MIZORAM PUBLIC SERVICE COMMISSION

GENERAL COMPETITIVE EXAMINATIONS FOR RECRUITMENT TO THE POST OF SERICULTURE EXTENSION OFFICER UNDER SERICULTURE DEPARTMENT SEPTEMBER, 2018

PAPER - III

Time Allowed : 2 hours Full Marks : 200

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

1. Safe period for spraying of Bavistin
(a) 5-10 days (b) 10 days
(c) 15 days (d) 7-10 days

2. The Economic Threshold Level (ETL) of Mealy bug is
(a) 10/shoot (b) 20/leaf
(c) 20/plant (d) 15/leaf

3. Powdery mildew can be controlled by spraying
(a) 0.3% Karathane (b) O.5% Wetable Sulphur
(c) 0.1% Carbendazim (d) 0.2% Copper Oxychloride

4. Before starting Muga rearing, plantation site should be disinfect by dusting bleaching powder and lime in the ratio of
(a) 1:9 (b) 9:1
(c) 8:2 (d) 3:4

5. 0.5% Dimecron should be applied twice at 15 days interval to control
(a) Leaf spot (b) Leaf rust
(c) Powdery mildew (d) Gall infestation

6. Stem borer can be controlled by applying
(a) 1.5% Nuvan (b) 3% Nuvan
(c) 2% Bavistin (d) 5% Carbofuron

7. Cultural method for reducing Powdery mildew
(a) Timely utilization of leaves (b) Intercropping
(c) Adoption of wider spacing (d) All of these

8. Leaf rust in Som can be reduced by foliar spray of
(a) 1.0% Dithane M-45 (b) 1.0% Bordeaux
(c) 1.5% Nuvan (d) 1.0% Captan

9. Which one is a soil borne disease
(a) Root rot (b) Leaf blight
(c) Seedling blight (d) Stem rot

10. Most popular foliar disease is
(a) Fusarial wilt (b) Sooty mould
(c) Powdery mildew (d) All of these

11. Aphids can be controlled by
(a) Spraying of 0.2% Roger
(b) Dusting 5% Aldrin
(c) Spraying 0.05% Monocrotophos
(d) Dusting spike with 1.5% quinlphos

12. Pest of Eri food plants
(a) Scale insects
(b) Mealy bug
(c) Semilooper
(d) All of these

13. Symptoms of Alternaria blight in Castor plant
(a) Wilting plants
(b) Appearance of irregular spots on leaves
(c) Marginal necrosis
(d) Appearance of black spots on leaves

14. Leaf blight diseases of mulberry is caused by
(a) Virus
(b) Bacteria
(c) Fungus
(d) Nematode

15. Tukra is caused by
(a) Meconellicoccus hirsutus
(b) White fly
(c) Nematode
(d) Bihar hairy caterpillar

16. Bavistin is a
(a) Pesticide
(b) Bio-fertilizer
(c) Bio-control agent
(d) Fungicide

17. Causal organism of leaf spot disease
(a) Cercospora moricola
(b) Pseudomonas mori
(c) Meloidogyne incognita
(d) Phyllactinia corylea

18. The scientific name of mulberry pest Bihar hairy caterpillar is
(a) Spilosoma oblique
(b) Diaphania pulverulentalis
(c) Pseudodendrothrips mori
(d) Agonoscellis nubile

19. Manangement of Jassid
(a) 0.05% DDVP
(b) 0.5% Neem oil
(c) 0.1% Benomyl
(d) 2% Mancobez

20. Symptoms of root rot disease
(a) Decaying of root
(b) Sudden withering and defoliation of leaves
(c) Fail to sprout
(d) All of these

21. Which is not a pest of mulberry?
(a) Leaf roller
(b) Cutworm
(c) Thrips
(d) Dermestid beetle

22. Powdery mildew diseases reduces leaf yield up to
(a) 20%
(b) 37-45%
(c) 10-15%
(d) 15-25%

23. Which is not a sucking pest?
(a) White fly
(b) Thrips
(c) Mealy bug
(d) Leaf roller

24. Boat shaped leaves appearance is caused by
(a) Mealy bug
(b) Cutworms
(c) Thrips
(d) Leaf webber

25. Cultural method adopted for management of White fly in Mulberry garden is

(a) Fixing yellow sticky trap (b) Light trap

(c) Sprinkler irrigation (d) Pheromone trap

26. Dimethoate is a chemical used to control

(a) Pest (b) Fungal disease

(c) Bacterial disease (d) Stem borer

27. Mulberry root knot diseases can be controlled by applying

(a) Dithane M-45 (b) Bavistin

(c) Carbofuron (d) None of these

28. Stem canker is caused by

(a) Bacteria (b) Fungus

(c) Pest (d) Nematode

29. Symptoms of Leaf Rust

(a) White powdery patches on the lower surface of mulberry leaves

(b) Small brownish irregular spots

(c) Pin-head sized circular to oval, brownish eruptive lesions

(d) Leaf marginal browning or blackening of leaves

30. Marginal scorching and yellowing of Mulberry leaf is due to deficiency of

(a) Moisture (b) Oxygen

(c) Potassium (d) Glucose

31. Intra-veinal chlorosis of older leaves of Mulberry is caused by deficiency of

(a) Zinc (b) Magnesium

(c) CO_2 (d) Phosphorus

32. Slow and weak growth of Mulberry with less branching is an indication of the deficiency of

(a) Glucose (b) Copper

(c) Nitrogen (d) Chlorine

33. Application of gypsum or ammonium sulphate is recommended for

(a) Magnesium deficiency (b) Sulphur deficiency

(c) Zinc deficiency (d) Calcium deficiency

34. Defoliation of young leaves with necrosis along the veins is due to

(a) Calcium deficiency (b) Bromine deficiency

(c) Magnesium deficiency (d) Iron deficiency

35. The population density of which control measures should be initiated against an increasing pest population to prevent economic damage is called

(a) Economic threshold level (b) Economic injury level

(c) Damage boundary (d) Level of damage

36. Calculate the quantity of Bavistin fungicide to prepare 180 liters of 0.2% Carbendazim solution for spraying of one acre Mulberry garden

(a) 550g (b) 456g

(c) 680g (d) 720g

37. Sap-sucking insects of Oak tree

(a) Aphids, Beetles, Weevils, Scales
(b) Butterflies, Weevils, Aphids, Leaf hopper
(c) Leaf hopper, Aphids, White flies, Scales
(d) Stem borer, White flies, Scales, Butterflies

38. Powdery mildew causing pathogens, *Phylactinia corylea* is an

(a) Parasite
(b) Endoparasite
(c) Ectoparasite
(d) None of these

39. Disinfection should be done_____before rearing

(a) 3 days
(b) 5 days
(c) 2 days
(d) 7 days

40. Symptoms of Pebrine disease

(a) Black pepper- like spots
(b) Hard and stiff body
(c) Head appears hook shaped
(d) Shrinkage of abdominal segment

41. A bleaching powder with_____chlorine content is suitable for disinfection in Sericulture

(a) 0.3%
(b) 0.2-0.3%
(c) 0.5%
(d) 0.3-0.6%

42. Rectal protrution is the symptoms of

(a) Muscardine
(b) Flacherie
(c) Grasserie
(d) Pebrine

43. Tiger band disease in Oak Tasar Silkworm was caused by

(a) Bacteria
(b) Virus
(c) Nematode
(d) Protozoa

44. Which of the following is not a bed disinfectant?

(a) Sanitech
(b) Labex
(c) Sericillin
(d) None of these

45. Flacherie diseases was severe during

(a) April-July
(b) April-September
(c) November-April
(d) July-November

46. Gattine is a disease caused by combination of

(a) Virus and Protozoa
(b) Fungi and Bacteria
(c) Virus and Bacteria
(d) Virus and Fungi

47. The right approach to eliminate pathogens from the rearing environment is

(a) Rearing disease resistance silkworm breed
(b) Chemotherapy
(c) Practice hygienic measures
(d) Disinfection

48. Diseased larvae should be disposed in

(a) 0.2% slaked lime
(b) 5% bleaching powder
(c) 0.2% bleaching powder
(d) 3% slaked lime

49. The route of infection for Grasserie disease

(a) Sub cutaneous
(b) Wound
(c) Per oral
(d) Transovum transmission

50. Flacidity of Silkworm body is the sign of

(a) Flacherie (b) Densonucleosis

(c) Grasserie (d) White muscardine

51. Common symptoms of Fungal diseases

(a) Mummified larvae (b) Irregular size

(c) Translucent head and thorax (d) Anal protrution

52. Bacterial diseases in Silkworm

(a) Densonucleosis (b) Infectious Flacherie

(c) Aspergillosis (d) Black thorax septicemia

53. Management of viral disease

(a) Rearing under congenial conditions of environment and nutrition

(b) Lowering humidity and used bed disinfectant

(c) Mother moth examination

(d) All of these

54. Predisposing factor of muscardine disease

(a) Poor quality leaves (b) Low temperature with high humidity

(c) Transovarian (d) High temperature

55. Ideal magnification required for the identification of pebrine spore

(a) 400X (b) 600X

(c) 100X (d) 10X

56. Bacterial diseases known as empty gut disease in Oak tasar silkworm was caused by

(a) Aspergillus flavus (b) Streptococcus pernyi

(c) Blepheripa sugan (d) Apantales rificus

57. Causal organism of white muscardine in silkworm *Bombyx mori* is

(a) Nosema bombysis (b) Streptococcus bombysis

(c) Bm CPV (d) Beauveria bassiana

58. Sotto disease is caused by

(a) *Aspergillosis* (b) *Bacillus thurengiensis*

(c) Streptococci bacteria (d) Baculo virus

59. Vijetha is a

(a) General disinfectant (b) Bed disinfectant

(c) Insecticide (d) Pesticide

60. Indigenous hymenopterous ecto-pupal parasitoid used to kill the uzi pupa is

(a) *Nesolyx thymus* (b) *Dermester ater*

(c) *Labia arachidis* (d) *Exorista bombycis*

61. Nuclear polyhedrosis in silkworm is commonly known as

(a) Grasserie (b) Flacherie

(c) Muscardine (d) Pebrine

62. Which is not a silkworm disease?

(a) Grasserie (b) Powdery mildew

(c) Flacherie (d) Muscardine

63. Serious pest of silkworm is

(a) Dermestid beetle (b) Jassid

(c) Uzi fly (d) Rats

64. Pebrine is also known as

(a) Microsporidian diseases (b) Bacterial diseases

(c) Bm NPV (d) Sotto disease

65. Recommended dosage of disinfectant for rearing house and appliances

(a) 5% bleaching powder + 0.2% slaked lime (b) 3% bleaching Powder + 0.5% slaked lime

(c) 5% bleaching powder + 0.3% slaked lime (d) 2% bleaching powder +0.3% slaked lime

66. Chemical used for disinfection in Sericulture

(a) Formalin (b) Bleaching powder

(c) Slaked lime (d) All of these

67. The fungal infection caused by Apergillus flavus in Oak Tasar silkworm is controlled mainly by

(a) 5% Sulphuric acid (b) Hygienic management

(c) 10% Hydrochloric acid (d) Maintain low temperature and high humidity

68. Parasitoids that attacks Oak Tasar silkworm larvae

(a) Wasps (b) Bugs

(c) Ants (d) Preying mantis

69. The most common disease of Oak Tasar silkworm experienced in Mizoram

(a) Pebrine (b) Tiger band disease

(c) Grasserie (d) Muscardine

70. To avoid formation of clumps of eggs, the loose eggs are dipped for 10 mins in

(a) 2% formalin solution (b) 2% formaldehyde solution

(c) 0.5% potassium carbonate solution (d) 0.5% bleaching powder solution

71. The silkworm seed should be absolutely free from

(a) Grasserie disease (b) Flacherie disease

(c) Muscardine disease (d) Pebrine disease

72. Surface sterilization of DFLs means

(a) Treating the silkworm eggs with formalin (b) Cleaning the tray

(c) Bed cleaning (d) Disinfecting the rearing house

73. Disease free and quality silkworm eggs are produced in large quantities in

(a) Breeding station (b) Breeding centre

(c) Hatcheries (d) Grainage

74. A condition where bacteria multiply enormously in the blood of the larvae, pupae and moth

(a) Sotto (b) Septicemia

(c) Polyhedral (d) Mycosis

75. Poisonous substances entering into the silkworm through feeding, body contact etc are categorized under

(a) Chronic (b) Infectious

(c) Non-infectious (d) Sporadic

76. What should come in the place of question mark (?) in the number series given below?

35, 44, 62, 89, 125, ?

(a) 170 (b) 140

(c) 153 (d) None of these

77. If the fractions 8/5, 7/2, 9/5, 5/4, 4/5 are arranged in descending order of their values, which one will be fourth?

(a) 4/5 (b) 8/5

(c) 9/5 (d) 5/4

78. Look at this series: 4, 1, (1/4), (1/16), ... What number should come next?

(a) 1/3 (b) 1/32

(c) 1/64 (d) 1/128

79. Look at this series: 17, 8, 18, 11, 19, 14, ... What number should come next?

(a) 27 (b) 20

(c) 21 (d) 18

80. Look at this series: 153, 153, 140,140, 127, 127, ... What number should come next?

(a) 12 (b) 114

(c) 27 (d) 53

81. Look carefully for the pattern, and then choose which pair of numbers comes next.

45, 38, 5, 41, 34, 5, 37,30,

(a) 11, 5 (b) 10, 42

(c) 5, 38 (d) 5, 33

82. Look at this series: 664, 332, 340, 170, ____, 89, ... What number should fill the blank?

(a) 85 (b) 97

(c) 109 (d) 178

83. Look at this series: 7, 8, 18,57, __,1165, ... What number should fill the blank?

(a) 174 (b) 232

(c) 224 (d) 228

(Direction) Questions Nos. 84 & 85 consist of two words which have a certain relationship to each other followed by four pairs of related words, Select the pair which has the same relationship.

84. PALAEONTOLOGY: FOSSIL

(a) Phrenology: Skull (b) Behavior: Accounting

(c) Neurology: Blood (d) Theology: play

85. LIGHT: BLIND

(a) Speech: dumb (b) Language: deaf

(c) Tongue: sound (d) Voice: vibration

Directions for Questions Nos. 86 to 88 : Read the following passage carefully and answer the questions given below

As seen from space, it is a rotating blue ball streaked with varying cloud patches, reddish-brown deserts and brilliant white polar caps. The energy for heating the Earth comes almost exclusively from sunlight, the energy conducted up from the hot interior of the Earth amounting to less than one thousandth of one percent of that arriving in the form of visible light from the Sun. But not all the sunlight is absorbed by the Earth. Some is reflected back to space by polar ice, clouds, and the rocks and water on the surface of the Earth. The average reflectivity, or albedo, of the Earth, as measured directly from satellites and indirectly from Earthshine reflected off the dark side of the Moon, is about 35 percent. The 65 percent of sunlight that is absorbed by the Earth heats it to a temperature which can readily be calculated. This temperature is about 18C, below the freezing point of seawater and some 30 C colder than the measured average temperature of the Earth.

86. What happened to the amount of Sunlight which is not absorbed by Earth?

(a) Reflected Back (b) Absorbed by Polar Ice

(c) Reflected off the dark side of the Moon (d) Rotated back to Source.

87. What is the main Source of Energy to heat the Earth?

(a) Clouds (b) Rocks

(c) Sunlight (d) None of these

88. What is the amount of the heat which is reflected back?

(a) 65 Percent (b) 35 Percent

(c) 100 Percent (d) None of these

89. College is related to Student in a same way as 'Hospital' is related to

(a) Doctor (b) Nurse

(c) Patient (d) Medicine

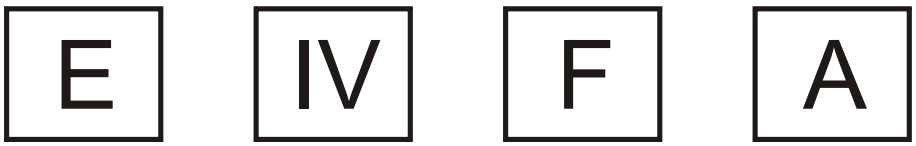
90. Which of the following words is the odd one out?

(a) Marigold (b) Ferns

(c) Lotus (d) Rose

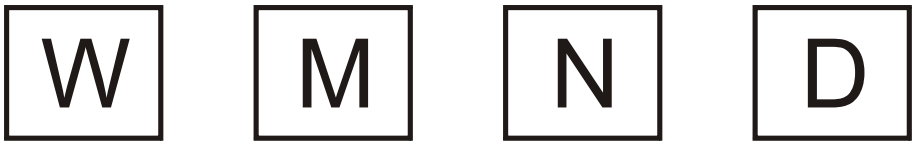
Instructions for Question Nos. 91 to 93: Select the odd one.

91.



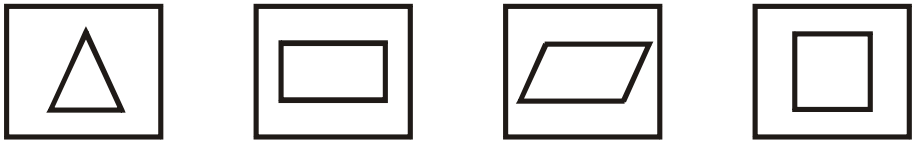
(a) (b) (c) (d)

92.



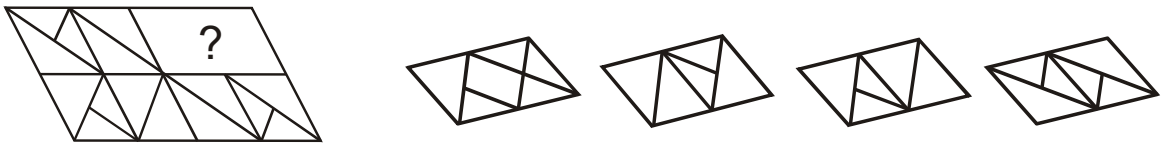
(a) (b) (c) (d)

93.



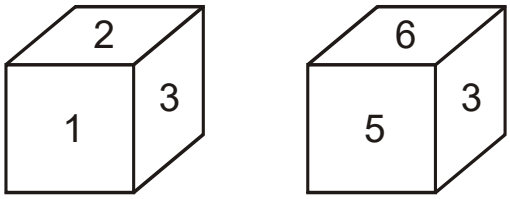
(a) (b) (c) (d)

94. Identify the figure that completes the pattern.



(a) (b) (c) (d)

95. Which digit will appear on the face opposite to the face with number 4?



(a) 3 (b) 5

(c) 6 (d) 2

96. What is the exact value of x?

(1) $4 < 2x < 13$

(2) $x^2 = 25$

(a) Statement (1) ALONE is sufficient, but statement (2) alone is not sufficient to answer the question asked

(b) Statement (2) ALONE is sufficient, but statement (1) alone is not sufficient to answer the question asked

(c) BOTH statements (1) and (2) TOGETHER are sufficient to answer the question asked, but NEITHER statement ALONE is sufficient

(d) Statements (1) and (2) TOGETHER are NOT sufficient to answer the question asked, and additional data are needed

97. Lalropuii drives 10 km. towards South, takes a right turn and drives 6 km. She then takes another right turn, drives 10 km. and stops. How far is she from the starting point?

(a) 16 km. (b) 6 km.

(c) 4 km. (d) None of these

98. A man travels 4 km due North, then travels 6 km due East and further travels 4 km due North. How far is he from the starting point?

(a) 6 km (b) 14 km

(c) 8 km (d) 10 km

99. A woman going with a boy is asked by another woman about the relationship between them. The woman replied, "My maternal uncle and the uncle of his maternal uncle is the same." How is the lady related to that boy?

(a) Grandmother and grandson (b) Mother and son

(c) Aunt and nephew (d) Cannot be determined

100. I was born on August 11. Mohan is older than me by 11 days. This year's Independence Day falls on Monday. The day on which Mohan's birthday will fall this year will be

(a) Friday (b) Tuesday

(c) Sunday (d) Thursday

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