
(2) Bajra - Wheat
(3) Maize - Mustard
(4) Sugarcane - Green
15. The rotation of maize-potato-wheat-moong is an example of
(1) Inter cropping
(2) Parallel cropping
(3) Relay cropping
(4) None of these
16. Sulphur content in single super phosphate is
(1) 8% (2) 12%
(3) 16% (4) 20%
17. Ratoon Stunting in sugarcane is caused by _____
(1) Virus (2) Fungus

(3) Bacteria

(4) None of these

18. The components of organic farming are
(1) Organic manure
(2) Bio-fertilisers
(3) Bio-pesticides
(4) All of the above
19. UPAS-120 is a variety of
(1) Wheat (2) Urd
(3) Green (4) Pigeon pea
20. Whenever land irrigation is available, the wheat crop should be irrigated at
(1) Tillering stage
(2) Flowering stage
(3) Crown Root Initiation stage
(4) Milling stage
21. In which State production of Bananas is maximum?
(1) Uttar Pradesh
(2) Tamil Nadu
(3) Punjab (4) Haryana
22. White Bunt is a good remedy for
(1) Distemper
(2) Skin problem
(3) Cancer
(4) Heart disease
23. The perennial variety of chick is
(1) Arka Lokit
(2) Pusa Jwala
(3) Pusa Seedeless
(4) Pant C-1
24. Bitterness in heteroguard is due to
(1) Capsaicin
(2) Quercetin
(3) Mimosidin
(4) None of these
25. Which of the following is a pear shaped variety of tomato?
(1) Pant Bahar
(2) Pusa Ruby
(3) Hesar Lahori
(4) Punjab Chitrawari

36. Indian Institute of Vegetable Research is established at
(1) New Delhi (2) Varanasi
(3) Lucknow (4) West Bengal
37. What is the seed-rate of rearing-gold/ha.?
(1) 1.5 kg (2) 3.0 kg
(3) 2.5 kg (4) 3.0 kg
38. Which one is the variety of Okra?
(1) Jwala
(2) Gauri
(3) Priyadarshini
(4) All of the above
39. Which is the most serious disease of Okra?
(1) Root rot
(2) Powdery mildew
(3) Yellow vein mosaic
(4) Downy mildew
40. Central Institute of Subtropical Horticulture is located at
(1) Bangalore (2) Lucknow
(3) Bangalore (4) Deharu
41. The percentage of histone of the total proteins of chromosome is around
(1) 80 (2) 85
(3) 90 (4) 95
42. The inheritance of how many characters was studied by Mendel in pea?
(1) 5 (2) 7
(3) 8 (4) 11
43. In which pulse crop, the first hybrid variety was developed in India?
(1) Pigeon (2) Green
(3) Arhar (4) Moong
44. In hybrid variety development, the male sterile line is represented as
(1) B-line (2) D-line
(3) C-line (4) A-line
45. In which country ICRISAT is located?
(1) India
(2) Australia
(3) Philippines
(4) Mexico
46. Which one of the following is not a Kharif crop?
(1) Groundnut
(2) Maize
(3) Linseed
(4) Paddy
47. The use of induced mutation to crop improvement is called
(1) Polyploid breeding
(2) Mutation breeding
(3) Microsate breeding
(4) Molecular breeding
48. The term mutation is given by
(1) De Vries (2) Morgan
(3) Beadle and Tatum
(4) Weill
49. Sulfathiazole is an effective herbicide in the crop of
(1) Arhar
(2) Paddy
(3) Wheat
(4) None of these
50. Safe herbicide for water + arhar intercropping system is
(1) S. 4-D
(2) Simazine
(3) Atrazine
(4) Pendimethalin
51. The term "chromosome" was coined by
(1) Mendel (1864)
(2) Waldeyer (1888)
(3) Brachauer (1875)
(4) Morgan (1910)
52. Which of the following can change the chromosome structure?
(1) Translocation
(2) Deletion
(3) Duplication
(4) All of the above
53. Dehulling in potato is done to obtain
(1) Quality seed
(2) Higher yield
(3) Big tubers
(4) None of these
54. Heterosis can be fully exploited in the form of
(1) Synthetic (2) Composite
(3) Hybrid (4) Multiline
55. Initial seed of an improved variety is called as
(1) Breeder seed
(2) Nucleus seed
(3) Foundation seed
(4) Certified seed
56. Seed viability is being tested by
(1) Tetrazolium test
(2) First count test
(3) Over out test
(4) None of these
47. The proper isolation technique for maintenance breeding of male sterile line (A x B) in hybrid rice is
(1) 100 m (2) 200 m
(3) 400 m (4) 500 m
48. S.R.L. method of cultivation is related with the crop of
(1) Wheat
(2) Sugarcane
(3) Paddy
(4) None of these
49. Which colour lag is used for breeder seed?
(1) Red (2) Blue
(3) White (4) Yellow/Golden
50. Improved seed distributed to farmers for commercial cultivation is
(1) Certified seed
(2) Breeder seed
(3) Foundation seed
(4) Nucleus seed
51. Forces responsible for retention of soil water are
(1) Cohesion (2) Adhesion
(3) Cohesion and Adhesion both
(4) None of these
52. The salt affected soil having 1.5ESF would be
(1) Alkali soil
(2) Saline soil
(3) Saline-alkali soil
(4) None of these
53. Chemical formula of Gypsum is
(1) $CaSO_4$
(2) $CaSO_4 \cdot \frac{1}{2} H_2O$
(3) $CaSO_4 \cdot 2H_2O$
(4) $CaSO_4 \cdot 3 H_2O$
54. Saline soils are found in the region
(1) Coimbatore region
(2) Patna region
(3) Bundelkhand region
(4) Kanpur region
55. C : N ratio of normal soil is
(1) 10 : 1 (2) 15 : 1
(3) 20 : 1 (4) 30 : 1
56. pH of alkaline soil is
(1) 6 (2) 7
(3) 8 (4) 9

67. Which one of the following goes manuring is preferred to the crop-grown in alkali soils ?
 (1) Sesam (2) Dhaincha
 (3) Guar (4) Cow pea
68. Which one of the following crops is more responsive to zinc application ?
 (1) Wheat (2) Rape seed
 (3) Paddy (4) Maize
69. The basis of soil testing, the critical limit for 'Sulphur' in soil is
 (1) 0.5 ppm (2) 1.0 ppm
 (3) 1.5 ppm (4) 3.0 ppm
70. Amide form of nitrogen is found in fertilizer
 (1) CAN
 (2) DAP
 (3) Urea
 (4) None of these
71. Which of the following is a growth promoter ?
 (1) Auxin (2) Ethylene
 (3) Carbonic
 (4) None of these
72. Nitrification is a process of
 (1) Reduction
 (2) Hydrolysis
 (3) Oxidation
 (4) None of these
73. Cause of water stagnation of surface of alkali soil is
 (1) Deflocculation
 (2) Aggregation
 (3) Flocculation
 (4) None of these
74. Which fertilizer is called 'Bone' ?
 (1) Ammonium nitrate
 (2) Urea
 (3) Diammonium phosphate
 (4) Calcium ammonium nitrate
75. The process that transforms the productive land into unproductive land is called
 (1) Desertization
 (2) Desalination
 (3) Both (1) and (2)
 (4) None of these
76. The elements which helps in biological nitrogen fixation is
 (1) Mg (Magnesium)
 (2) Mn (Manganese)
 (3) Zn (Zinc)
 (4) Mo (Molybdenum)

67. Nitrogenase is an enzyme associated with
 (1) Nitrogen oxidation
 (2) Nitrate reduction
 (3) Nitrogen fixation
 (4) Nitrogen absorption
68. Which of the following micro-organisms grows well in water logged soils ?
 (1) Clostridium
 (2) Azotobacter
 (3) Rhizobium
 (4) Nostoc
69. The number of Agricultural Universities in U.P. is
 (1) 5 (2) 4
 (3) 6 (4) 8
70. Dwarfing gene in wheat is
 (1) Nain-10
 (2) Dee-goo-woo-gen
 (3) Opaque - 3
 (4) None of these
71. Micro-organisms-grown at temperature below 5°C are called
 (1) Thermophiles
 (2) Mesophiles
 (3) Psychrophiles
 (4) None of these
72. Essential vitamins for calcification is
 (1) Vitamin A (2) Vitamin B
 (3) Vitamin C (4) Vitamin D
73. Glycolysis is related with
 (1) Photosynthesis only
 (2) Respiration only
 (3) Photosynthesis and respiration both
 (4) None of these
74. Polysaccharides are made up of
 (1) Sugars (2) RNA
 (3) Lipids
 (4) None of these
75. Enzymes are
 (1) Carbohydrate
 (2) Lipid
 (3) Protein
 (4) None of these
76. Microbial conversion of nitrate into chemical nitrogen is called
 (1) Denitrification
 (2) Nitrate reduction
 (3) Nitrogen fixation
 (4) None of these

77. Dark reaction of photosynthesis takes place in
 (1) Grana of Chloroplast
 (2) Stroma of Chloroplast
 (3) Cytoplasm
 (4) None of these
78. Which wavelength of light is absorbed maximum in chlorophyll 'a' ?
 (1) 450 nm (2) 560 nm
 (3) 600 nm (4) 680 nm
79. Chlorophyll was first used in photosynthesis by
 (1) Calvin (2) Hill
 (3) Warburg (4) Ruben
80. Which organelle is power house of cell ?
 (1) Mitochondria
 (2) Chloroplast
 (3) Vacuole
 (4) None of these
81. Which is non-reducing sugar ?
 (1) Glucose
 (2) Sucrose
 (3) Fructose
 (4) None of these
82. The work of cytochrome is
 (1) Oxidation of Glucose
 (2) Respiration
 (3) Electron transfer
 (4) None of these
83. How many electrons are essential for the growth and development of plants ?
 (1) 14 (2) 15
 (3) 16 (4) 17
84. Deficiency of which element makes plant more susceptible to fungal infection ?
 (1) Silicon
 (2) Nickel
 (3) Both (1) and (2)
 (4) Nitrogen
85. Integrated Weed Management includes
 (1) Tillage Operations
 (2) Use of herbicides
 (3) Close planting
 (4) All of the above
86. Rigging in bananas is accompanied with sudden rise in
 (1) Auxin
 (2) Ethylene
 (3) G.A.
 (4) Cytokinin

97. Drought resistance in plants is related to
- Negative water potential
 - Positive water potential
 - Surplus water
 - None of these
98. Which enzyme was first of all synthesized in crystal form ?
- Lipase
 - Zymase
 - Urease
 - None of these
99. Those seeds, whose life span varies from 15 to 100 years or more are called
- Mesobiotic
 - Macrobiotic
 - Microbiotic
 - None of these
100. Which one of the following is a water soluble vitamin ?
- A
 - B
 - C
 - D
101. Plant wilt because of excessive
- Absorption
 - Respiration
 - Evaporation
 - Transpiration
102. Saw fly is a major pest of which crop ?
- Mustard
 - Lentil
 - Cotton
 - Paddy
103. At which stage of Gram crop is damaged by *Helicoverpa armigera* ?
- Germination stage
 - Pod formation stage
 - Maturity stage
 - None of these
104. Bunchy top appearance of sugarcane is developed due to attack of which insect ?
- Sugarcane stem borer
 - Sugarcane root borer
 - Sugarcane top borer
 - Woolly aphid
105. Which insect of Mango has quarantine importance ?
- Woolly bug
 - Stone weevil
 - Mango hopper
 - Mango fruit fly
106. Nozzle is a part of
- Fluid compression sprayer
 - Cyco gas pump
 - Rotary chisel
 - None of these
107. Recent approaches of insect control is
- Biological Control
 - Chemical Control
 - Integrated Pest Management (IPM)
 - Mechanical Control
108. Paddle pump sprayer can spray upto the height of
- 15 feet
 - 20 feet
 - 25 feet
 - 30 feet
109. Crop rotation is suggested against
- Air born disease
 - Soil born disease
 - Aphid born disease
 - Soil born disease
110. Which systemic fungicide was used first ?
- Vita-Vac
 - Imidan M-45
 - Imidan Z-75
 - None of these
111. Karnal bunt is a designated seed born disease of
- Paddy
 - Pulses
 - Wheat
 - Mustard
112. False smut disease infects the crop
- Wheat
 - Paddy
 - Lentil
 - Mustard
113. Which of the following insect play important role in transmission of yellow vein mosaic disease of Okra ?
- White fly
 - Aphid
 - Grasshopper
 - None of these
114. The seed rate of hybrid rice in nursery for transplanting one hectare field is
- 10-40 - 45 kg
 - 30 - 35 kg
 - 35 - 37 kg
 - 18 - 20 kg
115. Symptoms of citrus canker appear on which of the plant parts ?
- Leaves
 - Fruit
 - Branch
 - All of these
116. In year 1943, Dengul famine was due to
- Blast disease of rice
 - Sheath blight disease of rice
 - Brown spot disease of rice
 - False smut disease of rice
117. Which of the following is internally seed born disease ?
- Covered smut in barley
 - Loose smut of Wheat
 - Grain smut of Jowar
 - Smut of Bajra
118. Who among the following is known for the discovery of the control of Khaira disease of Rice ?
- Dr. Y. L. Narve
 - Dr. K. C. Mehra
 - Dr. R. S. Singh
 - Dr. A. N. Mukhopadhyay
119. Indian Veterinary Research Institute is located at
- Mathura
 - DehraDuar
 - Patna
 - Allahabad
120. Which of the following does not affect soil erosion ?
- Climate
 - Vegetation
 - Solar
 - Topography
121. Straight line method of estimating annual depreciation of tractor is
- Depreciation the tractor to zero at the end of its useful life
 - Larger amount during early life
 - Decreasing amount during later life
 - Equal amount each year during its useful life
122. In an engine, if fuel economy is desired, there must be
- an excess of fuel
 - an excess of oxygen
 - an excess of both fuel and oxygen
 - None of these
123. Sprinkler method of irrigation is most suitable for
- undulated soil
 - well levelled soil
 - heavy soil
 - None of these
124. Unit of a plough rate is
- ton
 - kg
 - jointer
 - ton
125. Percentage optimum moisture content for particle storage is
- 8
 - 6
 - 12
 - 10
126. Which of the following is not a function of a combine ?
- Harvesting
 - Threshing
 - Separating
 - Drying

117. Percentage milk fat in ice cream is approximately
(1) 8 (2) 10
(3) 15 (4) 20
118. Barbati is a breed of
(1) Goat (2) Cow
(3) Buffalo (4) Sheep
119. Aecid is a breed of
(1) Duck (2) Turkey
(3) Hen (4) Guinea fowl
120. Large White-Terk Sire is a breed of
(1) Goat (2) Sheep
(3) Duck (4) Swine
121. What is Colostrum ?
(1) First drawn milk after parturition of the females
(2) Condensed milk
(3) Evaporated milk
(4) Uncoagulated milk
122. Requirement of concentrate mixture for buffalo weighing 400 kg producing 10 kg milk/day will be
(1) 3.5 kg (2) 4.5 kg
(3) 5.5 kg (4) 6.5 kg
123. The pH value of fresh milk is
(1) 6.5 (2) 6.7
(3) 7.4 (4) 8.5
124. Which of the following breeds is the highest milk producer in the world ?
(1) Jersey (2) Red Sindhi
(3) Red Dargi (4) Holstein Friesian
125. Which of the following States is considered to be the poultry capital of the country ?
(1) Andhra Pradesh
(2) Uttar Pradesh
(3) Madhya Pradesh
(4) Rajasthan
126. Newly born calf should be fed colostrum, because it contains
(1) Vitamin-D
(2) Calcium
(3) Antibodies
(4) Magnesium
127. "Cooperatives has failed in India but must succeed" was said by the Committee under the Chairmanship of
(1) A.M. Khanolkar
(2) A.D. Gorwala
(3) R.C. Sanyal
(4) D.R. Gadgil
128. In which year National Agricultural Credit Fund was established ?
(1) 1965 (2) 1964
(3) 1963 (4) 1966
129. The Commercial Banks were first nationalised on
(1) 5th July, 1969
(2) 16th July, 1969
(3) 10th July, 1969
(4) 29th July, 1969
130. Value addition in India in percentage is
(1) 3 (2) 5
(3) 7 (4) 9
131. Best planning is concerned with
(1) Fixing of objective
(2) Determining the strategic policy
(3) Prescribing the procedures for future action
(4) All of the above
132. Crop Insurance Scheme in India was started in the year
(1) 1980 (2) 1985
(3) 1987 (4) 1982
133. Central Soil Salinity Research Institute is located at
(1) Ludhiana
(2) Bhopal
(3) Karnal
(4) New Delhi
134. Directorate of Rice Research is located at
(1) Hyderabad
(2) Coimbatore
(3) Patna
(4) None of these
135. Regional Rural Banks under the sponsorship of Nationalised Banks were established in the year
(1) 1975 (2) 1973
(3) 1974 (4) 1976
136. The most common method used in regulated market is
(1) Close tender system
(2) Open auction system
(3) Dura sale
(4) Negotium sale
137. Indian Institute of Sugarcane Research is located at
(1) Lucknow (2) Coimbatore
(3) Patna
(4) Shahajhanpur
138. Preparing a farm budget is advance in known as
(1) Farm budgeting
(2) Partial budgeting
(3) Farm planning
(4) Advanced statement
139. Which of the following is not a component of project life cycle ?
(1) Conception
(2) Preparation
(3) Appraisal
(4) Awareness
140. The long term loans to cooperative credit organisation have
(1) Two-tier system
(2) Three-tier system
(3) Four-tier system
(4) None of these
141. Indian Institute of Pulses Research is located at
(1) Ludhiana (2) Raipur
(3) Jaipur (4) Jabalpur
142. The physical aspects of farm planning expressed in monetary terms is called
(1) Farm planning
(2) Farm budgeting
(3) Farm partial budgeting
(4) None of these
143. Which of the following is not institutional agency ?
(1) Cooperatives
(2) Commercial Bank
(3) Government
(4) Traders
144. First K.V.K. in India was established in
(1) Lucknow (2) Hissar
(3) Pondicherry
(4) None of these
145. I.C.K. is adopted by
(1) Government of India
(2) Government of Uttar Pradesh
(3) Indian Council of Agriculture Research
(4) Uttar Pradesh Council of Agriculture Research
146. Community Development was started on birth day of
(1) Pt. Jyotindra Lal Mehta
(2) Vinchankar
(3) Sardar Vallabhbhai Patel
(4) Mahatma Gandhi

147. Which of the following is a durum wheat variety ?

(1) Pusa - 215

(2) Pusa - 343

(3) HW - 2005

(4) None of these

148. LUDF was started in the year

(1) 1961

(2) 1962

(3) 1963

(4) 1964

149. Social forestry is an important programme of

(1) MHRDA (2) JTF

(3) MIDF (4) LUDF

150. 'Best' is a variety of

(1) Wheat

(2) Barley

(3) Sorghum

(4) Oat