

MIZORAM PUBLIC SERVICE COMMISSION

TECHNICAL COMPETITIVE EXAMINATIONS FOR RECRUITMENT TO THE POST OF SENIOR HORTICULTURE DEMONSTRATOR UNDER HORTICULTURE DEPARTMENT, APRIL, 2018

AGRICULTURE PAPER - I

Time Allowed : 2 hours

Full Marks : 150

All questions carry equal marks of 2 each.

Attempt all questions.

- Who gave the term ecosystem and when?
(a) A.G Tansley (1935) (b) A.G. Tansley (1925)
(c) E.P.Odum (1935) (d) E.P. Odum (1925)
- The ministry of Environment was set up in
(a) 1970 (b) 1975
(c) 1980 (d) 1985
- The concentration of CO₂ in atmosphere is increasing at the rate of about
(a) 4% (b) 2 %
(c) 0.4 % (d) 0.2%
- Atmospheric humidity is measured by
(a) Radiometer (b) Hygrometer
(c) Hydrometer (d) Micrometer
- How many agro-climatic zones are found in India?
(a) 15 (b) 16
(c) 17 (d) 18
- Air pollution can be controlled & reduced considerably, but which one of the following factors come in its way?
(a) Politics (b) Economics
(c) Manpower (d) Geography
- Which is the most abundant of all the hydrocarbon pollutants in the atmosphere?
(a) Propane (b) Methane
(c) Butane (d) Benzene
- Mycorrhizae is the association of
(a) Higher plants & fungi (b) Algae & fungi
(c) Lower plants & fungi (d) Both (a) & (c)
- In denitrification process the nitrogen is released in the form of
(a) NH₃ (b) N₂
(c) N₂O (d) Both (b) & (c)

10. Which of the following crop has the highest cultivated area in the world?
 - (a) Rice
 - (b) Wheat
 - (c) Barley
 - (d) Bajra
11. The varieties which belong to species *Oryza glaberrima* are found in
 - (a) Europe
 - (b) Asia
 - (c) America
 - (d) Africa
12. Photoperiodically, rice is a type of _____ Plant
 - (a) Long day
 - (b) Short day
 - (c) Day neutral
 - (d) Intermediate
13. Which of the following is relay cropping system?
 - (a) Maize-mustard-pearlmillet + cowpea
 - (b) Maize-potato-wheat-greengram
 - (c) Blackgram-wheat-greengram
 - (d) Pearlmillet-mustard-greengram
14. Which one of the following is the best example of catch crop ?
 - (a) Linseed
 - (b) Mustard
 - (c) Toria
 - (d) Groundnut
15. Yearly sequence and spatial arrangement of crops or crops and fallow on a given area is called
 - (a) Cropping pattern
 - (b) Cropping system
 - (c) Crop rotation
 - (d) None of these
16. Cropping intensity in India is
 - (a) 100 %
 - (b) 90 %
 - (c) 127 %
 - (d) 180 %
17. Cropping system which involve the raising of crops, animals and trees is called
 - (a) Mixed farming
 - (b) Intercropping
 - (c) Multiple cropping
 - (d) All of these
18. The first wheat variety having short plant height, lodging resistance and higher grain yield was
 - (a) Dee-gee-woo-gen
 - (b) Norin-10
 - (c) Lerma Rojo 64A
 - (d) Sonara- 64
19. The first GM potato developed at CPRI for increasing protein content in tubers consist of genes from
 - (a) Chickpea
 - (b) Pigeonpea
 - (c) Field pea
 - (d) Grain amaranthus
20. To which family does the newly developed plant variety canola belong?
 - (a) Papilionaceae
 - (b) Caesalpinaceae
 - (c) Compositae
 - (d) Cruciferae
21. Objective of intercropping system is
 - (a) Insurance of crop failure
 - (b) Increase in total productivity per unit area
 - (c) Judicious use of resources
 - (d) All of these
22. Multi storied cropping in coconut and planting cocoa is the principle of
 - (a) Annidation in space
 - (b) Annidation of time
 - (c) Both (a) & (b)
 - (d) None of these

23. In integrated farming system,
- (a) Farming techniques are changed
 - (b) Aimed for maximum profit on cropping system
 - (c) Optimum utilization of resources
 - (d) All of these
24. Farming system research is
- (a) Researchers need based
 - (b) Farmers need based
 - (c) Institute need based
 - (d) None of these
25. Which among the crop is having the highest protein content?
- (a) Gram
 - (b) Lentil
 - (c) Green gram
 - (d) Black gram
26. Largest cropping system in India is
- (a) Wheat based
 - (b) Rice based
 - (c) Pulse based
 - (d) Sugarcane based
27. Best suited soils for cultivation of wheat is
- (a) Loamy soils
 - (b) Clay loamy soils
 - (c) Both (a) and (b)
 - (d) Clay soils
28. Which part of India produce best quality wheat?
- (a) North India
 - (b) Peninsular India
 - (c) Maharastra, Gujarat, Madhya Pradesh
 - (d) Both (b) & (c)
29. Average maize yield in India is
- (a) 1000 kg ha⁻¹
 - (b) 1800 kg ha⁻¹
 - (c) 2500 kg ha⁻¹
 - (d) 4000 kh ha⁻¹
30. In India, which type of Maize is widely grown?
- (a) Dent corn
 - (b) Flint corn
 - (c) Sweet corn
 - (d) Waxy corn
31. Which is the QPM (Quality protein maize) hybrid/ composite released in India ?
- (a) Shaktiman 2
 - (b) HQPM 1
 - (c) Shakti 1(Composite)
 - (d) All of these
32. Best sowing month for fodder oats is
- (a) October
 - (b) November
 - (c) December
 - (d) None of these
33. Among the following, which is the variety of garden peas?
- (a) Early Badger
 - (b) Early December
 - (c) Arkel
 - (d) All of these
34. Pulse crop grown for grain, fodder and green manure is
- (a) Cowpea
 - (b) Redgram
 - (c) Gram
 - (d) Lentil
35. Which one of the following substances is used as sugarcane ripener ?
- (a) Cycocel
 - (b) Ethylene
 - (c) Ethephon
 - (d) NAA

36. Average rainfall of the country is
(a) 590 mm (b) 1190 mm
(c) 1290 mm (d) 1490 mm
37. High organic matter content in the soil reduces the availability of which one of the following to the plants?
(a) Copper (b) Iron
(c) Boron (d) Molybdenum
38. How much quantity of true potato seed is required for one hectare planting?
(a) 100 g (b) 200 g
(c) 300 g (d) 400 g
39. Amongst oil cakes, the highest nitrogen content is in
(a) Castor cake (b) Neem cake
(c) Groundnut cake (d) Coconut cake
40. Who is the first person used the definition of weed?
(a) Jethro Tull (b) James Hampshire
(c) Liebig (d) None of these
41. Number of weed species identified in the world is
(a) 30 (b) 300
(c) 3000 (d) 30000
42. Which of the following weed act as alternate host of root knot nematode in vegetables?
(a) *Brassica kaber* (b) *Cleoma viscosa*
(c) *Carthamus oxyacantha* (d) All of these
43. Most dominant factor influencing the weed composition in a field is
(a) Soil moisture (b) Soil type
(c) Soil texture (d) Soil temperature
44. Which is the largest pre-emergence herbicide control weeds in citrus and pineapple orchards?
(a) Atrazine (b) Bromacil
(c) 2,4-D (d) Alachlor
45. Herbicide spray drifts can be reduced by
(a) Increasing droplet size (b) Forming a foam
(c) Making invert emulsion (d) All of these
46. Commonly used wetting agent for herbicide spray in India is
(a) Soap solution (b) Teepol
(c) Uphar (d) All of these
47. Which of the following is the preventive method of weed control?
(a) Using weed free seeds (b) Using cleaned machineries
(c) Following quarantine measures (d) All of these
48. Soil erosion is a process of
(a) Detachment of soil particles (b) Transportation of soil particles
(c) Both (a) & (b) (d) Transport of water

49. Most spectacular symptom of soil erosion is
(a) Sheet erosion (b) Rill erosion
(c) Gully erosion (d) Landslides
50. According to land use capability classification, classes suitable for agriculture is
(a) I- IV (b) I-II
(c) I- VIII (d) I- VI
51. Maximum percentage of slope level for agronomic measures of soil conservation practices is
(a) 1 (b) 2
(c) 5 (d) 10
52. Bench terracing is necessary in soils having
(a) 16- 33% slope (b) 50 % slope
(c) 5% slope (d) 1 % slope
53. Which of the following is a stage of wind erosion ?
(a) Saltation (b) Surface creep
(c) Suspension (d) All of these
54. Number of essential elements required for plant growth is
(a) 12 (b) 16
(c) 20 (d) 10
55. Most available form of P for plant is
(a) H_2PO_4^- (b) HPO_4^{2-}
(c) PO_4^{3-} (d) None of these.
56. Oldest commercially available fertilizer is
(a) Urea (b) Super phosphate
(c) MOP (d) Anhydrous ammonia
57. Water available between field capacity and permanent wilting point is called as
(a) Gravitational water (b) Capillary water
(c) Available water (d) None of these
58. Which surface method is widely followed in fruit orchards?
(a) Basin (b) Check basin
(c) Ridges and furrows (d) Border strip irrigation
59. Most commonly practiced drip irrigation method is
(a) Surface drip irrigation (b) Sub- surface drip irrigation
(c) Spray irrigation (d) Pulse irrigation
60. Area under dryland agriculture in India is
(a) 70 % (b) 60 %
(c) 50 % (d) 40 %
61. Percentage of effective rainfall under rainfed condition is
(a) < 20 % (b) 20- 50%
(c) 50- 80 % (d) None of these

62. Watershed is also called as
(a) Catchment area (b) Drainage basin
(c) Both (a) and (b) (d) None of these
63. Size of farm pond per hectare of area is _____ m²
(a) 200 (b) 250-300
(c) 500 (d) None of these
64. Goal of Extension Education is:
(a) To promote income of farmers (b) To promote production of the crops
(c) To promote new crops (d) To promote scientific outlook
65. Cooperative society is basic institution for:
(a) Political growth of the villagers (b) Social growth of the villagers
(c) Cultural growth of the villagers (d) Socio-economic growth of the villagers
66. Success in rural development project depends upon :
(a) Regular training of workers (b) Regular contact of workers
(c) Amount of subsidy (d) Participation of beneficiaries
67. Lab to Land programme was started by :
(a) NBSSLUP (b) Govt. of U.P
(c) Smt. Indira Gandhi (d) ICAR
68. The full form of A.T.M.A is:
(a) Agriculture Technology Management Association
(b) Agriculture Technology Management Agency
(c) Agriculture Technology Mission Agency
(d) None of these
69. National Commission on farmers was set up in India in
(a) March, 1999 (b) March, 2002
(c) February, 2004 (d) June, 2004
70. National Institute of Agriculture Marketting (NIAM) is located at
(a) New Delhi (b) Jaipur
(c) Hisar (d) Meerut
71. Project planning and budgeting are used to know
(a) Commercial aspect (b) Financial aspects
(c) Economic aspects (d) Technical aspects of project
72. The ultimate aim of farm management is to
(a) Increase gross income (b) Reduce total cost
(c) Optimize factor utilization (d) None of the above
73. What is “support price” for agriculture commodity ?
(a) Subsidy paid by the government over the price already available in the market
(b) The floor price below which it can not be sold
(c) The minimum price at which the government is prepared to buy it
(d) Money paid to agriculturists for case of drought damaging their crops

74. The causes of inflation is

- (a) Increase in money supply
- (b) Fall in production
- (c) Increase in money supply and fall in production
- (d) Decrease in money supply and fall in production

75. IBRD is synonymous to

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| (a) World Bank | (b) Asian Development Bank |
| (c) International Monetary Fund | (d) WTO |

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