

Date: 22/07/19

To,  
The Principal  
Karnatak Arts, Science and Commerce College, Bidar




Sub: Request to grant permission to start add-on course on (ALGAL BIODIVERSITY ) for the academic year 2019-2020: Reg.

Respected Sir,

As per the guidelines issued by IQAC, we would like to start the add-on course on "Course Name" from the academic year 2019-2020 with intake of 25 students. Please permit us to start the add-on course and do the needful.

Thanking You.

  
Head of the Dept. of Botany  
Department of BOTANY  
Karnatak Arts, Science & Commerce  
College, BIDAR 585 401

Permitted



PRINCIPAL  
Karnatak Arts Sci. & Com. College  
BIDAR-585401

**K.R.E Society's  
Karnatak Arts, Science and Commerce ,Bidar  
Department of Botany**



**Course Name: ALGAL BIODIVERSITY**

**Duration: 30 Hrs.**

**Course coordinator: Dr. Piya Roychoudhury**

**Assistant Course coordinator: Dr. Pooja Suryawanshi**

**Name of the Faculty members**

- 1. Sri D.G. Joshi**
- 2. Dr. Piya Roychoudhury**
- 3. Dr. Pooja Suryawanshi**
- 4. Dr. M S Patil**

Minutes of meeting of institutional board of studies for  
certificate course on

**Algal Biodiversity**

**Held on 24 July 2019**



The institutional BOS meeting of the Department of Botany for the add on course on "ALGAL BIODIVERSITY" held on 24/07/2019 at IQAC room at 10:30am.

**Institutional BOS**

S.N	Name	Institute	Designation
1	<b>Dr. Rajsameersen Modi</b>	Assistant Professor, Govt. First Grade college Kalburgi	External Expert member
2	<b>Sri D.G. Joshi</b>	Head Department of Botany Karnatak Arts, Science and Commerce College Bidar.	Chairman
3	<b>Dr. M.S. Patil</b>	Associate Professor, Department of Botany	Member Internal Expert
4	<b>Dr. Pooja Suryawanshi</b>	Assistant Professor, Department of Botany	Member Internal Expert
5	<b>Dr. Piya Roychoudhuri</b>	Assistant Professor, Department of Botany	Member Internal Expert

In the beginning of the meeting the chairman of the Institutional BOS welcomed all the members and briefed them about the progress of the Department of Botany. the members expressed their highly appreciation and satisfaction about the courses and activities of the department.

**After the institutional BOS discussed and resolved the following items**

• **Item 1. Starting of the course on Algal Biodiversity.**

The BOS discussed the item and resolved to start the add on course from the month July 2019.



- **Item 2. Approval of the syllabus for certificate course**

The BOS discussed and approved the syllabus for add-on course on Algal Biodiversity

- **Item 3. Criteria for admission, regulation and policies to run the course and exam pattern.**

The BOS discussed and approved the criteria for admission and resolved that the student should have completed successfully 10+2 with science faculty, should be currently in B. Sc course with botany as a subject in Karnatak college, Bidar. In addition to this BOS also finalized the rules and regulations to smooth conduct of course and pattern.

Meeting of BOS is concluded with vote of thanks by Sri D.G. Joshi Head Department of Botany.

**Members Present:**

1. Dr. Rajsamarsen Modi
2. Sri D.G. Joshi
3. Dr. M.S. Patil
4. Dr. Pooja Suryawanshi
5. Dr. Piya Roychoudhri

**H.O.D**

Head of the Dept. of Botany  
Karnatak Arts, Science & Commerce  
College, B I D A R - 5 8 5 4 0 1

**IQAC Coordinator**

Vice-Principal &  
IQAC. Coordinator  
Karnatak Arts, Science &  
Commerce College, Bidar

**Principal**

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Karnataka Arts Sci. & Com. College  
BIDAR-585401


**INSTITUTIONAL BOARD OF STUDIES**




Sl.no	Name	Institute	Designation
1	<b>Sri D.G.Joshi</b>	HOD(Botany Department Karnatak College College,Bidar	Associate Professor
2	<b>Dr.Piya roychoudhury</b>	Karnatak College Bidar	Asst Professor
3	<b>Dr.Pooja Suryawanshi</b>	Karnatak College Bidar	Asst Professor
4	<b>Dr.M S Patil</b>	Karnatak College Bidar	KRE Society Professor Emeritus

**DISTRIBUTION OF TRAINING ON HOURLY BASIS**

Sl.No	Topics to be covered	Duration
1	Introduction of Algae Structure of Algae General characters' of algae	4hrs
2	Ecology and distribution Range of thallus organization in algae	4hrs
3	Classification of algae Reproduction of algae	4hrs
4	Isolation and culture of algae samples	4hrs
5	Isolation and culture of algae samples	4hrs
6	Mini Project on algae collection	10 hrs

  
**Head of the Dept. of Botany**  
 Karnatak Arts, Science & Commerce  
 College, B I D A R - 585 401

  
**Vice-Principal &  
 IQAC. Coordinator**  
 Karnatak Arts, Science &  
 Commerce College, Bidar

  
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1	<b>Sri D.G.Joshi</b>	HOD(Botany Department Karnatak College College,Bidar	Associate Professor
2	<b>Dr.Piya roychoudhury</b>	Karnatak College Bidar	Asst Professor
3	<b>Dr.Pooja Suryawanshi</b>	Karnatak College Bidar	Asst Professor
4	<b>Dr.M S Patil</b>	Karnatak College Bidar	KRE Society Professor Emeritus

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**Head of the Dept. of Botany**  
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 BIDAR-585401

  
**Vice-Principal &  
 IQAC. Coordinator**  
 Karnatak Arts, Science &  
 Commerce College, Bidar

# WORK-DONE



NAME OF THE LECTURER	TOPICS COVERED AND METHOD USED	DATE
Dr.M S Patil	General character of Algae classification of Algae	
Sri D.G.Joshi	1) Ecology & Distribution of Algae - PPT. 2) Thallus organization in algae - chart & board.	08-09-2019 & 15-09-2019  05-01-2020 & 16-02-2020
Dr.Piya roychoudhury	TYPE & MODE of Reproduction in Algae	
Dr.Pooja Suryawanshi	Economic importance of Algae.	

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K.R.E Society's

Karnatak Arts, Science and Commerce, College Bidar

Department of Botany

Certificate Course in

"Algal Biodiversity"



**COURSE OUTCOMES:** The followings are minimum learning outcomes after completion of "**Algal biodiversity**" course:

1. Students can expose to the field of algal biodiversity
2. Understand the principles and diversity algae
3. Become familiar with making slides and visualization of slides under microscope
4. Learn the different types of media and culturing methods and preservation methods

### **Course description:**

Algae are one of the most diverse groups of living organism that are distributed in all across the oceans, rivers, ponds and lakes. Algae play an important role in maintaining aquatic ecosystem and form the base of food chain or food web. Algae are generally classified as rhodophyta (red algae), phaeophyta (brown algae) or chlorophyta (green algae) depending on their nutrient, pigments and chemical composition. They are considered as a source of bioactive compounds as they are able to produce a great variety of secondary metabolites with some also a valuable food resource too. Some of the algae are also been known to be pollution indicator and helps in reduction of industrial pollutants in rivers and other water sources.

The course aims to train B.Sc final year (Botany) students, in theoretical knowledge and practical skills for the establishment, characterization and maintenance of algal cultures in order to gain an advanced understanding of algal diversity, life cycle and physiology. The main focus of the course will be on fresh water algae but several other groups will be covered as well.





**K.R.E SOCIETY'S**  
**Karnatak Arts, Science and Commerce College**  
**Bidar**  
**Department of Botany**

**Date:25/07/2019**

**NOTICE**

All the students are here by informed that department of **BOTANY** starting the add on course on **(ALGAL BIODIVERSITY)** from the 25/07/2019 , interested students can enroll their names on or before 30/07/2019 in the department of **BOTANY**.

  
**HOD**

**Head of the Dept. of Botany**  
**Karnataka College, BIDAR**



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**BIDAR-585401**

K.R.E. SOCIETY'S

**KARNATAK ARTS SCIENCE AND COMMERCE COLLEGE BIDAR**

(Affiliated to Gulbarga University Kalburgi)

College with Potential for Excellence

**ADMISSION FORM**

Certificate/Value added/Skill Development/Diploma/Advance Diploma Courses

&

**IAS/IPS/NET/SET Coaching Classes**

Name of the Department Botany Year 2019 - 20  
Name of the Student Aditi  
Father name Sanjeewa Reddy  
Date of Birth 22/3/1999  
Address for Correspondence Behind Akkamahadevi  
womens collage Devi colony  
Bidar  
Semester/class : B.sc IV Sem  
Register No. : 1863011  
Percentage of previous semester: 82%  
Contact No. : 9448604283  
E-Mail ID : Aditireddy@gmail.com  
Course to be Joined: Algal Biodiversity




Aditi  
Signature of the Student

[Signature]  
HOD/Coordinator  
Head of the Dept of Botany  
Karnataka College, BIDAR

STUDENTS ENROLLMENT FOR CERTIFICATE COURSE( ALGAL BIODIVERSITY) 2019-20

S.N	NAME OF THE STUDENT	SIGNATURE
1	patil Bhavani	Bhavani
2	Saobhagya	<del>Saobhagya</del>
3	Aditi Reddy	Aditi
4	Sakshi Sindal	Sakshi
5	madhurani	Madhu
6	Nandkumar	Nandkumar
7	Ambika Baliram	Ambika
8	Apoorva Subhash	Apoorva
9	Amargonda	Amargonda
10	Mariam	Mariam
11	Nusrath	Nusrath
12	Nagveni	Naganur
13	Paranguline Rani	Rani
14	Manikeshwari	Manikeshwari
15	Sarvesh	Sarvesh
16	Shivkumar A	Shivkumar
17	Amit Kumar	Amit
18	Mahadev	Mahadev
19	Srivastav	Srivastav
20	Sandeep	Sandeep
21	Rohit P	Rohit
22	Archana Trivansingh	Archana
23	Shashikaran	Shashikaran
24	Malikarjun	Malikarjun
25	Vasavi Gada	Vasavi

  
 Head of the Dept. of Botany  
 Karnataka College, BIDAR

## COURSE TIME TABLE

DATE/TIME	8 TO 9	9 TO 10	10 TO 11	11 TO 12	3 to 5
08-09-2019	Theory	Theory	Practical	Practical	Mini Project
15-09-2019	Theory	Theory	Practical	Practical	Mini Project
06-10-2019	Theory	Theory	Practical	Practical	Mini Project
05-01-2020	Theory	Theory	Practical	Practical	Mini Project
19-01-2020	Theory	Theory	Practical	Practical	Mini Project
16-02-2020	Exam for both Theory and Lab				



*[Signature]*  
Head of the Dept: of Botany  
Karnatak Arts, Science & Commerce  
College, B I D A R-585 401

*[Signature]*

**PRINCIPAL**

**Karnataka Arts Sci. & Com. College  
BIDAR-585401**

## B.Sc Students List and Attendance



SL.No	NAME OF THE STUDENT	08-09-2019	15-09-2019	06-10-2019	05-01-2020	19-01-2020	Total
1	Patil Bhavani	P	P	AB	P	P	
2	Saoubhagya	P	AB	P	P	P	
3	Aditi Reddy	P	P	P	P	P	
4	Vasavi Gada	P	P	P	P	P	
5	Sakshi Sindol	P	P	P	P	P	
6	Madhurani	P	P	P	P	AB	
7	Nandkumar	P	P	P	P	P	
8	Ambika Baliram	P	P	P	P	P	
9	Apporva Subhash	P	P	AB	P	P	
10	Amargond	P	P	P	P	P	
11	Mariam	P	P	P	P	P	
12	Nusrath	P	P	AB	AB	P	
13	Nagveni	P	P	P	P	P	
14	Evangeline Rani	P	P	P	P	P	
15	Manikeshwari	P	P	P	P	P	
16	Sarvesh	P	AB	AB	P	P	
17	Shivakumar A	P	P	P	P	P	
18	Amitkumar	P	P	P	AB	P	
19	Mahadev	P	P	P	P	P	
20	Srivastav	P	P	AB	P	P	
21	Sandip	P	P	P	P	P	
22	Rohith R	P	P	P	P	P	
23	Archana Trivansingh	P	P	P	P	P	
24	Shashi Kiran	P	P	P	P	P	
25	Mallikarjun	P	P	P	P	P	

  
**PRINCIPAL**

**Karnataka Arts Sci. & Com. College  
BIDAR-585401**

  
**Head of the Dept. of Botany  
Karnatak Arts, Science & Commerce  
College, B I D A R - 585 401**



K.R.E. Society's


**KARNATAK ARTS SCIENCE AND COMMERCE COLLEGE BIDAR**

**DEPARTMENT OF BOTANY**

DATE:04 /02/2020

**NOTICE :**

All the students who have enrolled their name for certificate course in Algal biodiversity for the year 2019-2020 are here by informed to attend Theory exam on 16/02/2020 at 11 am without fail.

  
Head of the Dept. of Botany  
Karnatak Arts, Science & Commerce  
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BIDAR-585401



K.R.E. Society's

KARNATAK ARTS SCIENCE AND COMMERCE COLLEGE BIDAR

DEPARTMENT OF BOTANY

DATE:04 /02/2020

**NOTICE :**

All the students who have enrolled their name for certificate course in Algal biodiversity for the year 2019-2020 are here by informed to attend Practical exam on 16/02/2020 at 2-3 pm without fail.

  
Head of Dept. of Botany  
Karnatak Arts, Science & Commerce  
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BIDAR-585401

**STUDENT ATTENDENCE SIGNATURE FOR CERTIFICATE COURSE THEORY EXAM 2019-20**

SL.No	NAME OF THE STUDENT	THEORY
1	Patil Bhavani	Bhavani <sup>o</sup>
2	Saoubhagya	Saoubhagya
3	Aditi Reddy	Aditi Reddy
4	Vasavi Gada	Vasavi
5	Sakshi Sindol	Sakshi
6	Madhurani	Madhu
7	Nandkumar	Nandkumar
8	Ambika Baliram	Ambika
9	Apporva Subhash	Apporva
10	Amargonda	Amargonda
11	Mariam	Mariam
12	Nusrath	Nusrath
13	Nagveni	Nagveni
14	Evangeline Rani	Rani
15	Manikeshwari	Manikeshwari
16	Sarvesh	Sarvesh
17	Shivakumar A	Shivakumar
18	Amitkumar	Amitkumar
19	Mahadev	Mahadev
20	Srivastav	Srivastav
21	Sandip sandeep	Sandeep
22	Rohith R	Rohith
23	Archana Trivansingh	Archana
24	Shashi Kiran	Shashi Kiran
25	Mallikarjun	Mallikarjun



*Pooja*  
STAFF INCHARGE

*[Signature]*  
H.O.D  
Head of the Dept of Botany  
DEPARTMENT OF BOTANY  
KARNATAKA COLLEGE, BIDAR

*[Signature]*  
**PRINCIPAL**  
Karnataka Arts Sci. & Com. College  
BIDAR-585401






STUDENT ATTENDENCE SIGNATURE FOR CERTIFICATE COURSE PRACTICAL EXAM 2019-20

SL.No	NAME OF THE STUDENT	PRACTICAL
1	Patil Bhavani	Bhavani
2	Saoubhagya	Saoubhagya
3	Aditi Reddy	Aditi Reddy
4	Vasavi Gada	Vasavi Gada
5	Sakshi Sindol	Sakshi Sindol
6	Madhurani	Madhurani
7	Nandkumar	Nandkumar
8	Ambika Baliram	Ambika Baliram
9	Apporva Subhash	Apporva Subhash
10	Amargonda	Amargonda
11	Mariam	Mariam
12	Nusrath	Nusrath
13	Nagveni	Nagveni
14	Evangeline Rani	Evangeline Rani
15	Manikeshwari	Manikeshwari
16	Sarvesh	Sarvesh
17	Shivakumar A	Shivakumar A
18	Amitkumar	Amitkumar
19	Mahadev	Mahadev
20	Srivastav	Srivastav
21	Sandip Sandeep	Sandip Sandeep
22	Rohith R	Rohith R
23	Archana Trivansingh	Archana Trivansingh
24	Shashi Kiran	Shashi Kiran
25	Mallikarjun	Mallikarjun

  
STAFF INCHARGE

  
PRINCIPAL  
Karnataka Arts Sci. & Com. College  
BIDAR-585401

  
H.O.D  
Head of the Dept. of Botany  
DEPARTMENT OF BOTANY  
Karnataka Arts, Science & Commerce  
College, B I D A R - 5 8 5 4 0 1



KRE SOCIETY

KARNATAK ARTS, SCIENCE AND COMMERCE COLLEGE, BIDAR

DEPARTMENT OF BOTANY

ADD ON COURSE

SUB: ALGAL BIODIVERSITY

MAX. MARKS: 20

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I. Answer the following questions.

4x5=20

1. Explain the structure of algae.
2. Explain classification of algae
3. Write down the reproduction methods in algae.
4. Explain general characters of algae.

## Explain the Structure of algae

Algae are photosynthetic microorganisms that perform photosynthesis & produce oxygen & consume  $\text{CO}_2$  from the atmosphere. During photosynthesis, algae produce at least half of the oxygen in Earth's atmosphere. Most of the algae inhabit the aquatic environment, either freshwater or marine habitats. They can also occupy on rocks, soils, vegetation or moist terrestrial habitats. Some marine algae are used as seafood, while some algae produce toxins.

### Vegetative Structure of algae :-

The vegetative structure (thallus) of algae varies from species to species. They may be simple unicellular to complex multi-cellular. Their size ranges from small as less than 2 micrometers to large as 30-60 meters long. The following are the diverse vegetative structure of algae.

- ① unicellular motile :- The body consists of a single cell. In these algae, movement takes place by flagella. Such as Chlamydomonas.
- ② unicellular non motile :- They are single-celled round algae. They exist as solitary or in the group within mucilage covering. Ex: Chlorella, Geocapsa etc.
- ③ Motile colonial :- In this case, division of unicellular algae forms colony & they are motile. This type of colony is known as a motile colony. Ex: Volvox.
- ④ Non motile colonial :- In colonial forms, the no. of unicellular algae is indefinite & they are non motile. Ex: Scenedesmus, Hydrodictyon.

## B.Sc Students Marks List



SL.No	NAME OF THE STUDENT	Theory (20)	Practical (20)	Mini Project (10)	Total Marks
1	Patil Bhavani	20	19	10	49
2	Saoubhagya	19	19	10	48
3	Aditi Reddy	20	20	10	50
4	Vasavi Gada	20	20	10	50
5	Sakshi Sindol	20	20	10	50
6	Madhurani	20	18	10	48
7	Nandkumar	20	19	10	49
8	Ambika Baliram	20	20	10	50
9	Apporva Subhash	20	20	10	50
10	Amargond	20	18	10	48
11	Mariam	20	19	10	49
12	Nusrath	20	20	10	50
13	Nagveni	20	18	09	47
14	Evangeline Rañi	20	20	10	50
15	Manikeshwari	20	18	10	48
16	Sarvesh	18	17	09	44
17	Shivakumar A	19	18	09	46
18	Amitkumar	18	17	09	44
19	Mahadev	20	18	09	47
20	Srivastav	17	18	08	43
21	Sandip	19	18	09	44
22	Rohith R	20	18	10	48
23	Archana Trivansingh	20	19	10	49
24	Shashi Kiran	18	17	08	43
25	Mallikarjun	19	18	09	44

Page 19

  
**Head of the Dept. of Botany**  
**Karnatak Arts, Science & Commerce**  
**College, B I D A R - 585 401**



KRE Society's

Karnatak Arts, Science and Commerce College, Bidar (KS)  
Department of Botany



This is to certify that **ADITI REDDY of B.Sc VI semester** has successfully completed certificate course on **"Algal Biodiversity"** during the year 2019 - 2020 offered by Department of Botany.

Head Dept. of Botany  
Head of the Dept. of Botany  
Karnatak Arts, Science & Commerce  
College, Bidar (KS)

Principal  
Karnatak Arts Science &  
Commerce College, Bidar

K.R.E. SOCIETY'S

KARNATAK, ARTS, SCIENCE AND COMMERCE COLLEGE, BIDAR

DEPARTMENT OF BOTANY

ADD-ON COURSE ON ALGAL BIODIVERSITY

**Report**

Name of the course: Algal Biodiversity

Name of the Department: Botany

Name of the B.O.S: Dr. Rajsamarsen Modi

Number of students: 25

BOS meeting date: 24/7/2019

Start date of course: 8/9/2019

End date of course: 16/2/2020

Department of Botany conducted add-on course on Algal Biodiversity. Algal Biodiversity helps students to understand the characters,, structure of different types of algae, ecological distribution of algae as well as the reproduction in algae it help the students to do research on algae. At the end we are conducted examination on algal biodiversity and declared the result.



HOD

**Head of the Dept. of Botany  
Karnataka College, BIDAR**



Principal

**ಪ್ರಾಚಾರ್ಯರು  
ಕರ್ನಾಟಕ ಕಲಾ, ವಿಜ್ಞಾನ ಮತ್ತು  
ವಾಣಿಜ್ಯ ಮಹಾವಿದ್ಯಾಲಯ, ಬಿದರ್**

