2021

SERICULTURE

[MAJOR]

Paper : I

Full Marks : 100 Time : 4 Hours

The figures in the right-hand margin indicate marks.

Candidates are required to give their answers in their own words as far as practicable.

Write the answers to questions of each group in separate books.

GROUP-A

(General Sericulture)

(Marks : 50)

1. Answer any **two** questions: 1×2=2

   a) Give an example of traditional multivoltine race which is reared in West Bengal.

   b) What is voltimism?

   c) What is silk conditioning?

   d) Which organization of Government of India is entrusted with policy making for the development of Sericulture?

2. Answer any **five** questions: 2×5=10

   a) Write a short note on silk route.

   b) Define silk exchange.

   c) What is shell ratio percentage of Renditta?

   d) Mention two major problems of sericulture industry.

   e) Mention major uses of mulberry plant.

   f) Differentiate between natural fibre and man made fibre.

   g) Mention any two by-products of sericulture industry.

3. Answer any **three** questions: 6×3=18

   a) State the silk industrial by products in spun silk industry.

   b) Discuss in details about the silk industry in Karnataka.

   c) State how sericulture spread from China to different countries.

   d) Write notes on degumming and bleaching of silk.

   e) Write a note on preservation of stifled cocoons.

4. Answer any **two** questions: 10×2=20

   a) i) Give an outline of silk scenario in Asian countries.

ii) State the methods of testing and grading of silk in India. 6+4

b) i) Classify mulberry silkworm on the basis of origin and voltimism.

ii) Discuss employment generation in 0.4 hectare under irrigated mulberry cultivation upto raw silk production. 5+5

c) i) State the marketing setup of cocoon in different states.

ii) Comment on the different types of cocoons of tasar, muga and eri silkworm. 5+5

GROUP-B

(Biology of Silkworm and Silkworm Rearing Technology)

(Marks : 50)

5. Answer any **two** questions: 1×2=2

a) Mention the family to which non-mulberry silkworms belongs.

b) In which state of India all types of silk is produced?

c) Indicate the feeding stage in the life cycle of silkworm.

d) Name a bed disinfectant used in eastern India.

6. Answer any **five** questions: 2×5=10

a) Indicate two multix Bi hybrids recommended for eastern India.

b) What is the ideal site for a Rearing House?

c) In which sex of *Bombyx mori* spermatheca is present?

d) Indicate the stages in the life stages silkworm.

e) Indicate the room disinfectant solution required per square meter of Rearing House.

f) Mention the bed cleaning schedule during Chawki stage.

g) How much bed space (area) is required to rear 100 multix Bivoltine dfls?

7. Answer any **three** questions: 6×3=18

a) How leaf is estimated for rearing?

b) Write a note on digestive system of silkworm larva with a diagram.

c) Describe the mouth parts of silkworm larva with a sketch.

d) Write a note on cocoon assessment.

e) What are the characteristics of chawki stage larva? What should be ideal temperature and RH during chawki stage?

8. Answer any **two** questions: 10×2=20

a) Write notes on (any **two**): 5+5

i) Brushing of loose eggs.

ii) Mounting of silkworm

iii) Sorting of cocoons

b) What is disinfection? Enumerate the importance of disinfection for a successful crop. Name two chemical disinfectants used in sericulture. 3+5+2

c) What do you understand by Chawki Rearing? Why more stress is given on chawki rearing for a good harvest? Mention the environmental condition required during chawki stage. Add a brief note on Chawki Rearing Centre. 2+3+2+3

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