PREVIOUS YEAR PAPER

UP PGT 2021 — Agriculture (Series A)

UP PGT · 17 or 18 August 2021

125 questions · +3.4 for a correct answer, −0 for a wrong one · 120 minutes

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Questions from the U.P. Secondary Education Services Selection Board's paper of 17 or 18 August 2021. Each question is followed by its answer, and the answer key is repeated on the last page.

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Agriculture

1. Who is the father of plant pathology in India ?
   (a) D. K. Epestin
   (b) E. J. Butler
   (c) Stout
   (d) None of these
   Answer: (b)

2. Which of the following cell organelle is rich in hydrolytic enzyme ?
   (a) Endoplasmic reticulum
   (b) Lysosome
   (c) Spherosome
   (d) Mitochondria
   Answer: (b)

3. Which of the following statement is correct ?
   (a) Xylem is made of living cells
   (b) Xylem is made of living and non-living cells
   (c) Xylem is made of non-living cells
   (d) Xylem does not contain cells
   Answer: (b)

4. Which type of weather forecasting is most suitable for farmers ?
   (a) Short range weather forecasting
   (b) Medium range weather forecasting
   (c) Long range weather forecasting
   (d) All of these
   Answer: (b)

5. How much muriate of potash will be required to supply 50 kg Potash/ha ?
   (a) 83.5 kg
   (b) 53.0 kg
   (c) 93.3 kg
   (d) 123.3 kg
   Answer: (a)

6. For the preservation of amlajuice, preservatives used is
   (a) Potassium metabisulphite
   (b) Acitic acid
   (c) 65 – 70% sugar
   (d) Sodium benzoate
   Answer: (a)

7. Reproduction by leaf occur in
   (a) Begonia
   (b) Hydrilla
   (c) Jasmine
   (d) All
   Answer: (a)

8. Bitter taste in brinjal fruit is due to
   (a) Solasodine
   (b) Anthocyanin
   (c) Phenols
   (d) None of these
   Answer: (a)

9. Reserve Bank of India was nationalized on
   (a) 1 April 1935
   (b) 1 January 1949
   (c) 15 August 1947
   (d) 26 January 1950
   Answer: (b)

10. The traditional media of communication is
   (a) Radio
   (b) Ram Lila
   (c) Print
   (d) Tape recorder
   Answer: (b)

11. Community development Project was started in India in
    (a) 1947
    (b) 1949
    (c) 1952
    (d) 1953
    Answer: (c)

12. The refractive index of cow milk at 20°C temp. is
    (a) 1.538
    (b) 1.344
    (c) 2.344
    (d) 2.538
    Answer: (b)

13. Act of parturition in sheep is called as
    (a) Kidding
    (b) Lambing
    (c) Tupping
    (d) Farrowing
    Answer: (b)

14. Older alluvium soil is called as
    (a) Bangar
    (b) Vertisol
    (c) Khadar
    (d) Aridisol
    Answer: (a)

15. Particle size of clay is
    (a) More than 0.2 mm
    (b) Less than 0.002 mm
    (c) More than 0.02 mm
    (d) None of these
    Answer: (b)

16. Adsali sugarcane is planted in
    (a) July – August
    (b) January – February
    (c) February – March
    (d) October – November
    Answer: (a)

17. When MPP > APP, then APP will be
    (a) Constant
    (b) At maximum
    (c) Decreasing
    (d) Increasing
    Answer: (d)

18. In which year AGMARK Act was passed ?
    (a) 1966
    (b) 1937
    (c) 1933
    (d) 1947
    Answer: (b)

19. Calcium is an important constituent of
    (a) Protein
    (b) Cell wall
    (c) Chloroplast
    (d) Nucleic acid
    Answer: (b)

20. 'AGMARK' logo is denoted on
    (a) Synthetic products
    (b) Agricultural products
    (c) Organic products
    (d) Industrial products
    Answer: (b)

21. The stem above the ground in banana is known as
    (a) Rhizome
    (b) Pseudostem
    (c) Sucker
    (d) None of these
    Answer: (b)

22. 'Raj Kiran' is a nematode resistant variety of
    (a) Barley
    (b) Wheat
    (c) Rai
    (d) Tomato
    Answer: (a)

23. Best time of castration in calf is
    (a) 2 – 4 week old
    (b) 10 days old
    (c) 8 – 10 week old
    (d) 16 – 20 week old
    Answer: (c)

24. Seed rate of composite maize per hectare is
    (a) 10 – 12 Kg
    (b) 15 – 18 Kg
    (c) 18 – 20 Kg
    (d) 20 – 25 Kg
    Answer: (c)

25. Example of igneous rock is
    (a) Gneiss
    (b) Slate
    (c) Marble
    (d) Diorite
    Answer: (d)

26. The art of communication is
    (a) Learning
    (b) Feeling
    (c) Listening
    (d) Sleeping
    Answer: (c)

27. The concept of 'minimum tillage' was started in
    (a) India
    (b) U.S.A.
    (c) China
    (d) Russia
    Answer: (b)

28. pH of cow milk is
    (a) 6.7 – 6.8
    (b) 6.4 – 6.6
    (c) 6.8 – 6.9
    (d) None of these
    Answer: (b)

29. Type of mouth parts found in pyrilla insect is
    (a) Piercing and sucking type
    (b) Biting and chewing type
    (c) Chewing and lapping type
    (d) Sponging type
    Answer: (a)

30. The agronomic measures of soil conservation are effective upto the scope of
    (a) 2%
    (b) 4%
    (c) 6%
    (d) 10%
    Answer: (a)

31. Who is regarded as the father of Economics ?
    (a) Marshall
    (b) Adam Smith
    (c) Ricardo
    (d) J. S. Mill
    Answer: (b)

32. "Gurgaon Project" was organized by
    (a) F.L. Bryne
    (b) Mahatma Gandhi
    (c) Albert Mayer
    (d) None of these
    Answer: (a)

33. Dual purpose breed of cow is
    (a) Tharparkar
    (b) Sahiwal
    (c) Sindhi
    (d) Gir
    Answer: (a)

34. Average content of silica in soil is
    (a) 24%
    (b) 27%
    (c) 30%
    (d) 32%
    Answer: (b)

35. Find out correct sentence.
    (a) Temperature decreases as altitude increases.
    (b) Temperature increases as altitude increases.
    (c) No change in temperature as altitude increases.
    (d) None of these

    Answer: (a)

36. Boundary layer between the water and the air is called
    (a) Adhesive
    (b) Meniscus
    (c) Surface tension
    (d) None of these

    Answer: (b)

37. _____ Goat, popularly known as Jersey of the goat breeds.
    (a) Nubian
    (b) Saanen
    (c) Angora
    (d) Alpine

    Answer: (a)

38. Fertilizer control order was passed in India in
    (a) 1957
    (b) 1952
    (c) 1956
    (d) 1954

    Answer: (a)

39. Inflorescence of cauliflower is called
    (a) Catkin
    (b) Head
    (c) Curd
    (d) None of these

    Answer: (c)

40. WTO came into existence in
    (a) April 1995
    (b) June 1995
    (c) October 1995
    (d) January 1995

    Answer: (d)

41. Which of the following statement is correct ?
    (a) $P_2O_5 \times 1.4 = P$
    (b) $P_2O_5 \times 0.43 = P$
    (c) $P_2O_5 \times 0.83 = P$
    (d) $P_2O_5 \times 2.29 = P$
    Answer: (b)

42. Which of the following is first hybrid variety of maize ?
    (a) Prakash
    (b) Ganga – I
    (c) Proteina
    (d) Vivek
    Answer: (b)

43. Which of the following is the example of a false fruit ?
    (a) Mango
    (b) Tomato
    (c) Pineapple
    (d) None of these
    Answer: (c)

44. Tetrazolium test determines the level of activities .he enzyme
    (a) Peroxidase
    (b) Dehydrogenase
    (c) Carboxylase
    (d) None
    Answer: (b)

45. Which of the following is not a principle of extension ?
    (a) Principle of learning by doing
    (b) Principle of participation
    (c) Principle of leadership
    (d) Principle of disassociation
    Answer: (d)

46. The concept of consumers surplus was first introduced by
    (a) Marshall
    (b) Keyness
    (c) H. H. Gossen
    (d) Karl Marx
    Answer: (a)

47. Loose Smut disease of wheat is caused by
(a) Neovossia indica
(b) Puccinia spp
(c) Ustilago nuda
(d) Erysiphae graminis
Answer: (c)

48. Body temperature of hen is
(a) 40°F
(b) 50°F
(c) 98°F
(d) 107°F
Answer: (d)

49. Pruning in ber is done
(a) During rainy season
(b) During winter season
(c) During spring season
(d) During summer season
Answer: (d)

50. 'Dapog' method of raising seedlings of rice was developed in which country ?
(a) India
(b) China
(c) Philippines
(d) Japan
Answer: (c)

51. Gestation period of swine is
(a) 114 days
(b) 148 days
(c) 160 days
(d) 280 days
Answer: (a)

52. Modern is a variety of which crop ?
(a) Til
(b) Sunflower
(c) Mustard
(d) Soybean
Answer: (b)

53. Edible part of pineapple fruit is
    (a) Pericarp
    (b) Mesocarp
    (c) Fleshy thalamus
    (d) Fleshy aril

    Answer: (c)

54. Puddling is done for
    (a) Reduce percolation of water
    (b) To kill weeds
    (c) Pulverise soil
    (d) None of these

    Answer: (a)

55. Nationalization of banks was carried out on
    (a) 19th June, 1969
    (b) 19th July, 1969
    (c) 19th August, 1969
    (d) 2nd October, 1969

    Answer: (b)

56. Who is called as 'Father of Agrometeorology' in In ?
    (a) Luke Howard
    (b) L.A. Ramdas
    (c) Gregor Kraus
    (d) None of these

    Answer: (b)

57. Presence of a single buyer for the products produced by a firm is known as
    (a) Oligopoly
    (b) Monopsony
    (c) Duopoly
    (d) Monopoly

    Answer: (b)

58. Tallest breed of sheep is
    (a) Nellore
    (b) Bikaneri
    (c) Deccani
    (d) Nilgiri

    Answer: (a)

59. Find out the correct statement.
    (a) Quartz is classified as a tectosilicate mineral
    (b) Quartz is classified as a phyllosilicate mineral
    (c) Quartz is classified as a foliated mineral
    (d) None of these
    Answer: (a)

60. Bordeaux mixture is commonly used to control
    (a) Downey Mildew
    (b) Blights
    (c) Anthracnose
    (d) All of the above
    Answer: (d)

61. CSWRI is situated at
    (a) New Delhi
    (b) Karnal
    (c) Makhdoom
    (d) Avikanagar
    Answer: (d)

62. The way in which message is handled before plac , in channel is
    (a) Feedback
    (b) Distortion
    (c) Treatment
    (d) Decoding
    Answer: (c)

63. The fruit of Bajara and Sorghum are called as
    (a) Capsule
    (b) Pod
    (c) Earhead
    (d) Siliqua
    Answer: (c)

64. Bunchy top of sugarcane is caused by
    (a) Acigona stenielius
    (b) Chilo infuscatelus
    (c) Scripophaga nivella
    (d) None of these
    Answer: (c)

65. Fruits having highest Riboflabin content is
    (a) Bael
    (b) Datepalm
    (c) Karonda
    (d) Citrus fruits
    Answer: (a)

66. Which one of the following is not correctly matched ?
    (a) Sunflower – Compositae
    (b) Cotton – Malvaceae
    (c) Caster – Compositae
    (d) Sugarcane – Gramineae
    Answer: (c)

67. "Peat" soils are generally characterized as
    (a) Black, heavy and acidic soil
    (b) Red, light and acidic soil
    (c) Black, light and alkaline soil
    (d) Black, heavy and neutral soil
    Answer: (a)

68. The link that connects the source with the receive
    (a) Message
    (b) Communication effect
    (c) Channel
    (d) Treatment
    Answer: (c)

69. 'Gola' is a popular variety of
    (a) Bael
    (b) Ber
    (c) Watermelon
    (d) Aonla
    Answer: (b)

70. The inherent capacity of soil to supply essential plant nutrient is called as
    (a) Fertilizer
    (b) Soil fertility
    (c) Soil productivity
    (d) Soil colour
    Answer: (b)

71. The instrument that is used to measure total incoming solar radiation is called
    (a) Tensiometer
    (b) Photometer
    (c) Pyranometer
    (d) Tachometer
    Answer: (c)

72. Nutrient which is stored in the form of phytic acid and phytin in seed is known as
    (a) Zinc
    (b) Boron
    (c) Phosphorus
    (d) Sulphur
    Answer: (c)

73. DRIS is applicable for
    (a) Long duration crops
    (b) Short duration crops
    (c) Oil seed crops
    (d) Vegetables crops
    Answer: (a)

74. Causal organism of yellow rust in wheat is
    (a) Puccinia graminis tritici
    (b) Puccinia recondita
    (c) Puccinia strii formis
    (d) None of these
    Answer: (c)

75. Dehorning of calf should be done at the age of
    (a) 10 days old
    (b) One month old
    (c) Two months old
    (d) One year old
    Answer: (a)

76. At which pH better growth of plants is found ?
    (a) 4 – 5
    (b) 5 – 6
    (c) 6.5 – 7.5
    (d) 8 – 9
    Answer: (c)

77. Which amongs the following plant disease of paddy was responsible for Great Bangal Famine ?
(a) Blast disease
(b) Bacterial blight
(c) Khaira disease
(d) Brown leaf spot disease
Answer: (d)

78. Which of the following contains highest protein content ?
(a) Blackgram
(b) Gram
(c) Soybean
(d) Til
Answer: (c)

79. Which of the following Rural Development Project was launched before independence ?
(a) Etawah Pilot Project
(b) Co-operative Movement
(c) Community Development Project
(d) National Extension Service
Answer: (b)

80. In troposphere, the decrease in temperature with height is at the rate of
(a) 3.5 °C/km
(b) 6.5 °C/km
(c) 7.5 °C/km
(d) None of these
Answer: (b)

81. Scientific name of sorghum stem borer insect is
(a) Sesamia inference
(b) Amsecta moorei
(c) Agrotis ipsilon
(d) Chilo partellus
Answer: (d)

82. Carbohydrate is found in milk in the form of
(a) Glucose
(b) Fructose
(c) Lactose
(d) None of these
Answer: (c)

83. Which one of the following parent material is transported by gravity ?
    (a) Glacial
    (b) Colluvial
    (c) Eolian
    (d) Alluvial
    Answer: (b)

84. Which of the following is a systemic fungicide ?
    (a) Bordeaux mixture
    (b) Metalaxyl
    (c) Both (A) and (B)
    (d) None of these
    Answer: (b)

85. The 'Typhoon method' of irrigation is applied in the crop of
    (a) Fruit crops
    (b) Wheat
    (c) Potato
    (d) Sugarcane
    Answer: (d)

86. Dual purpose breed of goat is
    (a) Barbari
    (b) Jamunapari
    (c) Marwari
    (d) Beetul
    Answer: (b)

87. Specific gravity of ripe mango fruit is
    (a) Less than one
    (b) Equal to one
    (c) More than one
    (d) None of these
    Answer: (c)

88. Phalsa is commercially propagated through
    (a) Cuttings
    (b) Seed
    (c) Grafting
    (d) Layering
    Answer: (b)

89. Which one of the following insecticides belongs to the organophosphates group ?
    (a) Carbaryl
    (b) Cyanide
    (c) Endosulfan
    (d) Phosphamidon
    Answer: (d)

90. Very dwarfing root stock of apple is
    (a) M7
    (b) M27
    (c) MM106
    (d) MM111
    Answer: (b)

91. Which kind of water erosion is also known as soil fertility erosion ?
    (a) Sheet erosion
    (b) Splash erosion
    (c) Stream bank erosion
    (d) Rill erosion
    Answer: (b)

92. Which of the following is not fixed capital ?
    (a) Farm buildings
    (b) Machinery
    (c) Factories
    (d) None of these
    Answer: (d)

93. Electrical conductivity of saline soil at 25°C is
    (a) <4 ds/m
    (b) >4 ds/m
    (c) <2 ds/m
    (d) >2 ds/m
    Answer: (b)

94. Function of Ribosomes is
    (a) Respiration
    (b) Photosynthesis
    (c) Proteinsynthesis
    (d) Photo respiration
    Answer: (c)

95. Mango mealy bug lays eggs on the
(a) Stem
(b) Inflorescence
(c) Soil
(d) Leaf
Answer: (c)

96. Nutrient which is associated with synthesis of cysteine amino acid in plants is
(a) Iron
(b) Manganese
(c) Copper
(d) Sulphur
Answer: (d)

97. Central AGMARK Lab is located at
(a) New Delhi
(b) Nagpur
(c) Mumbai
(d) Kanpur
Answer: (b)

98. The term "Extension Education" was first coined i
(a) U.S.A.
(b) U.K.
(c) Japan
(d) India
Answer: (b)

99. Which types of seeds are generally used by farmers for cultivation ?
(a) Breeder seeds
(b) Foundation seeds
(c) Certified seeds
(d) Nucleus seeds
Answer: (c)

100. Chemical formula of calcium ammonium nitrate is
(a) $CaNH_4 (NO_3)_3$
(b) $CaNH_2 (NO_3)_2$
(c) $CaNH_2 (NO_3)_3$
(d) $CaNH_4 (NO_3)_2$
Answer: (a)

101. Principle of extension education is

(a) Learning by doing
(b) Learning by seeing
(c) Learning by reading
(d) Learning by hearing

Answer: (a)

102. Mode of pollination in maize is

(a) Self-pollination
(b) Vegetative propagation
(c) Cross-pollination
(d) None

Answer: (c)

103. Wind break plants are planted in which direction of an orchard ?

(a) East-North
(b) North-West
(c) East-South
(d) None of these

Answer: (b)

104. Kranz anatomy is found in

(a) C_2 plant
(b) C_3 plant
(c) C_4 plant
(d) Succulent plant

Answer: (c)

105. Which of the following nutrient is essential for pollination, fruit and seed setting ?

(a) Carbon
(b) Nitrogen
(c) Boron
(d) Calcium

Answer: (c)

106. Mesophyll and Bundle sheath are found in

(a) Stems of plants
(b) Roots of plants
(c) Leaves of plants
(d) Fruits of plants

Answer: (c)

107. The primary unit of the community is

(a) Individual
(b) Village
(c) Family
(d) Block

Answer: (c)

108. Unconsolidated material overlying rocks is known as

(a) Solum
(b) Regolith
(c) Organic matter
(d) None of these

Answer: (b)

109. Minimum support price of agricultural commodities are announced by

(a) State Government
(b) CACP
(c) Central Government
(d) NABARD

Answer: (c)

110. _____ is an example of localized placement of f lizer application method.

(a) Deep placement
(b) Pellet application
(c) Plough-sole placement
(d) Sub soil placement

Answer: (b)

111. A fertilizer which supplies three essential plant nutrients is

(a) DAP
(b) MOP
(c) SSP
(d) SOP

Answer: (c)

112. For fruit ripening, hormone used is

(a) GA3
(b) Cytokinin
(c) Ethylene
(d) None of these

Answer: (c)

113. In India which fertilizer was manufactured first time ?

(a) Urea
(b) Single Super Phosphate
(c) Diammonium Phosphate
(d) None of these

Answer: (b)

114. Which one of the following is visual aids ?

(a) Puppet show
(b) Slides
(c) Drama
(d) Talking doll

Answer: (b)

115. Which system of planting accommodates 81% more plants than the square system ?

(a) Quincunx system
(b) Hexagonal system
(c) Triangular system
(d) Rectangular system

Answer: (a)

116. Passive factors of soil formation includes

(a) Parent material
(b) Climate
(c) Organisms
(d) None of these

Answer: (a)

117. Ranikhet is a

(a) Viral disease
(b) Nematode disease
(c) Bacterial disease
(d) Fungal disease

Answer: (a)

118. National Institution for Transforming India (NITI Aayog) was established by Government of India on

(a) 01 April, 2014
(b) 01 January, 2015
(c) 01 April, 2015
(d) None of these

Answer: (b)

119. The organic chemical fertilizer is
(a) Single Super Phosphate
(b) Potassium chloride
(c) Urea
(d) None of these
Answer: (c)

120. Waxing of fruits and vegetables causes
(a) Reduction in respiration rate
(b) Reduction in transpiration rate
(c) Reduction in respiration and transpiration rate
(d) None of these
Answer: (c)

121. Instrument used to perform secondary tillage is
(a) Deshi plough
(b) Harrow
(c) Disc plough
(d) None of these
Answer: (b)

122. Acid rains are due to following gases.
(a) CO_2 and CO
(b) Ozone and CO_2
(c) NO_2 and SO_2
(d) NH_3 and CO_2
Answer: (c)

123. Foot and Mouth Disease (FMD) of cattles is caused by
(a) Virus
(b) Bacteria
(c) Fungus
(d) Algae
Answer: (a)

124. Bulk density of most of the soils is
(a) 3.25 – 3.40 g/cm^3
(b) 1.02 – 1.80 g/cm^3
(c) 2.50 – 2.70 g/cm^3
(d) None of these
Answer: (b)

125. The seed rate of pearl millet/ha is

(a) 12 – 15 Kg

(b) 4 – 5 Kg

(c) 80 – 100 Kg

(d) None of these

Answer: (b)

Answer key

Answer key from the U.P. Secondary Education Services Selection Board's official answer key for this sitting. "—" means the key gave none.

Agriculture

1	**(b)**	2	**(b)**	3	**(b)**	4	**(b)**	5	**(a)**	6	**(a)**	7	**(a)**	8	**(a)**
9	**(b)**	10	**(b)**	11	**(c)**	12	**(b)**	13	**(b)**	14	**(a)**	15	**(b)**	16	**(a)**
17	**(d)**	18	**(b)**	19	**(b)**	20	**(b)**	21	**(b)**	22	**(a)**	23	**(c)**	24	**(c)**
25	**(d)**	26	**(c)**	27	**(b)**	28	**(b)**	29	**(a)**	30	**(a)**	31	**(b)**	32	**(a)**
33	**(a)**	34	**(b)**	35	**(a)**	36	**(b)**	37	**(a)**	38	**(a)**	39	**(c)**	40	**(d)**
41	**(b)**	42	**(b)**	43	**(c)**	44	**(b)**	45	**(d)**	46	**(a)**	47	**(c)**	48	**(d)**
49	**(d)**	50	**(c)**	51	**(a)**	52	**(b)**	53	**(c)**	54	**(a)**	55	**(b)**	56	**(b)**
57	**(b)**	58	**(a)**	59	**(a)**	60	**(d)**	61	**(d)**	62	**(c)**	63	**(c)**	64	**(c)**
65	**(a)**	66	**(c)**	67	**(a)**	68	**(c)**	69	**(b)**	70	**(b)**	71	**(c)**	72	**(c)**
73	**(a)**	74	**(c)**	75	**(a)**	76	**(c)**	77	**(d)**	78	**(c)**	79	**(b)**	80	**(b)**
81	**(d)**	82	**(c)**	83	**(b)**	84	**(b)**	85	**(d)**	86	**(b)**	87	**(c)**	88	**(b)**
89	**(d)**	90	**(b)**	91	**(b)**	92	**(d)**	93	**(b)**	94	**(c)**	95	**(c)**	96	**(d)**
97	**(b)**	98	**(b)**	99	**(c)**	100	**(a)**	101	**(a)**	102	**(c)**	103	**(b)**	104	**(c)**
105	**(c)**	106	**(c)**	107	**(c)**	108	**(b)**	109	**(c)**	110	**(b)**	111	**(c)**	112	**(c)**
113	**(b)**	114	**(b)**	115	**(a)**	116	**(a)**	117	**(a)**	118	**(b)**	119	**(c)**	120	**(c)**
121	**(b)**	122	**(c)**	123	**(a)**	124	**(b)**	12	**(b)**						