

**Rayat Shikshan Sanstha's
Rajarshi Chhatrapati Shahu College
Kolhapur**

Department of Botany

CAREER ORIENTED COURSE

BIODIVERSITY CONSERVATION

2021-2022



Career Oriented Course- Certificates Course in Biodiversity and it's Conservation.

1.Name of the Department: - Department of Botany

2.Course Name: - Certificates Course in Biodiversity and it's Conservation.

3.Course Coordinator Name & Contact Number: - Dr. Rode S. P.

9923560291

4.Duration: -6 Months

5.Course Fee: - Rs- 300/-

6.Eligibility: - 12" passed students are eligible to take admission

7.Minimum intake Capacity: - 20

8.Objective :

The objective of this scheme is to introduce career and market skill enhancing add-on courses that have utility for job, self employment and empowerment of the students

9.Certificate Course:

The course will be of 30 credits. Each credit will have 15 hrs. of workloads out of which 10 credits should necessarily be assigned to fieldwork/project work/training (450)

10.Teaching programme:

Theory and Practicals is of -30 hrs — 20 credits.

Field Work /Project work /Training-15 hrs — 10 credits.

Theory Paper I — 100 marks

Theory Paper II — 100marks

Paper III 100marks


Co-ordinator

Course in Biodiversity Conservation





Head

Department of Botany
Rajarshi Chh. Shahu College, Kolhapur

RAYAT SHIKSHAN SANSTA's
RAJARSHI CHHATRAPATI SHAHU COLLEGE KOLHAPUR

Department of Botany

Carrier Oriented Course: - Biodiversity Conservation

2021-2022

Notice

24/12/2021

All the students of Arts, Science and Commerce are hereby informed that Department of Botany is going to start Carrier Oriented Course Certificate course in Biodiversity Conservation from next week. Those who are interested please contact to Head Department of Botany.

The Course fees is Rs.300/- and duration of Course is 6 Months.

S. S. S.

Head

Department of Botany
Rajarshi Chh. Shahu College, Kolhapur.



S. S. S.

Principal,
Rajarshi Chh. Shahu College
Kolhapur.


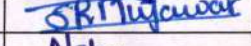

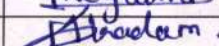
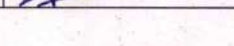
Rayat Shikshan Sanstha's

RAJARSHI CHHATRAPATI SHAHU COLLEGE, KOLHAPUR

Career Oriented Course 2021-2022

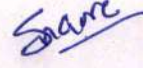
BIODIVERSITY CONSERVATION

List of Students Enrolled

Sr. No.	Roll Number	Name of the students	Class	Signature
1.	51	Bepari Sabiya Imtiyaz	B.Sc. II	
2.	70	Mujawar Swaleha Riyaz	B.Sc. II	
3.	80	Shinde Neha Viswas	B.Sc. II	
4.	78	Rajput Prajakta Darasing	B.Sc. II	
5.	61	Kadam Sakshi Makarand	B.Sc. II	


Co-ordinator
COC in Biodiversity Conservation




Head
Department of Botany
Rajarshi Chh. Shahu College, Kolhapur

11.Syllabus

Paper I — Fundamentals of biodiversity.

Section I

Unit I —Origin of life.	15
—Position of different organisms in living world.	
— Differentiation between prokaryotic and eukaryotic cell.	
1.3— Brief introduction to five kingdom classification system.	
Unit 2 —Concept of Evolution	12
— Theories of evolution, Darwinism, Concept of species formation.	
— Phylogeny	
Unit 3—Taxonomy and Classification	20
3.1- Introduction to major groups of plants.	
3.2- Introduction to major groups of animals and microbes.	
Unit 4 —Loss of Biodiversity	10
4.1- Causes of loss of Biodiversity.	
4.2- Effects of loss of Biodiversity.	
4.3 -Terminology- Red data book-concept.	

Section II

Unit I—Biodiversity introduction, concept and significance	7
Unit 2 —Levels of Biodiversity	15
2.1— Mega diversity in India	
2.2 -Bioreserves	
2.3 Hot spots in India with special reference to Himalaya and Western ghat(Maharashtra)	
2.4 –National parks,wildlife sanctuaries Botanical gardens and Zoological museums .	



Unit3-Climatic Change	7
3.1-Causes of Climatic change.	
3.2-Effects of Climatic change.	
Unit4-Earth Summits- Objectives and resolution passed.	12

Paper II-Ecology and Conservation Biology.

Section-I

Unit1-Ecology concept,biotic and abiotic component	12
Unit2-Ecosystem and Phytogeography of India	12
Introduction, components of Ecosystem.	
Food chains and Food webs	
Unit3	12
Environmental Pollution.	
Causes and effects of it on environment	
Unit4	10
Plant as Bioindicatos	
Role in environmental monitoring	

SectionII

Unit1-Biodiversity conservation strategies.	15
Insitu and Exsitu conservation	
Unit2-Research institute related to Conservation of Biodiversity	15
Bio-ethics,IPR and Patenting	
Unit3-Ecotourism and Biodiversity.	12
Communication, education and public awareness	
Unit4-Brief review of protocols given by various earth summits to various nations.	12



Paper-III

Practicals:-

30Periods

- Cultivation and isolation of micro-organisms.
- Morphology of major groups (Bryophyte, Pteridophyta, Gymnosperms and Angiosperms)
- Study of comparative diversity in Angiosperms.
- Classification of insects (All major orders) using Lee Study of wild species in crop improvement.
- Study of Red data book Species of Sahyadri belonging to Satara district.

Work experience:

60periods

- Assessment of Biodiversity of an area (Ajinkyatara, Yavateswar, Kas, Pateswar) by suitable sampling method (quadrate) species abundance, frequency, density




12.Suggested Reading for Biodiversity:

- 1.Veena Arora 202 Natraj Publishers ,Dehradun Publisher: The Biological
- 2.Diversity Act,Edt Heywood, V.H .: Global Biodiversity Assessment PartI
- 3.M.S.Prashanth: Environmental Studies
- 4.M.C.Dash:Fundamental of Ecology
- 5.D.K.Asthana,Meera Asthana:Environment: Problems&Solutions
- 6.D.K.Belsare: Introduction to Biodiversity
- 7.SurendraSingh:Geo morphology and Remote Sensing in Environmental Management
- 8.N.Das Gupta:Environmental Accounting
- 9.E rach Bharucha:Textbook of Environmental Studies
- 10.M.L.Narasaiah:Biodiversity & Sustainable Development
- 11.M.L.Narasaiah:Education & Biodiversity
- 12.R.L.Panigrahy,LingarajPatro:Biodiversity Conservation and Sustainable Development
- 13.John R.Jensen:Remote Sensing of the Enviroment
- 14.M.M.Anji Reddy.: Remote Sensing and Geographic alInformation
- 15.Systema Veer Bala Rastogi:Fundamentals of Biostatistics
- 16.P.K.Bane Jee:Introduction to Biostatistics
- 17.Jadhav,H.and Bhosale, V.M. Environmental Protection and Laws
- 18.Principles of Biochemistry:Lehninger


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Rayat Shikshan Sanstha's

RAJARSHI CHHATRAPATI SHAHU COLLEGE, KOLHAPUR

Career Oriented Course 2021-2022

BIODIVERSITY CONSERVATION

Sr.No	Name of Students	1-1-2022	2-1-2022	5-1-2022	6-1-2022	7-1-2022	8-1-2022	9-1-2022	12-1-2022	13-1-2022	14-1-2022	15-1-2022
1.	Bepari Sabiya Imtiyaz	Bepari Sabiya Imtiyaz	Bepari Sabiya Imtiyaz	Bepari Sabiya Imtiyaz	Bepari Sabiya Imtiyaz	Bepari Sabiya Imtiyaz	Bepari Sabiya Imtiyaz	Bepari Sabiya Imtiyaz	Bepari Sabiya Imtiyaz	Bepari Sabiya Imtiyaz	Bepari Sabiya Imtiyaz	Bepari Sabiya Imtiyaz
2.	Mujawar Swaleha Riyaz	Mujawar Swaleha Riyaz	Mujawar Swaleha Riyaz	Mujawar Swaleha Riyaz	Mujawar Swaleha Riyaz	Mujawar Swaleha Riyaz	Mujawar Swaleha Riyaz	Mujawar Swaleha Riyaz	Mujawar Swaleha Riyaz	Mujawar Swaleha Riyaz	Mujawar Swaleha Riyaz	Mujawar Swaleha Riyaz
3.	Shinde Neha Viswas	Shinde Neha Viswas	Shinde Neha Viswas	Shinde Neha Viswas	Shinde Neha Viswas	Shinde Neha Viswas	Shinde Neha Viswas	Shinde Neha Viswas	Shinde Neha Viswas	Shinde Neha Viswas	Shinde Neha Viswas	Shinde Neha Viswas
4.	Rajput Prajakta Darasing	Rajput Prajakta Darasing	Rajput Prajakta Darasing	Rajput Prajakta Darasing	Rajput Prajakta Darasing	Rajput Prajakta Darasing	Rajput Prajakta Darasing	Rajput Prajakta Darasing	Rajput Prajakta Darasing	Rajput Prajakta Darasing	Rajput Prajakta Darasing	Rajput Prajakta Darasing
5.	Kadam Sakshi Makarand	Kadam Sakshi Makarand	Kadam Sakshi Makarand	Kadam Sakshi Makarand	Kadam Sakshi Makarand	Kadam Sakshi Makarand	Kadam Sakshi Makarand	Kadam Sakshi Makarand	Kadam Sakshi Makarand	Kadam Sakshi Makarand	Kadam Sakshi Makarand	Kadam Sakshi Makarand
Sr.No	Name of Students	Practicals										
1.	Bepari Sabiya Imtiyaz	Bepari Sabiya Imtiyaz	Bepari Sabiya Imtiyaz	Bepari Sabiya Imtiyaz	Bepari Sabiya Imtiyaz	Bepari Sabiya Imtiyaz	Bepari Sabiya Imtiyaz	Bepari Sabiya Imtiyaz	Bepari Sabiya Imtiyaz	Bepari Sabiya Imtiyaz	Bepari Sabiya Imtiyaz	Bepari Sabiya Imtiyaz
2.	Mujawar Swaleha Riyaz	Mujawar Swaleha Riyaz	Mujawar Swaleha Riyaz	Mujawar Swaleha Riyaz	Mujawar Swaleha Riyaz	Mujawar Swaleha Riyaz	Mujawar Swaleha Riyaz	Mujawar Swaleha Riyaz	Mujawar Swaleha Riyaz	Mujawar Swaleha Riyaz	Mujawar Swaleha Riyaz	Mujawar Swaleha Riyaz
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Career Oriented Course 2021-2022

BIODIVERSITY CONSERVATION

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Sr.No	Name of Students	2-2-2022	3-2-2022	4-2-2022	7-2-2022	8-2-2022	9-2-2022	10-2-2022	11-2-2022	12-2-2022	19-2-2022	18-2-2022
1.	Bepari Sabiya Imtiyaz	Bepari Sabiya Imtiyaz	Bepari Sabiya Imtiyaz	Bepari Sabiya Imtiyaz	Bepari Sabiya Imtiyaz	Bepari Sabiya Imtiyaz	Bepari Sabiya Imtiyaz	Bepari Sabiya Imtiyaz	Bepari Sabiya Imtiyaz	Bepari Sabiya Imtiyaz	Bepari Sabiya Imtiyaz	Bepari Sabiya Imtiyaz
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Sr.No	Name of Students											
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Rajarshi Chhatrapati Shahu College, Kolhapur

Department of Botany

CAREER ORIENTED COURSE: BIODIVERSITY CONSERVATION

2021-22

Question Paper Pattern,

PAPER- I

Time: 3 hours

Marks: 100

Que 1: Rewrite the following sentences by choosing alternative.

20 Marks

1

To

10

Que 2: Attempt any three of the following.

60 Marks

A

B

C

D

E

Que 3: Attempt any four of the following.

20 Marks

A

B

C

D

E



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Department of Botany

CAREER ORIENTED COURSE: BIODIVERSITY CONSERVATION

2021-22

Question Paper Pattern,

PAPER- II

Time: 3 hours

Marks: 100

Que 1: Rewrite the following sentences by choosing alternative.

20 Marks

1

To

10

Que 2: Attempt any three of the following.

60 Marks

A

B

C

D

E

Que 3: Attempt any four of the following.

20 Marks

A

B

C

D

E



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Department of Botany

CAREER ORIENTED COURSE: BIODIVERSITY CONSERVATION

2021-22

Question Paper Pattern,

PRACTICAL EXAMINATION

Time: More than 4 hours

Marks: 100

Que 1: Identify and show important structures observed in given specimen.

20 Marks

A

B

C

D

E

Que 2: Identify and show important structures observed in given specimen.

20 Marks

A

B

Que 3: Identify and show important structures of

20Marks

A

B

Que 4: Demonstrate the technique

20 Marks

A

B

Que5: Demonstrate the technique

20 Marks

A

B



**Rayat Shikshan Sanstha's
Rajarshi Chhatrapati Shahu College Kolhapur
Career Oriented Course Biodiversity Conservation
Examination 2021-2022
Results**

Sr. No	Name of Students (Mother' Name)	Paper I (100 M)	Paper II (100 M)	Practical (50 M)	Total (300)	Percentage (%)	Class
1	Bepari Sabiya Imtiyaz	65	67	90	222	74	I st
2	*Kadam Sakshi Makrand	80	75	92	247	82	I st
3	*Mujawar Swaleha Riyaj	60	65	90	215	71	I st
4	*Shinde Neha Vishwas	60	68	89	217	72	I st
5	Rajput Prajakta Darasing	70	69	89	228	76	I st

Solne

Head
Department of Botany
Rajarshi Chh. Shahu College, Kolhapur.



Shahu
Principal,
Rajarshi Chh. Shahu College
Kolhapur.

"Education through self-help is our motto" -Karmaveer



Rayat Shikshan Sanstha's,

RAJARSHI CHHATRAPATI SHAHU COLLEGE, KOLHAPUR.

NAAC Reaccredited 'A' Grade (with CGPA 3.07) 3rd Cycle

CERTIFICATE

This is to certify that, Shri/Smt. _____

Mother's Name Shilpa

Class B.Sc. of II year Rajarshichi Chatrapati's College, Kolhapur

has successfully completed the Career Oriented/Certificate Course in Biodiversity Conservation
organized by **Rajarshi Chhatrapati Shahu College, Kolhapur.**

Course organized academic year 2021-2022


Course Coordinator




Principal

