

MIZORAM PUBLIC SERVICE COMMISSION

TECHNICAL COMPETITIVE EXAMINATIONS FOR RECRUITMENT TO THE POST OF SERICULTURE EXTENSION OFFICER UNDER SERICULTURE DEPARTMENT GOVERNMENT OF MIZORAM, OCTOBER, 2020

TECHNICAL PAPER - II

Time Allowed : 2 hours

Full Marks : 150

All questions carry equal mark of 2 each.

Attempt all questions.

- Which country is the largest producer of raw silk?
(a) Japan (b) India
(c) China (d) South Korea
- India occupies the _____ position in production of raw silk in the world.
(a) 2nd (b) 3rd
(c) 4th (d) 5th
- Maximum raw silk produced in India is :
(a) Bivoltine silk (b) Multivoltine silk
(c) Univoltine silk (d) Trivoltine
- Which state is the largest producer of raw silk in India?
(a) Tamil Nadu (b) Andhra Pradesh
(c) Karnataka (d) West Bengal
- What is Vanya silk?
(a) Vanya silk is produced by non-mulberry silkworms
(b) Eri silk
(c) Raw silk
(d) Oak tasar silk
- Which state is the leading raw silk producer in India?
(a) Tamil Nadu (b) Karnataka
(c) Andhra Pradesh (d) West Bengal
- Which country is producing all the four commercial silk in the world?
(a) India (b) China
(c) South Korea (d) Japan
- Muga silk is produced only in :
(a) India (b) Bangladesh
(c) Pakistan (d) Myanmar
- Define Sericulture.
(a) Sericulture is the science that deals with the production of raw silk by rearing of silkworms.
(b) Silk culture
(c) Silkworm rearing
(d) The process in which raw silk is produced

10. More than _____ % of the raw silk production in India is mulberry silk.
- (a) 80 % (b) 87 %
(c) 89 % (d) 77 %
11. What is ants well?
- (a) It is the seat of rearing rack
(b) Alluminium bowl
(c) It is a device to prevent ants from entry into the rearing racks containing rearing tray.
(d) Plastic mug
12. The scientific name of Mulberry silkworm is :
- (a) Bombyx mori (b) Bombyx mandarina
(c) Bombyx rotundapex (d) Bombyx incomposita
13. Philosamia ricini is the scientific name of :
- (a) Eri silk worm (b) Muga silkworm
(c) Oak Tasar silkworm (d) Mulberry silkworm
14. Out of the four variety of silkworms which one is the only monophagus in nature.
- (a) Mulberry silkworm (b) Muga silkworm
(c) Eri silkworm (d) Oak tasar
15. In Orissa Tropical Tasar is mainly fed on _____ leaves.
- (a) Sal (b) Arjun
(c) Ber (d) Janum
16. Explain polyphagus insects?
- (a) Insects (including silkworm) that feed on more than one food plants.
(b) Multi food plants
(c) Muga silkworm only
(d) Mulberry silkworm only
17. Silkworm undergoes _____ moulting.
- (a) two (b) three
(c) four (d) five
18. _____ symptoms are intersegmental membranes of the body which becomes swollen and the skin becomes shiny.
- (a) Flacherie (b) Muscardine
(c) Grasserie (d) Pebrine
19. What is Voltinism?
- (a) Voltinism is the number of generation in a year
(b) One generation in a year
(c) Two generation in a year
(d) Number of moulting in a year
20. What is fecundity?
- (a) Number of eggs laid by muga moth (b) The number of eggs laid by a single moth
(c) Number of eggs laid by eri (d) Number of mulberry eggs

21. The average number of eggs laid by Mulberry silk moth is :
- (a) 300 (b) 400
(c) 450 (d) 500
22. Name Oak Tasar silkworm reared in Mizoram :
- (a) *Antherea proylei* (b) *Antherea mylitta*
(c) *Anthereae roylei* (d) *Anthereae frithi*
23. Explain Chawki rearing.
- (a) Rotational rearing
(b) Rearing of young age silkworm (preferably upto 2nd moult out) under optimum climatic conditions.
(c) Rearing of late worms
(d) Rearing of first stage worms
24. Explain Why Chawki rearing is necessary?
- (a) To protect early age worms
(b) Chawki rearing is necessary to minimize the loss and mortality of young age worms and to increase cocoon yield
(c) To increase filament length
(d) To increase cocoon yield
25. What is the purpose of Ante room?
- (a) To act as barrier to the entry of Uzi fly (b) To act as disinfection room
(c) A room to culture Uzi fly (d) Prevention of Uzi fly
26. Optimum temperature for rearing mulberry silkworm is :
- (a) 24° C - 26° C (b) 24° C - 25° C
(c) 26° C - 28° C (d) 23° C - 28° C
27. What is the main physical disinfectants?
- (a) cold storage (b) sunlight
(c) wind (d) to keep outside
28. What is the tropical Tasar silkworm reared in India?
- (a) *Anthereae roylei* (b) *Anthereae mylitta*
(c) *Anthereae yamamai* (d) *Anthereae proylei*
29. Muga worms came down to the bottom after consuming the leaves, this phenomenon is called :
- (a) geotropism (b) descending worms
(c) falling worms (d) bharpok
30. The chromosome number of *Anthereae proylei* is :
- (a) 30 - 49 (b) 30
(c) 25 - 30 (d) 40
31. Muga silkworm has the minimum number of chromosome than all other silkworms. The chromosome of Muga silkworm is :
- (a) 25 (b) 30
(c) 15 (d) 40
32. Oak Tasar silkworm is a _____ bivoltine.
- (a) strong (b) pure
(c) weak (d) partial

33. Silkworm undergo _____ times moulting.
(a) two (b) three
(c) four (d) five
34. When _____ are out of moult feeding may be resumed.
(a) 80% (b) 90%
(c) 95% (d) 100%
35. The biochemical aspect of *A. mylitta* have been studied and showed pH of diseases larvae of the body fluid increase towards _____.
(a) Acidity (b) Alkalinity
(c) Both acidity and alkalinity (d) None of these
36. Hybrid vigour is also known as :
(a) Crossing of two species (b) Heterosis
(c) Dominant gene (d) Crossing of two breeds
37. Under major classification of insects, Mulberry silkworm comes under the family of :
(a) Bombycidae (b) Saturniidae
(c) Lepidoptera (d) Monoclamydae
38. *Anthereae pernyi* feeds on _____ leaves.
(a) Oak (b) Castor
(c) Som (d) Soalu
39. What is cross breed?
(a) Crossing of two different races
(b) Cross breed is the mating of two or more different breeds
(c) Crossing of two breeds
(d) Production of Multi x Bi
40. Where a univoltine race is reared in India?
(a) Bihar (b) Kashmir state
(c) Karnataka (d) West Bengal
41. How many types of mutation breeding are there?
(a) Two (b) Three
(c) Four (d) Five
42. Define generation gap?
(a) The time between the parents and the offspring
(b) The average age of the parents when their offspring are born
(c) The gap between the moth and the silkworms
(d) The life cycle of an insect
43. Most absorption of water in a plants takes place from the :
(a) root tap (b) root branches
(c) hairs zone (d) tape root
44. The arrangement of leaves in a plants is known as :
(a) leaf bud (b) attachment of leaf
(c) phylotaxy (d) taxonomy

45. Male and female moth of Tasar silkworm can easily be differentiate from the :
- (a) wings (b) thorax
(c) antennae (d) abdomen
46. The abdomen of female moth in mulberry is comparatively _____ than the male moth
- (a) smaller (b) bigger
(c) longer (d) thinner
47. The scientific name of Muga silkworm is :
- (a) *Antheraea mylitta* (b) *Antheraea assamensis*
(c) *Antheraea polyphemus* (d) *Antheraea frithi*
48. *Phylosamia Cynthia* is the wild silk moth of :
- (a) Muga (b) Tasar
(c) Eri (d) Mulberry
49. Leaf rust is caused by :
- (a) Virus (b) Leaf gall
(c) Fungus (d) Bacteria
50. Powdery mildew is a fungus caused by :
- (a) *Phyllactinia corylea* (b) *Cercospora moricola*
(c) *Cerolellum fici* (d) *Puccinia triticina*
51. The leaf spot of som can be controlled by spraying :
- (a) Bavistin (b) Indofil M-45
(c) Mathene M-45 (d) Glycel
52. The causative agent of Pebrine disease is :
- (a) *Berreline virus* (b) *Nosema bombysis*
(c) Polyhedrosis (d) *Puccinia recondita*
53. Name the disease of silkworm that can be transmitted from parents to the offspring.
- (a) Virus disease (b) Fungal disease
(c) Bacterial disease (d) Pebrine disease
54. The most common disinfectant used in silkworm rearing is :
- (a) 2 -5% formalin (b) 0.1% rogor
(c) Bleaching powder (d) Lime
55. The most economic method of silkworm rearing is :
- (a) tray rearing (b) shoot rearing
(c) chawki rearing (d) by any means
56. The mode of transmission of disease from the infected mother moth is called :
- (a) transfer of disease from the ovary (b) transovarial
(c) inherited disease (d) transgenesis
57. Plant hopper is also called :
- (a) leafhopper (b) root knot
(c) jassid (d) sucking insect

58. Bihar caterpillar is controlled by :
- (a) leaf plucking (b) spraying of DDT
(c) installation of light trap (d) yellow sticky trap
59. Jassid attacks mostly the :
- (a) root (b) leaf
(c) stem (d) the trunk
60. Brown beetle in Assam causes maximum injury during :
- (a) November - December (b) October - November
(c) September - October (d) January - March
61. In Muga, hibernating pupae are found along the seed cocoons collected from the :
- (a) high altitude (b) plain area
(c) foot hills (d) all of these
62. The advantage of shoot rearing is it requires cleaning only _____ during rearing.
- (a) once (b) twice
(c) thrice (d) 5 times
63. Flacherie is the general term of _____ disease.
- (a) bacterial (b) viral
(c) fungal (d) both viral and fungal
64. Very high temperature during egg laying results to :
- (a) reduced eggs (b) dead eggs
(c) diapause eggs (d) unfertilized eggs
65. Mulberry moth emerges after :
- (a) 9 – 14 days of spinning cocoons (b) 10 – 15 days of spinning cocoons
(c) 15 – 20 days of spinning cocoons (d) 8 – 14 days of spinning cocoons
66. Female moth is generally :
- (a) weaker (b) inactive
(c) stronger than male moth (d) over active
67. Occurrence of grasserie is throughout the year but mere in :
- (a) Spring (b) Summer
(c) Winter (d) Autumn
68. Uzi flies are pest of :
- (a) Mullberry (b) Non-Mulberry
(c) All variety of silkworms (d) Eri
69. Ants brings more damage to silkworm reared in :
- (a) Indoor (b) Outdoor
(c) Semi out door (d) Semi indoor
70. Birds are also predators causing extensive damage to silkworm of :
- (a) Mulberry (b) Non-Mulberry
(c) Eri (d) Muga

71. Septicemia is another form of _____ disease.
- (a) Grasserie (b) Flacherie
(c) Fungal disease (d) Pebrine
72. Mulberry grows best in a rainfall ranging of :
- (a) 650 – 2000 m (b) 600 – 650 m
(c) 700 – 2500 m (d) 200 – 2500 m
73. The best season for planting mulberry in the North East is :
- (a) January - February (b) March - April
(c) May - June (d) June – July
74. A common size of Mulberry nursery bed is :
- (a) 2 m x 0.45m (b) 2.5 m x 0.45 m
(c) 2 m x 1 m (d) 2.5 m x 2 m
75. Space for raw system of planting mulberry is :
- (a) 50cm × 10cm (b) 45cm × 10cm
(c) 50cm × 15cm (d) 40cm × 10cm

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