

CERTIFICATE COURSE IN SERICULTURE

ORGANISED BY

DEPARTMENT OF ZOOLOGY

ACADEMIC YEAR -: 2023-2024

Disclaimer

The syllabus for the B.Sc. Zoology Certificate Course in Sericulture follows guidelines from the college development committee at Shivneri mahavidyalaya Shirur anantpal Dist-Latur 413544. It has been meticulously crafted by the department of Zoology and approved by Principal, Shivneri Mahavidyalaya. Participants are urged to use this syllabus as a comprehensive guide for Sericulture studies.

DEPARTMENT OF ZOOLOGY

CERTIFICATE COURSE IN SERICULTURE

SYLLABUS

Period - 30

Mark-90

Objectives -:

- 4) Study the cultivation of mulberry plant, silk worm; identify and manage mulberry diseases.
- 5) Acquireskill to carry out silk worm rearing and post-cocoon processing.
- Study the silk worm diseases, their control and preservation.

Outcome-:

- Ability to cultivate mulberry plants and silk worms; identify and manage mulberry diseases.
- 4) Properly carry out silk worm rearing and post-cocoo processing.

UNIT-I

Introduction of Sericulture

Period-09

- F) History and Scope of sericulture, present status of sericulture in India.
- (i) Types of silkworm- Mulberry, Tasar, Eri and Muga silkworm
- H) Cultivation of Mulberry- Planting, Grafting and Harvesting
- I) Mulberry diseases-Foliar diseases, Root rot diseases, Commonpests of mulberry
- J) Silk worm rearing equipments

UNIT-II

Rearing practices

Period-12

- C) Procurement of quality seeds
- Preperation of feed bed and feeding, bed cleaning, spacing, mounting, harvesting of cocoons, post cocoon processing-relling.

Pests and Diseases

- E) Introduction and classification of different types of silkworm diseases.
- FY Infulence of environment and nutrition on the incidence of diseases.
- G) Pests of silkworm.
- H) Pathogenesis, Control and Preventation of silkworm diseases

UNIT - III Period-09

Sericulture Economics and Marketing

- E) Mulberry cultivation- Cost and returns under irrigation and rainfed condition.
- F) Economics of silk worm rearing; Investments and returns.
- G) Sericulture marketing organization for seed cocoon, raw silk and silk fabric.
- H) Traditional and regulated markets.

REFERENCE BOOKS

- Manual on Sericulture; Food and agriculture organisation, Rome 1976.
- 7) Silk worm rearing and Diseases of silk worm Pub.Govt.Press, Bangalore.
- 8) Economic Zoology- Shukla and Upadhyaya, Rastogi Publication Meerut.
- 9) Crop-pests and how to fight them- Govt Of Maharashtra Pub, Bombay.
- 10) Sericulture Training Manual by Soo-Ho-Lim, Sang-Poong Lee.

DEPARTMENT OF ZOOLOGY

CERTIFICATE COURSE IN SERICULTURE

Student Enrollment List

Academic Year 2023-2024

Sr. No.	Name Of Student	Class
1	Birajdar Pawan U	B Sc T Y
2	Chigure Priti A	B Sc T Y
3	Kadam Govind B	B Sc T Y
4	Kamble Shreysh S	B Sc T Y
5	Malkapure Dattraya M	B Sc T Y
6	Shendre Vashistha R.	B Sc T Y
7	Gaurkar Shashikant A	B Sc T Y
8	Gavhane Madhav S	B Sc T Y
9	Rautrao Deepali A	B Sc T Y
10	Kamble Nikhil M	B Sc S Y
11	Shinde Akash V	B Sc S Y
12	Suryawanshi Aniket M	B Sc S Y

DR. JADHAV R. R. Head

Dept. of Zoology Shivneri Mahavidhyalaya, Shirur Anantpal, Dist. Latur PRINCIPAL
Shivneri Mahavidyalaya
(Arts, Commerce & Science)
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CERTIFICATE COURSE IN SERICULTURE

Time Table

Academic Year 2023-2024

Day/Time	09:10 To 10:00 AM	03:50 To 04:40 PM
Monday		05.50 10 04.40 1111
Tuesday	Certificate course In Sericulture	
Wensday		Certificate course In Sericulture
Thursday		Certificate course In Sericulture
Friday	Certificate course In Sericulture	
Saturday		

DR. JADHAV R. R.

Head Dept. of Zoology Shivneri Mahavidhyalaya, Shirur Anantpal, Dist. Latur PRINCIPAL Shivneri Mahavidyalaya (Arts, Commerce & Science) Shirur Anantpal, Dist. Latur(M.S.)

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CERTIFICATE COURSE IN SERICULTURE

Student Attendence

Academic Year 2023-2024

Month - August 2023

Sr No	Name Of Student	8	9	10	11	17	18	22	23	24	25	29	30	31
1	Birajdar Pawan U	P	P	P	P	P	P	P	P	P	P	P	P	P
20	Chigure Priti A	P	P	P	P	P	P	P	P	P	P	P	P	P
3	Kadam Govind B	P	P	P	P	P	P	P	P	P	P	P	P	P
4	Kamble Shreysh S	P	P	P	P	P	P	P	P	P	P	P	P	P
5	Malkapure Dattraya M	p	P	p	P	P	P	P	P	P	P	P	P	P
6	Shendre Vashistha R.	P	Р	P	P	P	P	P	P	A	P	P	P	P
7	Gaurkar Shashikant A	P	P	P	P	P	P	P	P	P	P	P	P	P
6	Gavhane Madhay S	Р	P	P	P	P	P	P	P	P	P	P		
9	Rautrao Deepali A	P	P	P	P	A	P	P	P	P	P	P	P	P
10	Kamble Nikhil M	P	P	P	P	P	P	P	P	P	P	P	P	P
11	Shinde Akash V	P	P	P	P	P	P	P	P	P	P	A	P	F
12	Suryawanshi Aniket M	P	P	P	P	P	P	P	P	P	P	P	P	I

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DEPARTMENT OF ZOOLOGY

CERTIFICATE COURSE IN SERICULTURE

Student Attendence

Academic Year 2023-2024

Month - September 2023

Sr	Name Of Student	5	6	7	8	9	12	13	14	15	16	20	21	22	23	26	27	29	30
1	Birajdar Pawan U	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
2	Chigure Priti A	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
3	Kadam Govind B	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
4	Kamble Shreysh S	P	P	P	P	P	P	P	P	P	P	Р	P	P	P	P	P	P	P
5	Malkapure Dattraya M	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
6	Shendre Vashistha R.	P	P	P	P	P	P	P	P	A	P	P	P	P	P	A	P	P	P
7	Gaurkar Shashikant A	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	
8	Gavhane Madhav S	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
9	Rautrao Deepali A	P	P	P	P	A	P	P	P	P	P	P	P	P	P	P	P	P	P
10	Kamble Nikhil M	Р	P	Р	Р	Р	P	P	P	Р	Р	P	P	P	P	P	P	P	P
11	Shinde Akash V	P	P	P	P	P	P	P	P	P	P	A	P	P	P	P	P	A	P
12	Suryawanshi Aniket M	P	P	P	P	P	P	P	Р	P	Р	P	P	P	P	P	P	P	P

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Exam Seat Number

Sr. No.	Name Of Student	Seat No
1	Birajdar Pawan U	CCS34713
2	Chigure Priti A	CCS34714
3	Kadam Govind B	CCS34715
4	Kamble Shreysh S	CCS34716
5	Malkapure Dattraya M	CCS34717
6	Shendre Vashistha R.	CCS34718
7	Gaurkar Shashikant A	CCS34719
8	Gavhane Madhav S	CCS34720
9	Rautrao Deepali A	CCS34721
10	Kamble Nikhil M	CCS34722
11	Shinde Akash V	CCS34723
12	Suryawanshi Aniket M	CCS34724

DR. JADHAV R. R. Head

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QUESTION PAPER

Academic Year 2023-2024

Marks-30

Time-01 Hrs

Seat No. Of Candidates -:

- Q.1) When----are of moult feeding may be resumed.
- a) 80% b) 90% c) 95% d) 100%
- Q.2) Anthereae pernyi feeds on -----leaves.
- ay was toy castor by Son dy Soulu
- 2.3) Where a univoltine race is rared in India.
 - a) Bihar b) Kashmir c) Karnataka d) West bengal
 - Q.4) How many types of mutation breeding are there.
 - a) Two b) Three c) Four d) Five
 - Q.5) Most absorption of water in a plants takes place from the---
 - a) root tap b) root branches c) hairs zone d) tape root
 - Q.6) The Arrangement of leaves in a plants is known as-
 - a) Leaf bud b) Attachment of leaf c) Phylotaxy d) Taxonomy
 - Q.7) Male and female moth of tasar silkworm can easily be differentiate from the---
 - a) Wings b) Thorax c) Antennae d) Abdomen
 - O 8) The abdomen of female moth in mulberry is comparatively --- than the male
 - a) Smaller b) Bigger c) Kinger d) Thiner
 - Q.9) Phylosamia cynthia is the wild silk moth of ----
 - a) Muga b) Tasar c) Eri d) Mulberry
 - 10) Leaf ruts is caused by----
 - a) Virus b) Leaf gall c) Fungus d) Bacteria
 - \$ 11, Outs fills lost variety of silk worm which one is the only monophagus nature
 - a) Eri silk worm b) Muga silk worm c) Oak Tasar silkworm d) Mulberry silkworm
 - Q.12) In Orissa tropical tasar is mainly fed on-----
 - a) Sal b) Arjun c) Ber d) Janum
 - Q.13) Silkworm undergoes------Moulting.
 - a) Two b) Three c) Four d) Five

- Q.14) The average number of eggs laid by mulberry silk month is;
- a) 300 b) 400 c) 450 d) 500
- Q.15) Optimum temperature for rearing mulberry silkworm is:
- a) 24-26 b) 24-25 c) 26-28 d) 23-28
- Q.16) What is the main physical disinfectants
- a) Cold storage b) Sunlight c) Wind d) To keep outside
- O 173 Mary \$30, a cost has the minimum number of chromosomes than all other silkworm. The chromosomes of Muga silkworm is-
- a) 25 b) 30 c) 15 d) 40
- Q.18) The chromosome number of Anthereae proylei is---
- a) 30-19 b) 30 c) 25-30 d) 40
- Q.19) Oak Tasar silkworm is a -----
- a) Strong b) Pure c) Weak d) Partial
- Q._or answorm undergo----time moulting
- a) Two b) Three c) Four d) Five
- Q21) Which country is the largest producer of raw silk.
- a) Japan b) India c) China d) South Korea
- Q.22) India occupies the-----position in production of raw silk in the world.
- a) 2 b) 3 c) 4 d) 5
- Q.23) Maximum raw silk production in India is:
- a) Bivoltine silk b) Multivoltine silk c) Univoltine silk d) Trivoltine silk
- Q24) Which state is the largest producer of raw silk in India.
- a) Tamilnadu b) Andhra Pradesh c) Karnataka d) West Bengal
- Q.25) Which state is the leading raw silk producer in India.
- a) Tamilnadu b) Andhra Pradesh c) Karnataka d) West Bengal
- Q.26) Which country is producing all the four commercial silk in the world.
- a) India b) China c) South Korea d) Japan
- Q.27) Muga silk is produced only in:
- a)India b) Bangaladesh c) Pakistan d) Myanmar
- Q.28) More than ----% of the raw silk production in India is Mulberry silk.
- ay 50% by 67% cy 89% dy 77%
- Q.29) The scientific name of mulberry silkworm is---
- a) Bombyx mori b) Bombyx mandarina c) Bombyx rotun dapex d) Bembyx incomposita
- Q.30) Philosamia ricini is the scientific name of---
- a) Eri silk worm b) Muga silk worm c) Oak Tasar silkworm d) Mulberry silkwo

31) Very high temperature during egg laying results to---a) Reduced eggs b) Dead eggs c) Diapause eggs d) Unfertilized eggs 32) Female moth is generally...... a) Weaker b) Inactive c)Stronger than male moth d) Over active 33) Occurence of grasserie is throughout year but mere in....... a) Spring b) Summer c) Winter d) Autumn 34) Uzi files are pest of...... a) Mullebrry b) Non mulleberry c) All variety of silk worm d) Eri 35) Ants brings more damage to silkworm reared in...... a) Indoor b) Outdoor c) Semi outdoor d) Semi indoor 36) Birds are also predators causing extensive damage to silkworm of a) Mulberry b) Non-mulberry c) Eri d) Muga 37) Speciation in another form ofdiseases. b) Flachence c) Fungal diseases d) Pebrine a, Glasselle 38) Mulberry grows best in a rainfall ranging of a) 650-200m b) 600-650 m c) 700-2500 m d) 200-2500 m 39) The best season for planting mulberry in the north east is....... a) Jan - Feb b) March - April c) May - June d) June - Jully 40) Space for raw system of planting mulberry is...... a) 50cm X 10cm b) 45cm X 10cm c) 50cm X 15cm d) 40cm X 10cm

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Result

Academic Year 2023-2024

Sr. No.	Name Of Student	Seat No	Internal (10)	MCQ (40)	Total (50)
2	Chigure Priti A	CCS34714	08	35	43
3	Kadam Govind B	CCS34715	07	37	44
4	Kamble Shreysh S	CCS34716	08	38	46
5	Malkapure Dattraya M	CCS34717	08	36	44
6	Shendre Vashistha R.	CCS34718	07	37	44
7	Gaurkar Shashikant A	CCS34719	07	35	42
8	Gavhane Madhav S	CCS34720	08	36	44
9	Rautrao Deepali A	CCS34721	08	38	46
10	Kamble Nikhil M	CCS34722	07	37	44
11	Shinde Akash V	CCS34723	07	38	45
12	Suryawanshi Aniket M	CCS34724	08	36	44

DR. JADHAV R. R.

Head

Dept. of Zoology Shivneri Mahavidhyalava, Shirur Anantpal, Dist. Latur PRINCIPAL



SHIVNERI MAHAVIDYALAYA SHIRURANANTPAL, DIST. LATUR-413544

CERTIFICATE

This is to certify that, Mr/Mrs BIRAJDAR P.U. having successfully completed the Certificate Course in SERICULTURE conducted by Department Of Zoology during the academic year 2023-2024.

Hence certified

Date-: 05/10/2023

Head of Department

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Shirt of Mahasidhyalaya,
SI Anantpal, Dist. Letur



SHIVNERI MAHAVIDYALAYA SHIRURANANTPAL, DIST. LATUR-413544

CERTIFICATE

This is to certify that, Mr/Mrs CHIGURE P.A. having successfully completed the Certificate Course in SERICULTURE conducted by Department Of Zoology during the academic year 2023-2024.

Hence certified

Date-: 05/10/2023

Head of Department

Dept. of Zoology Shimeri Mahavidhyalaya, S' _. Anantpal, Dist. Latur



SHIVNERI MAHAVIDYALAYA

SHIRURANANTPAL, DIST. LATUR-413544

CERTIFICATE

This is to certify that, Mr/Mrs KADAM G.D. having successfully completed the Certificate Course in SERICULTURE conducted by Department Of Zoology during the academic year 2023-2024.

Hence certified

Date-: 05/10/2023

D Head of Department

Dept, of Zoology Shivneri Mahavidhyalaya, S'- -ur Anantpal, Dist. Latur



SHIVNERI MAHAVIDYALAYA SHIRURANANTPAL, DIST. LATUR-413544

CERTIFICATE

This is to certify that, Mr/Mrs KAMBLE S.S. having successfully completed the Certificate Course in SERICULTURE conducted by Department Of Zoology during the academic year 2023-2024.

Hence certified

Date-: 05/10/2023

D Head of Department

Dept. of Zoology Shivneri Mahavidhyalaya, Shivur Anantpal, Dist. Latur



SHIVNERI MAHAVIDYALAYA

SHIRURANANTPAL, DIST. LATUR-413544

CERTIFICATE

This is to certify that, Mr/Mrs MALKAPURE D.M. having successfully completed the Certificate Course in SERICULTURE conducted by Department Of Zoology during the academic year 2023-2024.

Hence certified

Date-: 05/10/2023

Head of Department

Dept. of Zoology Shivneri Mahavidhyalaya, Shirur Anantpal, Dist. Latur



SHIVNERI MAHAVIDYALAYA

SHIRURANANTPAL, DIST. LATUR-413544

CERTIFICATE

This is to certify that, Mr/Mrs SHENDRE V.R. having successfully completed the Certificate Course in SERICULTURE conducted by Department Of Zoology during the academic year 2023-2024.

Hence certified

Date-: 05/10/2023

Head of Department

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SHIVNERI MAHAVIDYALAYA

SHIRURANANTPAL, DIST. LATUR-413544

CERTIFICATE

This is to certify that, Mr/Mrs GAURKAR S.A. having successfully completed the Certificate Course in SERICULTURE conducted by Department Of Zoology during the academic year 2023-2024.

Hence certified

Date-: 05/10/2023

Head of Department

Dept. of Zoology Shivneri Mahavidhyalaya, Shirur Anantpal, Dist. Latur



SHIVNERI MAHAVIDYALAYA

SHIRURANANTPAL, DIST. LATUR-413544

CERTIFICATE

This is to certify that, Mr/Mrs GAVHANE M.S. having successfully completed the Certificate Course in SERICULTURE conducted by Department Of Zoology during the academic year 2023-2024.

Hence certified

Date-: 05/10/2023

DR. JADHAV R. R.

Head of Department Dept. of Zoology Shivneri Mahavidhyalaya, Shirur Anantpal, Dist. Latur



SHIVNERI MAHAVIDYALAYA SHIRURANANTPAL, DIST. LATUR-413544

CERTIFICATE

This is to certify that, Mr/Mrs RAUTRAO D.A. having successfully completed the Certificate Course in SERICULTURE conducted by Department Of Zoology during the academic year 2023-2024.

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Date-: 05/10/2023

Head of Department

Dept. of Zoology Shivneri Mahavidhyalaya, Silvur Anantpal, Dist. Latur



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SHIRURANANTPAL, DIST. LATUR-413544

CERTIFICATE

This is to certify that, Mr/Mrs KAMBLE N.M. having successfully completed the Certificate Course in SERICULTURE conducted by Department Of Zoology during the academic year 2023-2024.

Hence certified

Date-: 05/10/2023

Head of Department
Dept. of Zoology
Shivneri Mahavidhyalaya,
Shivneri Mahavidhyalaya,



SHIVNERI MAHAVIDYALAYA

SHIRURANANTPAL, DIST. LATUR-413544

CERTIFICATE

This is to certify that, Mr/Mrs SHINDE A.V. having successfully completed the Certificate Course in SERICULTURE conducted by Department Of Zoology during the academic year 2023-2024.

Hence certified

Date-: 05/10/2023

Head of Department

Dept. of Zoology Shivneri Mahavidhyalaya, Si sur Anantpal, Dist. Latur



SHIVNERI MAHAVIDYALAYA

SHIRURANANTPAL, DIST. LATUR-413544

CERTIFICATE

This is to certify that, Mr/Mrs SURYAWANSHI A.M. having successfully completed the Certificate Course in SERICULTURE conducted by Department Of Zoology during the academic year 2023-2024.

Hence certified

Date-: 05/10/2023

Head of Department

Dept. of Zoology Shanco Mahavidhyalaya, Si Anantpal, Dist. Latur PRINCIPAL Shivneri Wanavidyalaya Shivir Anantpal Dist. Latur (M.S.)