HT NO: 27018

SKU RESCET – 1027

RESEARCH COMMON ENTRANCE TEST – 2010
SERICULTURE

Time : 90 Minutes | Max. Marks : 100

Answer ALL the questions.

ALL questions carry EQUAL marks.

Multiple Choice Questions (1 to 100)

1. Morin is present in

   (1) Mulberry (2) Terminalia

   (3) Castor (4) Papaya

2. Mulching means

   (1) Digging the soil

   (2) Fertilizer application

   (3) Covering the soil to prevent soil moisture evaporation

   (4) Irrigation

3. Root Knot disease is caused by

   (1) Fusarium

   (2) Pseudomonas

   (3) *Meloidogyne incognita*

   (4) Jassids

4. *Ricinus communis* is the scientific name of

   (1) Tapioca (2) Castor

   (3) Papaya (4) Oak

[P.T.O.]

5. VAM (Vesicular Arbuscular Mychorize) is

(1) Nitrogen fixing bacteria

(2) Potassium fertilizer

(3) Phosphate solubilizing fungi

(4) Iron solubilization

6. Carbon fixation mechanism in mulberry is

(1) C_3 (2) C_4 (3) C_2 (4) None

7. Pruning is

(1) Methodical removal of branches

(2) Removal of plants

(3) Digging the soil

(4) Foliar application of fertilizer

8. Bavistin is

(1) Pesticide

(2) Biofertilizer

(3) Biocontrol agent

(4) Fungicide

9. Causal organism of leaf spot disease

(1) Cercospora moricola

(2) Phyllactinia corylea

(3) Meloidogyne incognita

(4) Pseudomonas mori

10. Fertilizer dosage for mulberry under irrigated conditions

(1) 100:50:50

(2) 280-300:120:120 NPK

(3) 120:80:80 NPK

(4) 50:25:25

11. Drought means

(1) Scarcity of water

(2) Excess of water

(3) Irrigation to plant

(4) Soil erosion

12. Colchicine is

(1) Chemical mutagen (2) Pesticide

(3) Fungicide (4) Nematicide

13. Tukra is caused by

(1) *Meconellicoccus hirsutus*

(2) Spiralling whitefly

(3) Nematode

(4) Pseudomonas mori

14. Chromosome number in mulberry

(1) n = 14 (2) n = 28 (3) n = 48 (4) n = 1

15. Back crossing is used for induction of

(1) Disease resistance (2) Inbreeding

(3) Mutation breeding (4) Polyploidy breeding

16. *Mechilus bombycina* is the food plant of

(1) Tasar silkworm

(2) Muga silkworm

(3) Eri silkworm

(4) Mulberry silkworm

17. Paired row system means

(1) $2' \times 2'$ (2) $3' \times 3'$

(3) $(2 \times 3) \times 5$ (4) $1\frac{1}{2} \times 1\frac{1}{2}$

18. Insertion of a part / branch of a plant into a rooted plant is called

(1) Grafting

(2) Cutting preparation

(3) Air layering

(4) Trench layering

19. Example for green manure crop

(1) Sun hemp

(2) Mango

(3) Mulberry

(4) Castor

20. Vermicompost is prepared by

(1) Compost

(2) Azotobacter

(3) Earthworm

(4) Nitrogen fertilizer

21. Weathering is defined as

(1) Soil moisture maintenance

(2) Fertilizer application

(3) Leaching of salts

(4) Disintegration of parent rock

22. Root nodule is formed by

(1) Rhizobium (2) Nematode

(3) Virus (4) Mealy bug

23. Water holding capacity is more in

(1) Clay soils

(2) Sandy soils

(3) Laterite soils

(4) Alkaline soils

24. Gosheoerami is

(1) Oak plant

(2) Muga food plant

(3) Castor plant

(4) Temperate mulberry variety

25. Germplasm Bank is a

(1) Fertilizer storage centre

(2) Place where water is stored

(3) Place where gene pool is maintained

(4) Agriculture development bank

26. Female silkworm pupa can be identified by
    (1) Narrow abdomen and pair of hook like structure
    (2) Broader abdomen and knob like ovipositor
    (3) Small body structure
    (4) Narrow slit on the abdomen

27. Ideal magnification required for the identification of pebrine spores is
    (1) 400 X
    (2) 100 X
    (3) 50 X
    (4) 600 X

28. Pebrine spores appears
    (1) Round and red in colour
    (2) Oval, colourless and lustrous
    (3) Spherical and red
    (4) Rod shaped

29. Ideal temperature and humidity required for preservation of seed cocoons is
    (1) 24 ± 2° C and 70-80% RH
    (2) 20° C and 90% RH
    (3) 14 ± 1° C and 60% RH
    (4) 10 ± 2° C and 65% RH

30. Transfer of newly hatched larvae from egg sheet to rearing tray is known as
    (1) Incubation
    (2) Mounting
    (3) Moulting
    (4) Brushing

31. Surface sterilization of DFLs means
    (1) Treating the silkworm eggs with formalin
    (2) Cleaning the trays
    (3) Bed cleaning
    (4) Disinfecting the rearing house

32. Mother moth examination is done to identify
    (1) Viral diseases
    (2) Pebrine diseases
    (3) Pests
    (4) Fecundity

33. Mating period required for maximum fertilization of eggs is

(1) 3-4 hours
(2) 6-7 hours
(3) 9-10 hours
(4) 24 hours

34. Specific gravity of HCL used in cold acid treatment

(1) 1.11
(2) 1.54
(3) 2.4
(4) 0.54

35. Hygrometer is used to record

(1) Rain fall
(2) Soil moisture
(3) Relative humidity
(4) Light

36. A DNA strand copied from mRNA using reverse transcriptase is known as

(1) Z DNA
(2) Humidifier
(3) cDNA
(4) None of the above

37. The muga silkworm belongs to the genus

(1) Antheraea
(2) Philosamia
(3) Eriogyna
(4) None of the above

38. Under natural conditions the Univoltine races produce

(1) Ten generations/Annum
(2) Two generations/Annum
(3) One generation/Annum
(4) Five generations/Annum

39. Diploid number of chromosomes in somatic cells of *Bombyx mori* are

(1) 28
(2) 56
(3) 84
(4) 112

40. Cocoon styfling is a process of

(1) Killing of Pupae
(2) Killing of larvae
(3) Dissecting a larvae
(4) Killing eggs

41. Ushnakoti is a
    (1) Reeling device
    (2) Cottage hot air drying chamber
    (3) Book making device
    (4) Cocoon sorting device

42. Serigraph test is
    (1) To determine the neatness of raw silk
    (2) To find the tenacity and elongation of raw silk
    (3) To determine the degree of agglutination of filaments
    (4) To determine the number of breaks

43. pH of reeling water required for quality raw silk production is
    (1) 8.8 (2) 10-12
    (3) 6.6-7.6 (4) 8.2-9

44. Number of ends per basin in multiend reeling machine
    (1) 20 (2) 2 (3) 1 (4) 10

45. Filament length of bivoltine cocoon
    (1) 300-500 (2) 700-1500
    (3) 500-600 (4) 2000-3000

46. Grainage is a
    (1) Silkworm seed production center
    (2) Silk reeling unit
    (3) Silk twisting unit
    (4) Chawki rearing unit

47. Optimum humidity required for incubation of silkworm eggs is
    (1) 80-85% (2) 65-70%
    (3) 35-50% (4) 90-95%

48. Core protein in silk filament is

(1) Glycine
(2) Sericin
(3) Leusin
(4) Fibroin

49. Cocoons spun by two silkworms are known as

(1) Mute cocoons
(2) Undersized cocoons
(3) Malformed cocoons
(4) Double cocoons

50. Fagara silk is obtained from the giant silk moth

(1) *Attacus atlas*
(2) *Bombyx mori*
(3) *Antheraea mylitta*
(4) *Philosamia ricini*

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

(1) *Nosema bombycis*
(2) *Streptococcus bombycis*
(3) *Bacillus thurengiensis*
(4) *Beauveria bassiana*

52. Sotto disease caused by

(1) Aspergillosis
(2) *Bacillus thurengiensis*
(3) Streptococci bacteria
(4) Baculo virus

53. Raw material for the production of spun silk is

(1) Pupal waste
(2) Silk waste
(3) Bark of mulberry
(4) Silkworm litter

54. The head office of Central Silk Board is located in

(1) Chennai (2) Bangalore

(3) Kolkota (4) Delhi

55. Hormone produced by corpus allatum in silkworm is

(1) Juvenile hormone (2) Ecdysone hormone

(3) Diapause hormone (4) None of the above

56. Role of restriction enzymes in recombinant DNA technology is

(1) Cut the DNA (2) Join the DNA

(3) Match the DNA (4) Above all

57. Vijetha is a

(1) General disinfectant

(2) Bed disinfectant

(3) Chemical used for the uniform hatching

(4) Pesticide

58. Chawki rearing means

(1) Rearing of late age larvae (2) Incubation of silkworm eggs

(3) Young age silkworm rearing (4) Moulting care

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

(1) *Nesolyx thymus* (2) *Dermestes ates*

(3) *Labia arachidis* (4) *Exorista bombycis*

60. Type of croissure in multiend reeling machine is

(1) Chambon type (2) Tavellette type

(3) Standard type (4) Above all

61. Silkworms are fond of dim light of

(1) 50-60 luxes (2) 5-10 luxes

(3) 1-2 luxes (4) 15-30 luxes

62. Name the valve which regulates the passage of food from foregut to the midgut and prevents regurgitation is

(1) Pyloric valve
(2) Cardiac valve
(3) Tunica intima
(4) Ostia

63. External openings of the respiratory system in *Bombyx mori* are known as

(1) Ostia
(2) Rectum
(3) Spiracles
(4) Spinneret

64. Optimum temperature for spinning of a cocoon is

(1) 30° C
(2) 40° C
(3) 50° C
(4) 24° C

65. Cocoon riddling means separation of cocoons according to their

(1) Size
(2) Colour
(3) Shape
(4) Above all

66. The diameter of the DNA helix is

(1) 40 A°
(2) 60 A°
(3) 20 A°
(4) 100 A°

67. Elongation of primer nucleotide in the 5'-3' direction is catalysed by the enzyme

(1) DNA polymerase III
(2) DNA ligase
(3) Helicase
(4) Gyrase

68. The construction of protein molecules in the cell by sequentially arranging amino acids using peptide bond is called

(1) Transcription
(2) Protein synthesis
(3) DNA replication
(4) Translation

69. Restriction enzymes from different organisms that recognize identical nucleotide sequences are called

(1) Isoschizomers
(2) Methyl transferase
(3) Micro projectiles
(4) Liposomes

70. Sulphur containing amino acid

(1) Cystine
(2) Glutamine
(3) Histidine
(4) Proline

71. Identification of individuals at genetic levels is known as

(1) Gene library
(2) DNA finger printing
(3) DNA replication
(4) DNA profiling

72. Silk protein fibroin contains 50% of

(1) Serine
(2) Alanine
(3) Proline
(4) Glycine

73. Synthesis of small fragments during replication in the lagging strand are known as

(1) Okazaki fragments
(2) RNA fragments
(3) DNA fragments
(4) Protein fragments

74. Multiple forms of an enzyme catalyzing the same reaction is known as

(1) Catalases
(2) Isoenzymes
(3) Lyases
(4) Oxidases

75. The moment of charged particles in an electric field resulting in their migration towards the oppositely charged electrode is known as

(1) Southern blotting
(2) Chromatography
(3) Centrifugation
(4) Electrophoresis

76. Home land of sericulture is

(1) Thailand
(2) Japan
(3) Korea
(4) China

77. Number of units of cocoons required to produce one unit of silk is known as

(1) Renditta
(2) Denier
(3) Shell ratio
(4) Kekame

78. Chambon type of croissure is found in

(1) Country charka
(2) Cottage basin
(3) Multiend reeling
(4) Automatic reeling unit

79. The female silkworm larvae can be identified by the presence of

(1) Silk glands
(2) Scent glands
(3) Ischiwatta's glands
(4) Herold glands

80. Scientific name of Uzi fly

(1) Bombyx mori
(2) Philosamia ricini
(3) Exorista sorbillans
(4) Dermesters ater

81. Nuclear polyhedrosis in silkworm is commonly known as

(1) Grasserie
(2) Flacherie
(3) Muscardine
(4) Pebrine

82. Extension education is

(1) Formal education
(2) Adult education
(3) Informal education
(4) All the above

83. *Streptococcus faecalis* is associated with

(1) Bacterial disease
(2) Viral disease
(3) Fungal disease
(4) Protozoan disease

84. The common media used to culture bacterial micro flora is

(1) Nutrient agar
(2) Sabouraud dextrose agar
(3) Potato dextrose agar
(4) Grace media

85. Chawki silkworms should be fed with

(1) Coarse leaf (2) Tender leaf

(3) Medium leaf (4) Glossy leaf

86. Scientific name of mulberry silkworm

(1) *Antheraea mylitta* (2) *Antheraea assama*

(3) *Bombyx mori* (4) *Philosamia ricini*

87. Denier is

(1) Thickness of the Silk filament (2) Length of the filament

(3) Strength of the filament (4) Depth of the filament

88. Haemocytes involved in

(1) Excretion (2) Digestion

(3) Defense (4) Respiration

89. Sanitech is a

(1) Disinfectant (2) Pesticide

(3) Fungicide (4) Weedicide

90. Fine quality of the silk can be obtained from

(1) Multivoltine cocoons (2) Diazo cocoons

(3) Bivoltine cocoons (4) Nistari cocoons

91. Effective and efficient method to transfer the technology to the field is

(1) Lecture method (2) Discussions

(3) Buzz sessions (4) Demonstrations

92. Which silk is known as ahimsa silk ?

(1) Muga Silk (2) Mulberry (3) Eri (4) Tasar

93. Antwells are used during rearing to prevent the menace of

(1) Rats (2) Lizards

(3) Birds (4) Ants

94. Measuring the minute objectives by using microscope is known as

(1) Sterilization
(2) Micrometry
(3) Chromatography
(4) Spectroscopy

95. Name the country - the biggest consumer of raw silk and silk fabrics

(1) China
(2) India
(3) Singapore
(4) Japan

96. India is monopoly in the production of which silk ?

(1) Mulberry Silk
(2) Muga Silk
(3) Tasar
(4) Eri

97. The BLAST program to align DNA sequences was developed by

(1) Fredrick Sanger *et al*
(2) Joseph Sambrook *et al*
(3) Altschul *et al*
(4) Leroy Hood *et al*

98. Application of information technology to the management of biological data is known as

(1) Genetic engineering
(2) Bioinformatics
(3) Recombinant technology
(4) Biochemistry

99. AGRICOLA stands for

(1) Agricultural online access
(2) Agricultural online library access
(3) Aquaculture online access
(4) All the above

100. In 1962, Watson, Crick and Wilkins awarded with

(1) Magsaysay Award
(2) Padmasri
(3) Noble prize
(4) Bharatha Ratna
