

**MIZORAM PUBLIC SERVICE COMMISSION**  
**COMPETITIVE EXAMINATIONS FOR**  
**JUNIOR GRADE OF MIZORAM AGRICULTURE SERVICE (MAS)**  
**UNDER AGRICULTURE DEPARTMENT,**  
**GOVERNMENT OF MIZORAM, JANUARY-FEBRUARY, 2024**

**PAPER - IV**

Time Allowed : 3 hours

FM : 200

*All questions carry equal marks of 2 each.  
Attempt all questions.*

1. The term seed is used for any propagating material known as
  - (a) Propagule
  - (b) Endogeeal
  - (c) Progule
  - (d) All of these
2. The central variety release committee (CVRC) in ICAR was started in October
  - (a) 1975
  - (b) 1968
  - (c) 1964
  - (d) 1990
3. The first variety released by state variety release committee (SVRC) for Mizoram is
  - (a) Zorin Bean
  - (b) Siata Mimpui
  - (c) Zovaimim
  - (d) Mizo chili
4. Certified should be the progeny of
  - (a) Foundation seed
  - (b) Breeder seed
  - (c) Nucleus seed
  - (d) Certified seed
5. Purple color certificate is associated to which class of seed?
  - (a) Breeder
  - (b) Registered
  - (c) Nucleus
  - (d) certified
6. White color certificate is associated to which class of seed?
  - (a) Breeder
  - (b) Registered
  - (c) Nucleus
  - (d) Foundation
7. The seed class which needs to be maintained by a plant breeder
  - (a) Foundation and certified seed
  - (b) Registered and certified seed
  - (c) Nucleus and breeder seed
  - (d) certified and nucleus seed
8. The first geographical indication (GI) product in India.
  - (a) Darjeeling Tea
  - (b) Dharwad peda
  - (c) Tirupati ladu
  - (d) Nagaland raja mircha
9. Geographical indication of goods (Registration and Protection) act passed in the year
  - (a) 2002
  - (b) 2003
  - (c) 2010
  - (d) 2005

10. Mizoram state has GI for  
(a) Mizo chilli and Mizo turmeric (b) Mizo Chilli and zo ginger  
(c) Mizo chilli and Mizo ginger (d) Birds eye chilli and Thingpui
11. The removal of off type plants for seed production is known as  
(a) Clearance (b) Roguing  
(c) Breeder's removal (d) Degumming
12. Among the intellectual property rights (IPR) which one is the strongest?  
(a) Patent (b) Trademarks  
(c) GI (d) Copyright
13. The agreement on Trade related aspects of IPR (TRIPS) was effective from the year  
(a) 1995 (b) 2000  
(c) 2005 (d) 1990
14. The national seed corporation was founded in the year  
(a) 1955 (b) 1970  
(c) 1963 (d) 1990
15. The difference between seed and grain is  
(a) Seed quality (b) Genetic purity  
(c) Seed colour (d) Seed coat
16. The fruit of two fused carpels is known as  
(a) Pedicle (b) Funicle  
(c) Siliqua (d) Panicle
17. Seed act in India was enacted in  
(a) 1959 (b) 1970  
(c) 1966 (d) 1980
18. The impurity percentage of seed is called  
(a) Dockage (b) Dopage  
(c) Sockage (d) Both (b) & (c)
19. The seed viability test is also known as  
(a) Tollium test (b) Tetrazolium test  
(c) Zollium est (d) Germination test
20. Which test of serological method is used to confirm the presence of virus in seed  
(a) ELISA (b) Nucleic acid  
(c) PCR (d) None of these
21. Test weight of seed is used to determine how many no of seed  
(a) 100 (b) 1000  
(c) 1500 (d) Both (a) & (b)
22. For storage of field crops, the seed should be dried to \_\_\_\_\_% moisture.  
(a) 16 (b) 5-10  
(c) 10-12 (d) 12-15

23. Pelleting of seed is done for
- (a) Uniformity in shape, size and weight of seeds
  - (a) Uniformity in nutrient acquisition
  - (a) For proper emergence
  - (d) All of the above
24. The protection of Plant Varieties and Farmers Rights (PPV & FR) act 2001 protects
- (a) Farmers rights
  - (b) Plant breeder rights
  - (c) Both (a) & (b)
  - (d) None of these
25. Which one is a genetically modified crop (GMC)
- (a) Bt brinjal
  - (b) Bt cotton
  - (c) Golden rice
  - (d) All of these
26. The effect of 2 or more genes to single character to influenced each other's expression in various ways
- (a) Gene interaction
  - (b) Complementary gene action
  - (c) Supplementary gene action
  - (d) All of these
27. The gene Dee-geo-woo-gen is associated with which crop?
- (a) Cotton
  - (b) Rice
  - (c) Maize
  - (d) Wheat
28. The offspring tendency in plants to resemble its parent is known as
- (a) Variation
  - (b) Inheritance
  - (c) Resemblance
  - (d) Heredity
29. Who is the father of Genetics?
- (a) Watson
  - (b) Bateson
  - (c) Morgan
  - (d) Mendel
30. The crossing of F1 to either of the parent is known as
- (a) Test cross
  - (b) Back cross
  - (c) F2 cross
  - (d) All
31. The oldest, simplest and most commonly used breeding method is
- (a) Pure line selection
  - (b) In breeding selection
  - (c) F2 selection
  - (d) Mass selection
32. Clonal crops are also known as \_\_\_\_\_ propagated crops.
- (a) Asexually
  - (b) Hybrid
  - (c) F1 selection
  - (d) Sexually
33. The parental lines showing high performance but have not tested general combining ability (GCA).
- (a) Inbred lines
  - (b) Composite varieties
  - (c) Hybrid
  - (d) Pure lines
34. The minimum distance for rice to get a pure seed.
- (a) 2 m
  - (b) 4 m
  - (c) 5 m
  - (d) 3 m
35. The sudden and heritable change in plant character is called
- (a) Genetic imbalance
  - (b) Mutation
  - (c) Cytoplasmic inheritance
  - (d) Heredity

36. Each specific of tRNA has a group of three bases called  
(a) Peptidyl (b) Codon  
(c) Nucleotide (d) Anticodon
37. The superiority or inferiority of an F1 to both its parent is called  
(a) Inbreeding (b) Hybrid meltdown  
(c) Heterosis (d) All of these
38. A trait that defines some aspects of produce quality is known as  
(a) Quality trait (b) Inheritance  
(c) Resemblance (d) All of these
39. The term Gene was coined by  
(a) Morgan (b) Mendel  
(c) Johannsen (d) Bateson
40. Pure lines and inbred lines are  
(a) Heterogenous and Heterozygous (b) Homogenous and Homozygous  
(c) Heterogenous and Homoygous (d) Homogenous and Heterozygous
41. Equipment for seed bed preparation  
(a) Seed drill (b) Disc plough  
(c) Wheel hoe (d) Power reaper
42. Farm mechanization can increase the cropping intensity to \_\_\_\_\_%.  
(a) 10-15 (b) 20-30  
(c) 15-20 (d) 30>
43. The highest mechanization index can be found for which crop?  
(a) Rice (b) Wheat  
(c) Maize (d) Vegetable
44. Country ploughs, Bakhar and Patela are the most popular traditional implements for  
(a) Puddling (b) Weeding  
(c) Seed bed preparation (d) Intercultural operation
45. Normally ploughing depth of soil is \_\_\_\_\_ cm.  
(a) 20 (b) 15  
(c) 25 (d) 10
46. The function of a seed drill is  
(a) Digging the soil and lining (b) Open furrow for ridging  
(c) Open furrow and placement (d) All of these
47. Ploughing method to break the soil and turn along the contour  
(a) Contour planking (b) Contour ridging  
(c) Contour breaking (d) Contour ploughing
48. Farm machinery in India started by adopting technologies from  
(a) Europe (b) USA  
(c) Africa (d) All of these
49. Improved tractor operated machineries could save \_\_\_\_\_% time.  
(a) 40-50 (b) 30-40  
(c) 60-70 (d) 50-60

50. The seed cum fertilizer drill mainly replace the method of  
(a) Broadcasting (b) Puddling  
(c) Planking (d) Weeding
51. Power tiller is use for which crop?  
(a) Rice (b) Maize  
(c) Soybean (d) All of these
52. Power reaper is used for which crop?  
(a) Rice (b) Maize  
(c) Soybean (d) All of these
53. Ultra low volume sprayers drops water and pesticide mixed in the form of  
(a) Fog (b) Aerosol  
(c) Mists (d) Sprays
54. Plant protection equipment's includes  
(a) Sprayer and Khurpi (b) Sprayer and reaper  
(c) Sprayer and light trap (d) Sprayer an decorticator
55. Pulverizer and chisel plough is for which operation  
(a) Seed bed preparation (b) Intercultural  
(c) Harvesting (d) All of these
56. Agricultural extension is \_\_\_\_\_ education.  
(a) Non formal (b) Formal  
(c) Informal (d) None of these
57. Principle of extension education includes principle of  
(a) Learning the knowledge (b) Learning of farmers  
(c) Learning by doing (d) Learning by seeing
58. Extension is based upon the methods of  
(a) Science (b) Arts  
(c) Culture (d) Science and culture
59. An extension worker should help farmer to attain a desirable change in the farmers  
(a) Belief (b) Temperament  
(c) Health (d) Wealth
60. The father of extension education is  
(a) Sommers (b) Brunner  
(c) JP Leagans (d) Albert Mayer
61. First important step in an extension education process is  
(a) Situation analysis (b) Re consideration  
(c) Objective definement (d) Traverse
62. Demonstration of an extension teaching methods falls under  
(a) Spoken (b) Written  
(c) Visual (d) Spoken and Visual

63. Internet is an extension teaching methods falling under  
(a) Spoken (b) Written  
(c) Visual (d) Spoken and Visual
64. Farm and home visit extension teaching methods falls under  
(a) Visual (b) Written  
(c) Spoken (d) Spoken and Visual
65. Spoken and visual methods are  
(a) Conferences (b) Charts and sound movies  
(c) Leaflet (d) Specimens
66. Extension programme should necessarily have which objectives  
(a) Spoken (b) Written  
(c) Visual (d) Spoken and Visual
67. Last step in an extension education process is  
(a) Specific (b) Simple  
(c) Clear (d) All of these
68. Fidelity in communication is associated with  
(a) Effectiveness (b) Barrier  
(c) Sound (d) Noise
69. The foundation stone of any extension programme are  
(a) Problems (b) Objectives  
(c) Facts (d) Solutions
70. The first step in any systematic attempt to promote rural development is to useful programmes based on people.  
(a) Needs and requirement (b) Knowledge  
(c) Wealth (d) Health
71. In India women comprise of \_\_\_\_\_% of agriculture labour force.  
(a) 42 (b) 33  
(c) 20 (d) 50
72. In India women comprise of \_\_\_\_\_% of self-employed farmers.  
(a) 45 (b) 30  
(c) 30 (d) 48
73. The idea of intensive all round development work in compact area started in 1948 as  
(a) Community development project (b) Etawah Pilot Project  
(c) Food enquiry committee (d) Grow more food
74. The first agricultural university established in India was  
(a) PAU, Punjab (b) IARI, New Delhi  
(c) OUAT, Orrisa (d) GB Pant University, Uttarakhand
75. A programme based on principles of conservation and better management of resources and efforts in potential and responsive areas with assured water supply in 1960.  
(a) SFA (b) MFALA  
(c) IADP (d) NDP

76. The first KVK was established in 1974 based on the recommendation of  
(a) IADP (b) Command and development programm  
(c) Education Commission (d) Planning commission
77. The scheme aiming to provide technical and entrepreneurial skills to rural youth age (19 - 35) years was  
(a) TRYSEM (b) IRDP  
(c) DDP (d) JRY
78. The NDC on May, 2007 a special additional central assistance scheme  
(a) JTY (b) IVLP  
(c) IRDP (d) RKVY
79. Transact walk and Technology is a part of  
(a) ITK (b) RRA  
(c) PRA (d) All of these
80. Traditional agriculture knowledge has  
(a) Labour extensive (b) High risk factor  
(c) Non adaptable to multipurpose needs (d) Minimum risk factor
81. The capital that is consumed by a farm in the production process is known as  
(a) Depreciation (b) Capital cost  
(c) Marginal lost (d) Production cost
82. Farm management is an economics involving the scarcity of resources, alternative use &  
(a) Optimum profit (b) Improved economics  
(c) Profit maximization (d) Output maximization
83. Characteristics of a good farm plan is  
(a) Use external forces for profit (b) Solely profitable  
(c) Increase profit by marketing (d) Balance combination of enterprises
84. Analyzing plans for the use of agricultural resources at the command of the decision maker.  
(a) Farm budgeting (b) Farm plan  
(c) Farm needs (d) Farm marketing
85. The study of financing and liquidity services credit provided to farm borrowers.  
(a) Macro finance (b) Agricultural economics  
(c) Agricultural finance (d) Agricultural budget
86. Crop damage insurance scheme (PMFBY) was launched on  
(a) February, 2016 (b) February, 2015  
(c) May, 2016 (d) March, 2016
87. The headquarter of NABARD is located at  
(a) Delhi (b) Chennai  
(c) Kolkata (d) Mumbai
88. The kisan credit card scheme was recommended by  
(a) RV Gupta Committee (b) Balvantrai committee  
(c) Gadgil committee (d) None of these

89. The term MSR in agricultural marketing stands for  
(a) Market supply ratio (b) Mean supply ratio  
(c) Marginal surplus ratio (d) Marketed surplus ratio
90. Public sector institution is  
(a) State level agricultural marketing boards (b) TRIFED  
(c) Food corporation of India (d) NAFED
91. Nationalization of banks was implemented under the Banking Companies Act of  
(a) 1970 (b) 1980  
(c) 1760 (d) 1975
92. Demand for factors of production is  
(a) Composite demand (b) Derived demand  
(c) Joint demand (d) Marketed demand
93. Rice is harvested normally when the grain moisture content is less than \_\_\_\_\_ %.  
(a) 15 (b) 10  
(c) 5 (d) 20
94. The harvest maturity symptoms of wheat is  
(a) Yellowing of spikelets (b) Red colour stem  
(c) Yellowing of internodes (d) Brown colour leaf
95. The harvest maturity symptoms of pulses is  
(a) Brown pods (b) Hard seed in pods  
(c) Brown and drying of maximum leaves (d) All of these
96. The principles of farm finance as three C's are Character.....  
(a) Concentration and Capital (b) Capability and Capacity  
(c) Capacity and Capital (d) All of these
97. The 12<sup>th</sup> ministerial conference of WTO from June, 2022 reach a consensus on  
(a) Waiver for covid 19 vaccines (b) Fishery subsidies  
(c) Food security (d) All of these
98. If the cost benefit ratio (BCR) of a project is  $> 1$  but less than 2, it is \_\_\_\_\_ invest on  
(a) Not worthy (b) Worth  
(c) Can be worth nor not worthy (d) All of these
99. The coefficient of variation is  
(a) Standard deviation/Mean (b) Standard error/Mean  
(c) Standard deviation/Standard error (d) None of these
100. Mizoram state produce about \_\_\_\_\_ % of rice requirement for the state.  
(a) 50 (b) 80  
(c) 35 (d) 10