

KAS (P) Examination, 2009
AGRICULTURE
[01]

Time Allowed : Two Hours]

[Max. Marks : 300

1. Which of the following is a monophagous pest
 - (a) Rice stem borer
 - (b) Bihar hairy caterpillar
 - (c) Tobacco leaf eating caterpillar
 - (d) Pink boll worm
2. Which of the following is parasitoid of potato tuber moth
 - (a) *Trichogramma chilonis*
 - (b) *Bracon kirpatricki*
 - (c) *Copidosoma koehleri*
 - (d) *Epiricani melanoleuca*
3. Control measures should be applied at
 - (a) Below ETL
 - (b) Above ETL
 - (c) At ETL
 - (d) None of these
4. A pest which causes above 10% loss in yield is declared as
 - (a) Minor pest
 - (b) Major pest
 - (c) Sporadic pest
 - (d) Endemic pest
5. Type of sprayer generally used in orchard for spraying
 - (a) Knapsack sprayer
 - (b) Rocking sprayer
 - (c) Hand compression sprayer
 - (d) None of these
6. Which of the following is responsible for the pest outbreak
 - (a) Polyculture
 - (b) Monoculture
 - (c) Mixed cropping
 - (d) Diversified farming system
7. Potato is a modified
 - (a) Stem
 - (b) Root
 - (c) Shoot
 - (d) Branch
8. For bakery products the wheat variety should have high percentage of
 - (a) Gluten
 - (b) Protein
 - (c) Carbohydrates
 - (d) Sugar
9. Number of agro-ecological zones of India are
 - (a) 14
 - (b) 15
 - (c) 16
 - (d) 17

10. Origin of wheat crop is
- (a) South Western Asia
 - (b) North Western Asia
 - (c) Asia Central
 - (d) North America
11. Growing two or more crops simultaneously during part of the life cycle of each is
- (a) Row intercropping
 - (b) Relay intercropping
 - (c) Double cropping
 - (d) Sequential cropping
12. Critical stage of wheat at which irrigation is required essentially
- (a) Flowering stage
 - (b) Crown root initiation
 - (c) Jointing
 - (d) Tillering
13. Attraction of water molecules for soil particles is termed as
- (a) Adhesion
 - (b) Cohesion
 - (c) Surface tension
 - (d) Plasticity
14. Fertilizer containing any combination or mixture of straight fertilizer is referred as
- (a) Complete fertilizer
 - (b) Mixed fertilizer
 - (c) Filler
 - (d) Biofertilizer
15. Application of more nitrogen fertilizers leads to
- (a) Early flowering
 - (b) Luxuriant growth
 - (c) Delayed maturity
 - (d) Resistance to pests
16. Loose smut of wheat is controlled by
- (a) Solar heat treatment
 - (b) Brine water
 - (c) Hot water treatment
 - (d) Cold water
17. Black heart of potato is caused due to
- (a) Zinc deficiency
 - (b) Molybdenum deficiency
 - (c) Oxygen deficiency
 - (d) Nitrogen deficiency
18. Variety of potato having resistance late blight is
- (a) Laxmi
 - (b) Kufri Jyoti
 - (c) Arka Sinduri
 - (d) Anamika
19. Root-knot disease of vegetables caused by
- (a) *Pratylenchus* spp.
 - (b) *Meloidogyne* spp.
 - (c) *Rotylenchulus* spp.
 - (d) *Heterodera* spp.

20. The first epidemic of scab of apple in Kashmir valley was observed in
(a) 1975
(b) 1978
(c) 1973
(d) 1980
21. In mixed farming crop enterprise is combined with
(a) Crop
(b) Dairy
(c) Tractor
(d) None
22. Which of the following process relates to Agriculture extension
(a) One way
(b) Two way
(c) Three way
(d) Multi way
23. Extension is expected to be expressed in which of the following process
(a) Complete
(b) Continuous
(c) Complex
(d) Effective
24. The size fraction of clay is
(a) < 0.002 mm
(b) $0.002 - 0.05$ mm
(c) $0.05 - 2.0$ mm
(d) > 2 mm
25. Number of elements required for plant growth as macronutrients are
(a) Ten
(b) Nine
(c) Seven
(d) Six
26. National demonstrations are first line demonstration conducted on the farmers field by
(a) Research Scientist
(b) Extension Scientist
(c) Development Staff
(d) Extension Official
27. National extension development project was launched in the year
(a) 1950
(b) 1952
(c) 1951
(d) 1953
28. A good extension programme should be
(a) Flexible
(b) Rigid
(c) Both of the above
(d) None of the above
29. Which of the following is *not* a method of group communication
(a) Conference
(b) National demonstration
(c) Field trips
(d) Farm and home visits
30. The president of state development committee is
(a) Agriculture Minister
(b) Governor
(c) Chief Minister
(d) None of the above

31. Most important fruit crop of J & K largely processed for value addition is
- Grape
 - Apple
 - Pineapple
 - Mango
32. Widely grown vegetable in J & K is
- Cauliflower
 - Brinjal
 - Okra
 - Tomato
33. India stands second next to China in production of
- Fruits
 - Vegetables
 - Plantation crops
 - Spices
34. Which one of the following is not a system of farming
- Mixed farming
 - Co-operative collective farming
 - Co-operative farming
 - Peasant farming
35. Production possibility curve represents
- Input-output relation
 - Product-product relation
 - Input-input relation
 - None of the above
36. Preparing farm budget in advance is
- Farm planning
 - Farm management
 - None of these
 - Both of these
37. Crop farming and milk production is example of
- Complementary enterprise
 - Supplementary enterprise
 - Competitive enterprise
 - None of these
38. Selection and adoption of best package of practices comes under
- Type of farming
 - Farm management
 - Both of these
 - None of these
39. Decision regarding what to produce, how to produce and how to equip the farm are known as
- Buying decisions
 - Production and organization decisions
 - Selling decisions
 - Administrative problems decisions
40. In long run, all costs are
- Fixed
 - Variable
 - Complete
 - Short period

41. Pulses are the important source of
- (a) Fats
 - (b) Proteins
 - (c) Crude Fibres
 - (d) Carbohydrates
42. The crop rich in protein and equally important for oil is
- (a) Maize
 - (b) Rice
 - (c) Soyabean
 - (d) Safflower
43. Pusa Bold is a variety of
- (a) Radish
 - (b) Cauliflower
 - (c) Cabbage
 - (d) Mustard
44. Photo and thermo insensitive oil seed crop is
- (a) Groundnut
 - (b) Mustard
 - (c) Rice
 - (d) Sunflower
45. Tuber crops are rich in
- (a) Fats
 - (b) Proteins
 - (c) Minerals
 - (d) Carbohydrates
46. Sulphur limiting amino acids in pulses are
- (a) Methionine
 - (b) Tryptophan
 - (c) Both
 - (d) None of these
47. Laws of heredity were discovered by Mendel in
- (a) Drosophila
 - (b) Maize
 - (c) Garden Pea
 - (d) Neurospora
48. Crossing over takes place during
- (a) Leptotene
 - (b) Zygotene
 - (c) Pachytene
 - (d) Diplotene
49. The term polygenes was first used by
- (a) R. A. Fisher (1918)
 - (b) Sewall Wright (1935)
 - (c) Mather (1941)
 - (d) D. S. Falconer (1960)
50. Jumping gene was first discovered by
- (a) Johanssen (1909)
 - (b) Morgan (1933)
 - (c) Barbara Mc Clintock (1950)
 - (d) Benzer (1955)

51. In light reaction
- (a) ADP is formed
 - (b) CO_2 is formed
 - (c) $NADPH_2$ is formed
 - (d) Both ATP & $NADPH_2$ are formed
52. First event in photosynthesis is
- (a) Production of CO_2
 - (b) Production of O_2
 - (c) Oxidation of chlorophyll
 - (d) Oxidation of sugar
53. Glycolysis was discovered by
- (a) Krebs
 - (b) Kolreuter
 - (c) Embden Embden Meyerhof & Parnas
 - (d) Hooker
54. Usually food is translocated
- (a) In upward direction
 - (b) In downward direction
 - (c) In radial direction
 - (d) Not certain
55. Translocation of food theory was given by
- (a) Dixon
 - (b) Jolly
 - (c) Munch
 - (d) Hooker
56. Growth is
- (a) Permanent change in size
 - (b) Increase in weight
 - (c) Increase in volume
 - (d) All of these
57. The term auxin was given by
- (a) Pal
 - (b) Jenson
 - (c) F. W. Went
 - (d) Stark
58. Amongst cereal crops J & K grow largely
- (a) Wheat
 - (b) Rice
 - (c) Maize
 - (d) Sorghum
59. The rice variety having highest export potential is
- (a) Chinor
 - (b) Hybrid rice
 - (c) Basmati
 - (d) Local
60. Legume crops need more amount of
- (a) Nitrogen
 - (b) Phosphorus
 - (c) Potash
 - (d) Zinc

61. Physical properties of soil are improved by
- (a) Adding organic matter
 - (b) Adding fertilizers
 - (c) Giving irrigation
 - (d) Puddling
62. Microbial fertilizers are more beneficial in
- (a) Cereal crops
 - (b) Pulse crops
 - (c) Fibre crops
 - (d) Plantation crops
63. Soil fertility can be maintained by
- (a) Crop rotation
 - (b) Relay cropping
 - (c) Chemical fertilizers
 - (d) Irrigation
64. Urea contain
- (a) 45% Nitrogen
 - (b) 46% Nitrogen
 - (c) 47% Nitrogen
 - (d) 48% Nitrogen
65. Fertilizer which can be used as foliar spray is
- (a) Ammonium Sulphate
 - (b) Urea
 - (c) Super Phosphate
 - (d) Suphala
66. Effective nodule colour in pulses for higher rhizobium activity is
- (a) Yellow
 - (b) Pink
 - (c) White
 - (d) Black
67. Example of complex Fertilizer is
- (a) DAP
 - (b) Urea
 - (c) Single Super Phosphate
 - (d) Ammonium Sulphate
68. The systematic arrangement of sand, silt and clay particles is known as
- (a) Soil Structure
 - (b) Soil Texture
 - (c) Soil Compaction
 - (d) Soil Colloid
69. The plants absorb nitrogen in the form of
- (a) N_2O
 - (b) NO_3^-
 - (c) NO_2^-
 - (d) None of these
70. Cow dung on decomposition in biogas plant releases
- (a) Ethane
 - (b) Propane
 - (c) Methane
 - (d) Butane

71. In India agriculture accounts to the national Gross Domestic Product (GDP) to the extent of
- (a) 10%
 - (b) 15%
 - (c) 20%
 - (d) 30%
72. Brix reading of sugarcane at maturity is
- (a) 25-31%
 - (b) 12-13%
 - (c) 18-21%
 - (d) 21-25%
73. In cotton when floral parts are not borne directly on a branch, such branches are called
- (a) Sympodial
 - (b) Monopodial
 - (c) Apodial
 - (d) Unipodial
74. Crop rotation is effective in controlling
- (a) Cynodon
 - (b) Cuscuta
 - (c) Chenopodium
 - (d) Cyperus
75. The botanical name of Indian mustard is
- (a) *Eruca sativa*
 - (b) *Brassica campestris*
 - (c) *Brassica nigra*
 - (d) *Brassica juncea*
76. *Vigna mungo* is the scientific name of
- (a) Red gram
 - (b) Bengal gram
 - (c) Green gram
 - (d) Black gram
77. Maximum water requiring crop is
- (a) Maize
 - (b) Cotton
 - (c) Sugarcane
 - (d) Sorghum
78. Sprouting points on potato tuber are called
- (a) Eyes
 - (b) Buds
 - (c) Suckers
 - (d) None of these
79. Nutrient rich rice developed through biotechnology is
- (a) Brown rice
 - (b) Golden rice
 - (c) Organic rice
 - (d) Hybrid rice
80. The toxic fungal metabolite that can develop in groundnut seeds, cake and meals are
- (a) Aflatoxins
 - (b) Gossypol
 - (c) Strigol
 - (d) None of these

81. Heterobeltiosis is estimated over the
- (a) Mid parent
 - (b) Better Parent
 - (c) Popular variety
 - (d) Popular hybrid
82. Gene-for-gene hypothesis was proposed by
- (a) Nelson (1973)
 - (b) Flor (1956)
 - (c) Vander Plank (1963)
 - (d) Robinson (1971)
83. Vertical resistance is known as
- (a) Major gene resistance
 - (b) Race specific resistance
 - (c) Oligogenic
 - (d) All of the above
84. Wheat stem sawfly has non-preference for
- (a) Small leaves
 - (b) Thick leaves
 - (c) Solid stem
 - (d) All of the above
85. In cotton jassids have non-preference for
- (a) Smoothness of leaves
 - (b) Frego bracts
 - (c) Hairiness of leaves
 - (d) Okra leaves
86. In rice resistance to stem borer is associated with
- (a) High tannins in stem
 - (b) High silica content in shoot
 - (c) Waxiness of leaves
 - (d) High aspartic acid in leaves
87. Which is the commercial multiplication method of strawberry
- (a) Budding
 - (b) Suckers
 - (c) Runner
 - (d) Grafting
88. Disease and insect resistance is governed by
- (a) Oligogenes
 - (b) Polygenes
 - (c) Plasma gene
 - (d) All of the above
89. In India parasitic weed of Sorghum is
- (a) Cuscuta spp
 - (b) Striga spp
 - (c) Orobanche spp
 - (d) None of the above
90. Ability of plants to maintain a favourable internal water balance under moisture stress is known as
- (a) Drought escape
 - (b) Drought tolerance
 - (c) Drought avoidance
 - (d) Drought hardening

91. Pyrimidine bases include
- (a) A and G
 - (b) G and C
 - (c) A and T
 - (d) T, C and U
92. The one gene one enzyme hypothesis was proposed by
- (a) Beadle and Ephrussi (1937)
 - (b) Beadle and Tatum (1941)
 - (c) Benzer (1955)
 - (d) Crick (1966)
93. The term mutation was coined by
- (a) de Vries (1900)
 - (b) Morgan (1910)
 - (c) Muller (1927)
 - (d) Stadler (1928)
94. A unit of mutation in a gene is known as
- (a) Hot Spot
 - (b) Cistron
 - (c) Muton
 - (d) Recon
95. The ratio of additive variance to phenotypic variance is referred as
- (a) Broad sense heritability
 - (b) Narrow sense heritability
 - (c) Coheritability
 - (d) Combining ability
96. The term heterosis was coined by
- (a) East (1908)
 - (b) Deven Port (1908)
 - (c) Shull (1914)
 - (d) Jones (1917)
97. Concept of plant ideotype developed by
- (a) Donald (1968)
 - (b) Adams (1982)
 - (c) Jennigs (1964)
 - (d) None of the above
98. Central Rice Research Institute located at
- (a) Hyderabad
 - (b) Cuttak
 - (c) Karnal
 - (d) Simla
99. Central Agricultural University located at
- (a) Bangalore
 - (b) Chandigarh
 - (c) Imphal
 - (d) Jorhat
100. A homogeneous population includes
- (a) Pure line
 - (b) An inbred line
 - (c) F_1 between two pure line
 - (d) All of these

101. Cutting, grafting, layering, separation and division are method of
- (a) Vegetative propagation
 - (b) Sexual propagation
 - (c) Both (a) and (b)
 - (d) None of these
102. Potato tubers grow as
- (a) Underground stolon
 - (b) Underground runner
 - (c) Underground suckers
 - (d) Root
103. Banana is propogated by means of Suckers which arise from
- (a) Underground rhizome
 - (b) Underground runner
 - (c) Underground suckers
 - (d) Roots
104. Which of the following places in India produce superior quality of mandarin oranges
- (a) Sikkim
 - (b) Coorg
 - (c) J & K
 - (d) Nagpur region
105. Late blight of potato is caused by
- (a) *Fusarium solani*
 - (b) *Rhizoctania solani*
 - (c) *Phytophthora infestans*
 - (d) *Alternaria solani*
106. Minimum daily requirement of vegetable per head is
- (a) 100g
 - (b) 300g
 - (c) 184g
 - (d) 384g
107. Which of the following fruit contains higher Vitamin 'C'
- (a) Apple
 - (b) Ber
 - (c) Papaya
 - (d) Anonla
108. Which of the following fruit is richest in Vitamin 'A'
- (a) Mango
 - (b) Strawberry
 - (c) Apple
 - (d) Banana
109. Which of the following fruit crop is commercially propogated by tissue culture
- (a) Banana
 - (b) Mango
 - (c) Apple
 - (d) Papaya
110. Flat pan nozzle is recommended for the spray in
- (a) Orchard crops
 - (b) Plantation crops
 - (c) Vegetable crops
 - (d) Injurious weeds

111. Plant tissue water potential is measured with the help of
- (a) Porometer
 - (b) Psychrometer
 - (c) Lysimeter
 - (d) None of the above
112. Norin 10 is the source of dwarfing gene in
- (a) Rice
 - (b) Barley
 - (c) Wheat
 - (d) Maize
113. National pest of chick pea is
- (a) *Mylabris*
 - (b) *Helicoverpa*
 - (c) *Spodoptera*
 - (d) *Parthenium*
114. Source of high lysine content in maize is
- (a) Opaque 2
 - (b) Floury 2
 - (c) Opaque 7
 - (d) All of the above
115. Erucic acid is found in
- (a) Soyabean
 - (b) Safflower
 - (c) Mustard
 - (d) Lathyrus
116. *Lathyrus sativus* variety with low Neurotoxin is
- (a) Pusa - 6
 - (b) Pusa - 8
 - (c) Pusa - 24
 - (d) Pusa - 12
117. Cultivation of crop regrowth on the same field in a year is referred as
- (a) Double cropping
 - (b) Ratoon cropping
 - (c) Mixed intercropping
 - (d) None of the above
118. Multiple cropping system helps in
- (a) Stabilizing crop production
 - (b) Best use of land resources
 - (c) Control of pest and diseases
 - (d) All of the above
119. Breeder seed is the progeny of
- (a) Foundation seed
 - (b) Nucleus seed
 - (c) Registered seed
 - (d) Certified seed
120. Which of the following fruit is called berry
- (a) Tomato
 - (b) Brinjal
 - (c) Bittergourd
 - (d) Banana