

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

SEAL

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
- Mid parent
 - Better Parent
 - Popular variety
 - Popular hybrid
82. Gene-for-gene hypothesis was proposed by
- Nelson (1973)
 - Flor (1956)
 - Vander Plank (1963)
 - Robinson (1971)
83. Vertical resistance is known as
- Major gene resistance
 - Race specific resistance
 - Oligogenic
 - All of the above
84. Wheat stem sawfly has non-preference for
- Small leaves
 - Thick leaves
 - Solid stem
 - All of the above
85. In cotton jassids have non-preference for
- Smoothness of leaves
 - Frego bracts
 - Hairiness of leaves
 - Okra leaves
86. In rice resistance to stem borer is associated with
- High tannins in stem
 - High silica content in shoot
 - Waxiness of leaves
 - High aspartic acid in leaves
87. Which is the commercial multiplication method of strawberry
- Budding
 - Suckers
 - Runner
 - Grafting
88. Disease and insect resistance is governed by
- Oligogenes
 - Polygenes
 - Plasma gene
 - All of the above
89. In India parasitic weed of Sorghum is
- Cuscuta spp
 - Striga spp
 - Orobancha spp
 - None of the above
90. Ability of plants to maintain a favourable internal water balance under moisture stress is known as
- Drought escape
 - Drought tolerance
 - Drought avoidance
 - 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
- Vegetative propagation
 - Sexual propagation
 - Both (a) and (b)
 - None of these
102. Potato tubers grow as
- Underground stolon
 - Underground runner
 - Underground suckers
 - Root
103. Banana is propogated by means of Suckers which arise from
- Underground rhizome
 - Underground runner
 - Underground suckers
 - Roots
104. Which of the following places in India produce superior quality of mandarin oranges
- Sikkim
 - Coorg
 - J & K
 - Nagpur region
105. Late blight of potato is caused by
- Fusarium solani*
 - Rhizoctania solani*
 - Phytophthora infestans*
 - Alternaria solani*
106. Minimum daily requirement of vegetable per head is
- 100g
 - 300g
 - 184g
 - 384g
107. Which of the following fruit contains higher Vitamin 'C'
- Apple
 - Ber
 - Papaya
 - Lonla
108. Which of the following fruit is richest in Vitamin 'A'
- Mango
 - Strawberry
 - Apple
 - Banana
109. Which of the following fruit crop is commercially propogated by tissue culture
- Banana
 - Mango
 - Apple
 - Papaya
110. Flat pan nozzle is recommended for the spray in
- Orchard crops
 - Plantation crops
 - Vegetable crops
 - 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