



S J M COLLEGE OF ARTS, SCIENCE & COMMERCE

Chandravalli,
CHITRADURGA – 577501

sjmasccta@rediffmail.com
www.sjmcascchitradurga.edu.in

ABOUT THE COLLEGE

Sri Jagadguru Murugarajendra College of Arts Science & Commerce (SJMC), Chitradurga was popularly known as SJM College of Arts, Science & Commerce, Chitradurga was established on 1st June 1969 managed by S.J.M. Vidyapeetha (R.) which was established in 1966. It is one of the premier colleges established to impart & provide in the field of higher education for the deserving

candidates and prove to be a milestone in the part of progress.

The college is at present affiliated with Davangere University, Davangere. Formerly affiliated with Kuvempu University, Shivamogga and it is recognized by the University Grants Commission (UGC) under section 2(f) and 12(B) on 31st March 1971 under Act. 1956. It is re-accredited by National Assessment and Accreditation Council (NAAC) with "A" Grade (CGPA Score 3.05 on a 4 Point Scale in 3rd Cycle) on 28th March, 2017.

Sri Jagadguru Murugarajendra College of Arts, Science, and Commerce (S.J.M) is one of the reputed institutions which is well administered and offered good infrastructure, facilities and excellent academic activities in Chitradurga which is in the state of Karnataka and this college excels not only in academic activities but also in Extra curricular activities and in Sports too. The college strives to produce intellectually competent, morally upright and strong, compassionately

committed, spiritually inspired and nationally dedicated men and women.

At present, the college is situated in a splendid place called Chandravalli, which has a panoramic view of mountains, greeneries, caves and historically significant Chandravalli Tank on Holalkere Road in outskirts of the city. The college is built on a land of 10 acres with all necessary infrastructures. The college offers three years undergraduate courses in B.A, B.Sc, and B.Com.

The college aims at an integral and personalized education of the young by providing well planned undergraduate courses like Arts, Science and Commerce streams. The College has a fine team of qualified, experienced and dedicated faculty and staff members. Value based and skill based initiatives are given priority in each department. Community Oriented Programs such as Reaching the Unreached, Service Beyond Self, creating opportunities for re-energizing students.

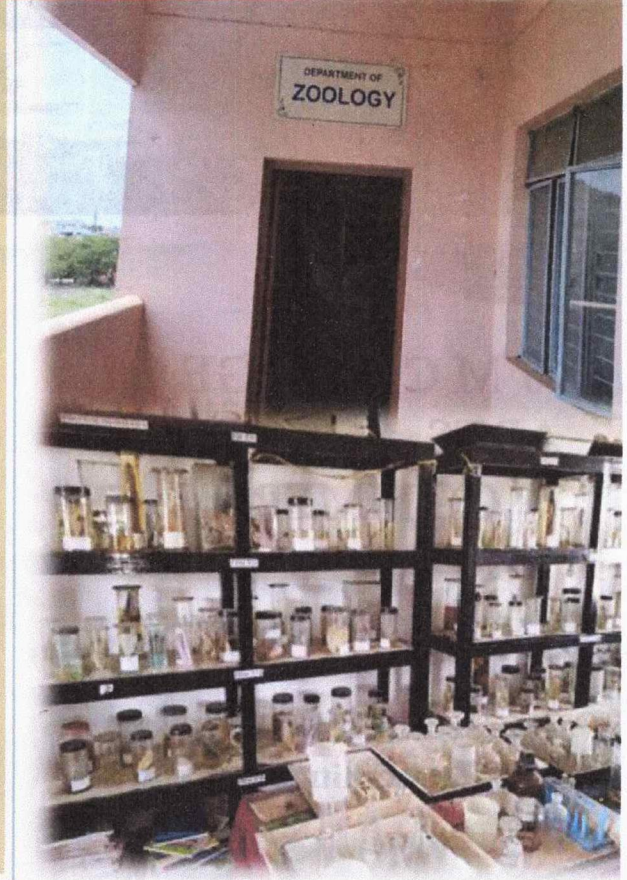
Admissions in the institutions are according to the norms of Davangere

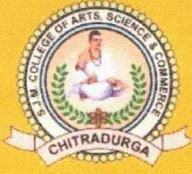


University and Regulations of Government of Karnataka. In the beginning of every academic year, one orientation program is conducted for degree students to familiarize them with the nature of courses offered, semester system, tests, assignments, project works, attendance and all the facilities available in the college.

ABOUT THE DEPARTMENT

The department of Zoology was established on 1st July, 1969. The major objective of the department is to impact high quality education and to encourage to the students in persuing research. Our department has good infrastructure and facilities to being practical knowledge with Global competition environment.





**SRI JAGADGURU MURUGHARAJENDRA
COLLEGE OF ARTS, SCIENCE & COMMERCE
CHANDRAVALLI, CHITRADURGA-577502**



Affiliated to Davangere University, Davangere
Accredited with 'A' Grade Third cycle



**IQAC INITIATIVE
DEPARTMENT OF ZOOLOGY**

**CERTIFICATE COURSE IN
APICULTURE**

From : 02-11-2022 To 31-01-2023

2022-23



ಶ್ರೀ ಜಗದ್ಗುರು ಮುರುಘರಾಜೇಂದ್ರ ಕಲಾ, ವಿಜ್ಞಾನ ಮತ್ತು ವಾಣಿಜ್ಯ ಮಹಾವಿದ್ಯಾಲಯ

ಚಂದ್ರವಳ್ಳಿ, ಚಿತ್ರದುರ್ಗ - 577 501. ಪೋಸ್ಟ್ ಬಾಕ್ಸ್ ನಂ. 88

ನ್ಯಾಕ್ ಸುನರ್ವ್ಯಾನ್ಯತೆ : 'ಎ' ಗ್ರೇಡ್ ಸಿ.ಐ.ಓ.ಎ. 3.05

SRI JAGADGURU MURUGHARAJENDRA COLLEGE OF ARTS, SCIENCE & COMMERCE

Chandravalli, CHITRADURGA - 577 501. Post Box No. 88, Karnataka

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ಕ್ರಮಾಂಕ : ಎಸ್.ಜಿ.ಎಂ.ಸಿ. /

/ 20 -20

ದಿನಾಂಕ : 2/11/22

To,

The Principal

SJM College of Arts, Science & Commerce

Chandravalli, Chitradurga



Sub: Request to grant permission to start Certificate on **Apiculture** for the Academic Year 2022-23

Respected Sir,

As per the guidelines issued by IQAC, we would like to start the Certificate course on "**Apiculture**" from the academic year 2022-23: with intake of 28 students. Please permit us to start the Certificate course and do the needful.

Thanking you,

[Signature]
Yours faithfully,
Head of the Department
Department of zoology
Chandravalli, H.L.K Road
S.J.M.College Chitradurga

http://www.sjmascchitradurga.edu.in
email: sjmasccta@rediffmail.com

ಎಸ್.ಜಿ.ಎಂ.ವಿದ್ಯಾಪೀಠ (ರಿ.) ಚಿತ್ರದುರ್ಗ

☎ ಕಛೇರಿ : 08194-222506

ಶ್ರೀ ಜಗದ್ಗುರು ಮುರುಘರಾಜೇಂದ್ರ ಕಲಾ, ವಿಜ್ಞಾನ ಮತ್ತು ವಾಣಿಜ್ಯ ಮಹಾವಿದ್ಯಾಲಯ

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ಕ್ರಮಾಂಕ : ಎಸ್.ಜಿ.ಎಂ.ಸಿ. /

/ 20 -20

ದಿನಾಂಕ : 24/10/22

Department of Zoology

Date : 24-10-2022

To,

The IQAC Coordinator

SJM College of Arts, Science & Commerce

Chandravalli, Chitradurga




**Sub: About conducting the Certificate Course:
Apiculture**

Respected Sir,

As per above mention subject the Department of Zoology wanted to conduct the Certificate Course on "**Apiculture**" in the current academic year from 02-09-2022 to 31-01-2023. The syllabus of Course is very helpful and applicable to all Students for all types of curricular as well as co-curricular examinations in the future.

So, please grant the permission for the same.

Thanking you,


Your's faithfully
**Head of the Department
Department of zoology
Chandravalli, H.L.K Road
S.J.M.College Chitradurga**

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/ 20 -20



ದಿನಾಂಕ : 03/11/22

OFFICE ORDER

Sri.C.N.Venkatesh, Assistant Professor of Zoology has been appointed as a Coordinator for the Certificate Course on Apiculture for the academic year 2022-23.

PRINCIPAL
Sri Jagadguru Murugharajendra College
of Arts, Science & Commerce
CHITRADURGA

http : //www.sjmascchitradurga.edu.in
email : sjmasccta@rediffmail.com

ಎಸ್.ಜಿ.ಎಂ.ವಿದ್ಯಾಪೀಠ (೦.) ಚಿತ್ರದುರ್ಗ

☎ ಕಛೇರಿ : 08194-222506

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/ 20 -20

ದಿನಾಂಕ : 02/11/22

NOTICE



All the students are hereby informed that, the **Certificate course on Apiculture** from the **02-11-2022**, interested students can enroll their names.

PRINCIPAL
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TO
ಕ್ರಮಾಂಕ : ಎಸ್.ಜಿ.ಎಂ.ಸಿ. /

/ 20 -20

ದಿನಾಂಕ : 03/11/22

Dr.Ramesh Iyyanahalli
Associate Professor
Dept. of Zoology
Govt.Science College,
Chitradurga.



Respected Sir,

Sub: Regarding providing service as Chairman for B.O.S
for Certificate Course on Apiculture.

Our College of the Zoology Department has planned to conduct a Certificate Course on Apiculture. In this academic year 2022-23 for B.Sc Students.

Hence I am requesting you to provide your honorable Service as a Chairman of Board of Studies for this Certificate Course.

Thanking you,


PRINCIPAL
Sri Jagadguru Murugharajendra College
of Arts, Science & Commerce
CHITRADURGA

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ಕ್ರಮಾಂಕ : ಎಸ್.ಜೆ.ಎಂ.ಸಿ. /
TO

/ 20 -20

ದಿನಾಂಕ : 02/11/22

Prof.Karibasappa.C
Assistant Professor
Dept. of Zoology
HPPC.First Grade Govt. College,
Challakere.



Respected Sir,

Sub: Regarding providing service as Member for B.O.S
for Certificate Course on Apiculture.

Our College of the Zoology Department has planned to conduct a Certificate Course on Apiculture. In this academic year 2022-23 for B.Sc Students.

Hence I am requesting you to provide your honorable Service as a Member of Board of Studies for this Certificate Course.

Thanking you,


PRINCIPAL
Sri Jagadguru Murugharajendra College
of Arts, Science & Commerce
CHITRADURGA

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ಕ್ರಮಾಂಕ : ಎಸ್.ಜೆ.ಎಂ.ಸಿ. /
TO

/ 20 -20

ದಿನಾಂಕ : 03/11/22

Dr.Sathish Gowda
Associate Professor
Dept. of Zoology
Govt.Science College,
Chitradurga.



Respected Sir,

Sub: Regarding providing service as Member and Resource
Person for B.O.S for Certificate Course on Apiculture.

Our College of the Zoology Department has planned to conduct a
Certificate Course on Apiculture. In this academic year 2022-23 for B.Sc
Students.

Hence I am requesting you to provide your honorable Service as a
Member and Resource Person of Board of Studies for this Certificate Course.

Thanking you,


PRINCIPAL
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ಎಸ್.ಜಿ.ಎಂ.ವಿದ್ಯಾಪೀಠ (ರಿ.) ಚಿತ್ರದುರ್ಗ

☎ ಕಛೇರಿ : 08194-222506

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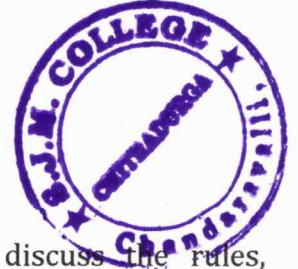
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/ 20 -20

ದಿನಾಂಕ : 24/10/23

BOS MEETING



A BOS Meeting was convened on 24/10/ 2023 to discuss the rules, regulations and syllabus in connection with the **Certificate course in Apiculture** for the academic year 2022-23 in the presence of following members.

Sl No	Name	Designation	Signature
1	Dr. Ramesh Iyyanahalli Associate Professor Dept of Zoology Govt Science College, Chitradurga	Chairman	
2	Prof. Karibasappa C. Assistant Professor Dept of Zoology HPPC First Grade College Challakere	Member	
3	Prof. C.N. Venkatesh Asst Professor, Dept of Zoology S J M College Of Arts, Science & Commerce, Chitradurga	Member & Co ordinator	
4	Dr. Sathis Gowda Associate Professor Dept of Zoology Govt Science College, Chitradurga	Member & Resource Person	

Head of the Department
Department of zoology
Chandravalli, H.L.K Road
S.J.M. College Chitradurga

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/ 20 -20

ದಿನಾಂಕ :

:: MEETING PROCEEDINGS ::



The Meeting of BOS in Zoology under the Chairmanship of Dr.Ramesh Iyyanahalli which was held on 24-10-2022 at S.J.M.College of Arts, Science & Commerce Chandravalli, Chitradurga.

The Syllabus for the Certificate Course on "API CULTURE" was unanimously approved by all the BOS Members.

Signature of BOS Members

1

2

3
4

Head of the Department
Department of zoology
Chandravalli, H.L.K Road
S.J.M.College Chitradurga

Course Code : Zoocc02

Hrs : 30

Certificate Course on APICULTURE



AIMS:

1. To promote the study of beekeeping for the improvement crop yield.
2. To establish areas of conservation throughout the Chitradurga district farmland for the conservation of honey bee.
3. To provide education on Bee to increase public awareness of the native honey bee.
4. To promote the formation of Bee Improvement groups
5. To act in an advisory capacity to groups and individuals who wish to promote it.
6. To co-operate with other Bee-Keeping organisations with similar aims and to seek the help of the scientific community and other stake holders in achieving our aims and objectives.
7. To control quality and promote markets of honeybee products.

OBJECTIVES:

To establish areas of conservation throughout the Chitradurga district for the conservation of the native honey bee

1. To use honeybee colonies to best execute the beekeeping management plan to maximize the collection of nectar to maximize honey production.
2. To provide pollination services for local food crops.
3. Explain the basic concepts of apiculture like systematics, colony organization, polymorphism, morphology and foraging.
4. Producing other honeybee substances, including bee pollen, propolis, and royal jelly.
5. To provide Knowledge of honeybee biology, Knowledge of local nectar flows, Deciding on the goals and how to best use the colonies
6. To build human resource in the beekeeping sector.
7. To justify the presence of bees to increase the agriculture productivity.

PROGRAM OF THE COURSE:

1. Course will be of 30 Credits (20 theory + 10 practical). One credit is equivalent to 15 hour of teaching (Lecture/Tutorial) or 4 hours of practical work/field work per week.
2. Maximum number of Students per batch will be 50.
3. The candidate required to attend 75% lectures/periods.
4. The candidate must obtained 35% of the total marks in theory and practical/project work separate to pass the course.
5. Candidate will be offered English as a medium of instructions/examination.
6. The admission shall be opened to any candidate who passed 10+2 examination.
7. There is no age bar to participate in the course.
8. Certificate: Successful persons will be awarded certificates issued by National Skill Qualification Framework (NSQF) under UGC & LVH College, Panchavati, Nashik.

Syllabus

Basics of Apiculture

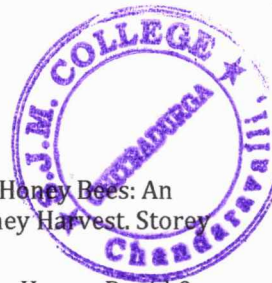
Total Lecture: 30



1	Introduction to Apiculture: Scope, importance, history of bee keeping	04
2	Types: Traditional bee keeping, Modern beekeeping, Urban or backyard beekeeping.	06
3	Basic Taxonomy: Honey bee species and identification. Origin, systematic and distribution of honey bees. Types of honey bees, Species of honey bees. Bee identification.	08
4	Basic concepts of morphology of Honey bees - indigenous, exotic	06
5	Social organization in honey bees: Drone, Worker and Queen, Colony life and social organization, Annual biological cycle of the bee colony.	06
6	Social behaviour and Communication.	04
7	Production of Honey by honeybee: its medicinal properties, application in various fields, other valuable by products of honey bees	08
8	Honey: its medicinal properties - application in various fields - other valuable by products of honey bees.	06
9	Nutrients and composition of honey, Acid content and flavour effects, Value added honey products. Properties of honey products	06
10		

Practicals

1. Study of morphology and anatomy of honey bee (different body parts of honey bees and their modifications)
2. Identification of different species and sub-species of honeybees.
3. Study of development stages of life cycle of the different types of bees and time needed to complete each stage.
4. To observe organization of a honey bee colony and become familiar with their duties
5. To become familiar with developmental stages and life cycle of different castes of honey bees.
6. Social behaviour of honey bees: To understand communication system of a honey bee colony.
7. To become familiar with different equipments used in modern beekeeping for domesticating hive bees.
8. To understand technique of mass queen rearing of honey bees which include prerequisite to produce good queen, basic grafting, management of cell builder colony and handling of queens produced.
9. To become familiar with important bee enemies and their management.
10. To familiarize with honey bee diseases, their symptoms and management.



Reference Books

- ABC & XYZ of Bee culture - A. I. Root
- Alethea Morrison (Author), Mars Vilaubi (Photographer), 2013. Homegrown Honey Bees: An Absolute Beginner's Guide to Beekeeping Your First Year, from Hiving to Honey Harvest. Storey Publishing, LLC; 1 edition.
- Alison Benjamin, By (author) Brian McCallum, 2008. Keeping Bees and Making Honey. David & Charles, Newton Abbot.
- Alison Benjamin, By (author) Brian McCallum, 2008. Keeping Bees and Making Honey. David & Charles, Newton Abbot.
- Asian Bee Journal
- Bee Keeping in India - G. K. Ghosh
- Beekeeping: A personal journey – Dennis Brown
- Craig Hughes, 2010. Urban Beekeeping: A Guide to Keeping Bees in the City. e Good Life Press, Preston.
- David Cramp, 2009. A Practical Manual of Beekeeping: How to Keep Bees and Develop Your Full Potential as an Apiarist. Spring Hill, London.
- David Cramp, 2012. The Complete Step-by-step Book of Beekeeping: A Practical Guide to Beekeeping, from Setting up a Colony to Hive Management and Harvesting the Honey. Lorenz Books. London.
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S.J.M. College of Arts, Science & Commerce Chandravalli, Chitradurga

DEPARTMENT OF ZOOLOGY

Time-Table for Certificate Course in
API CULTURE -2022-23



DAY	I 8-9	II 9-10	III 10.10- to11-10	IV 11.10- 12-10	V 12.10 to 1.10	VI 2-3	VII 3-4 VIII 4-5
MON					API CULTURE		
TUE					API CULTURE		
WED							
THU							
FRI							Practical
SAT							Practical


PRINCIPAL
Sri Jagadguru Muruganajendra College
of Arts, Science & Commerce
CHITRADURGA

S.J.M. College of Arts, Science & Commerce Chandravalli, Chitradurga

Marks List (Theory)

Attendance sheet

API CULTURE-2022-23

Sl.No	Student Name	
1	Haseeba Naz	Haseeba
2	Huzaiifa Banu	Huzaiifa Banu
3	K R Sandeep	Sandeep
4	Kanimesh S	Kanimesh S
5	Kavya M J	Kavya
6	Kavya N	Kavya N
7	Manasa G P	manasa G P
8	Megha T M	Megha
9	Mohammed Mustafa	Mohammed Mustafa
10	Nandeesh kumar J M	Nandeesh kumar J M
11	Nanditha N	Nanditha N
12	Manjunatha j	Manjunatha j
13	Neha twaseen	Neha twaseen
14	Obalesh B	Obalesh B
15	Pooja C S	Pooja
16	Praveen R	Praveen - R
17	Rashimitha N	Rashimitha. N
18	Raviteja L U	Raviteja L U
19	Shravani M P	Shravani M. P
20	Venkatesha G	Venkatesha G
21	Yashwanth N	Yashwanth N
22	Zoya hashmi	Zoya hashmi
23	Akash N M	Akash N M
24	Anusha G	Anusha - G
25	Darshan L	Darshan L
26	Manoj Kumar K N	Manoj Kumar K N
27	Navyasri R	NAVYA
28	Prajwal L U	Prajwal L. U
29	Raziq M	Raziq M.
30	Sharath S	Sharath S



ATTENDANCE

COURSE : APICULTURE

SL No	Name of the Student	01/11	7/11	8/11	9/11	11/11	15/11	21/11	22/11	28/11	29/11
20	Venkatesha G	Venkatesha	Venkatesh	Venkatesh	Venkatesh	Venkatesh	Venkatesh	Venkatesh	Venkatesh	Venkatesh	Venkatesh
21	Yashwanth N	Yash	Yash	Yash	Yash	Yash	Yash	Yash	Yash	Yash	Yash
22	Zoya hashmi	Zoya	Zoya	Zoya	Zoya	Zoya	Zoya	Zoya	Zoya	Zoya	Zoya
23	Akash N M	Akash	Akash	Akash	Akash	Akash	Akash	Akash	Akash	Akash	Akash
24	Anusha G	Anusha	Anusha	Anusha	Anusha	Anusha	Anusha	Anusha	Anusha	Anusha	Anusha
25	Darshan L	Darshan	Darshan	Darshan	Darshan	Darshan	Darshan	Darshan	Darshan	Darshan	Darshan
26	Manoj Kumar K N	Manoj	Manoj	Manoj	Manoj	Manoj	Manoj	Manoj	Manoj	Manoj	Manoj
27	Navyasri R	Navya	Navya	Navya	Navya	Navya	Navya	Navya	Navya	Navya	Navya
28	Prajwal L U	Prajwal	Prajwal	Prajwal	Prajwal	Prajwal	Prajwal	Prajwal	Prajwal	Prajwal	Prajwal
29	Raziq M	Raziq	Raziq	Raziq	Raziq	Raziq	Raziq	Raziq	Raziq	Raziq	Raziq
30	Sharath S	Sharath	Sharath	Sharath	Sharath	Sharath	Sharath	Sharath	Sharath	Sharath	Sharath



SL No	Name of the Student	05/12/22	06/12	12/12	13/12	16/12	19/12	20/12	21/12	26/12	27/12
20	Venkatesha G	<u>venkatesha</u>	<u>venkatesha</u>	<u>venkatesha</u>	<u>venkatesha</u>	<u>venkatesha</u>	<u>venkatesha</u>	<u>venkatesha</u>	<u>venkatesha</u>	<u>venkatesha</u>	<u>venkatesha</u>
21	Yashwanth N	<u>Yash</u>	<u>Yash</u>	<u>Yash</u>	<u>Yash</u>	<u>Yash</u>	<u>Yash</u>	<u>Yash</u>	<u>Yash</u>	<u>Yash</u>	<u>Yash</u>
22	Zoya hashmi	<u>Zoya</u>	<u>Zoya</u>	<u>Zoya</u>	<u>Zoya</u>	<u>Zoya</u>	<u>Zoya</u>	<u>Zoya</u>	<u>Zoya</u>	<u>Zoya</u>	<u>Zoya</u>
23	Akash N M	<u>Akash</u>	<u>Akash</u>	<u>Akash</u>	<u>Akash</u>	<u>Akash</u>	<u>Akash</u>	<u>Akash</u>	<u>Akash</u>	<u>Akash</u>	<u>Akash</u>
24	Anusha G	<u>Anusha</u>	<u>Anusha</u>	<u>Anusha</u>	<u>Anusha</u>	<u>Anusha</u>	<u>Anusha</u>	<u>Anusha</u>	<u>Anusha</u>	<u>Anusha</u>	<u>Anusha</u>
25	Darshan L	<u>Darshan</u>	<u>Darshan</u>	<u>Darshan</u>	<u>Darshan</u>	<u>Darshan</u>	<u>Darshan</u>	<u>Darshan</u>	<u>Darshan</u>	<u>Darshan</u>	<u>Darshan</u>
26	Manoj Kumar K N	<u>Manoj</u>	<u>Manoj</u>	<u>Manoj</u>	<u>Manoj</u>	<u>Manoj</u>	<u>Manoj</u>	<u>Manoj</u>	<u>Manoj</u>	<u>Manoj</u>	<u>Manoj</u>
27	Navyasri R	<u>Navya</u>	<u>Navya</u>	<u>Navya</u>	<u>Navya</u>	<u>Navya</u>	<u>Navya</u>	<u>Navya</u>	<u>Navya</u>	<u>Navya</u>	<u>Navya</u>
28	Prajwal L U	<u>Prajwal</u>	<u>Prajwal</u>	<u>Prajwal</u>	<u>Prajwal</u>	<u>Prajwal</u>	<u>Prajwal</u>	<u>Prajwal</u>	<u>Prajwal</u>	<u>Prajwal</u>	<u>Prajwal</u>
29	Raziq M	<u>Raziq</u>	<u>Raziq</u>	<u>Raziq</u>	<u>Raziq</u>	<u>Raziq</u>	<u>Raziq</u>	<u>Raziq</u>	<u>Raziq</u>	<u>Raziq</u>	<u>Raziq</u>
30	Sharath S	<u>Sharath</u>	<u>Sharath</u>	<u>Sharath</u>	<u>Sharath</u>	<u>Sharath</u>	<u>Sharath</u>	<u>Sharath</u>	<u>Sharath</u>	<u>Sharath</u>	<u>Sharath</u>



SL No	Name of the Student	01/12	03/11	09/11	10/11	16/11	17/11	18/11	23/11	26/11	30/11
20	Venkatesha G	<u>Venkatesha</u>	<u>Venkatesh</u>	<u>Venkatesha</u>	<u>Venkatesha</u>	<u>Venkatesha</u>	<u>Venkatesha</u>	<u>Venkatesha</u>	<u>Venkatesha</u>	<u>Venkatesha</u>	<u>Venkatesha</u>
21	Yashwanth N	<u>Yash</u>	<u>Yash</u>	<u>Yash</u>	<u>Yash</u>	<u>Yash</u>	<u>Yash</u>	<u>Yash</u>	<u>Yash</u>	<u>Yash</u>	<u>Yash</u>
22	Zoya hashmi	<u>Zoya</u>	<u>Zoya</u>	<u>Zoya</u>	<u>Zoya</u>	<u>Zoya</u>	<u>Zoya</u>	<u>Zoya</u>	<u>Zoya</u>	<u>Zoya</u>	<u>Zoya</u>
23	Akash N M	<u>Akash</u>	<u>Akash</u>	<u>Akash</u>	<u>Akash</u>	<u>Akash</u>	<u>Akash</u>	<u>Akash</u>	<u>Akash</u>	<u>Akash</u>	<u>Akash</u>
24	Anusha G	<u>Anusha</u>	<u>Anusha</u>	<u>Anusha</u>	<u>Anusha</u>	<u>Anusha</u>	<u>Anusha</u>	<u>Anusha</u>	<u>Anusha</u>	<u>Anusha</u>	<u>Anusha</u>
25	Darshan L	<u>Darshan</u>	<u>Darshan</u>	<u>Darshan</u>	<u>Darshan</u>	<u>Darshan</u>	<u>Darshan</u>	<u>Darshan</u>	<u>Darshan</u>	<u>Darshan</u>	<u>Darshan</u>
26	Manoj Kumar K N	<u>Manoj</u>	<u>Manoj</u>	<u>Manoj</u>	<u>Manoj</u>	<u>Manoj</u>	<u>Manoj</u>	<u>Manoj</u>	<u>Manoj</u>	<u>Manoj</u>	<u>Manoj</u>
27	Navyasri R	<u>Navya</u>	<u>Navya</u>	<u>Navya</u>	<u>Navya</u>	<u>Navya</u>	<u>Navya</u>	<u>Navya</u>	<u>Navya</u>	<u>Navya</u>	<u>Navya</u>
28	Prajwal L U	<u>Prajwal</u>	<u>Prajwal</u>	<u>Prajwal</u>	<u>Prajwal</u>	<u>Prajwal</u>	<u>Prajwal</u>	<u>Prajwal</u>	<u>Prajwal</u>	<u>Prajwal</u>	<u>Prajwal</u>
29	Raziq M	<u>Raziq</u>	<u>Raziq</u>	<u>Raziq</u>	<u>Raziq</u>	<u>Raziq</u>	<u>Raziq</u>	<u>Raziq</u>	<u>Raziq</u>	<u>Raziq</u>	<u>Raziq</u>
30	Sharath S	<u>Sharath</u>	<u>Sharath</u>	<u>Sharath</u>	<u>Sharath</u>	<u>Sharath</u>	<u>Sharath</u>	<u>Sharath</u>	<u>Sharath</u>	<u>Sharath</u>	<u>Sharath</u>



S J M VIDYAPEETHA ®, Chitradurga
S.J.M. COLLEGE OF ARTS, SCIENCE AND COMMERCE
Chandravalli, CHITRADURGA-577501. Post Box No.88, Karnataka

**CERTIFICATE COURSE
ON
APICULTURE**



**Final Examination 2022-23
QUESTION PAPER - THEORY**

Time : 1 Hrs


Max Marks : 25

- 1 Give detailed account of species and races of Honey bees.
- 2 Explain social organization of Honey bee.
- 3 Explain properties and uses of Honey
- 4 Write a note on Honey bee diseases
- 5 Explain scope .importance and history of Bee keeping

S.J.M. College of Arts, Science & Commerce Chandravalli, Chitradurga
Marks List (Theory)
API CULTURE-2022-23




Sl.No	Student Name	
1	Haseeba Naz	21
2	Huzaiifa Banu	23
3	K R Sandeep	22
4	Kanimesh S	20
5	Kavya M J	20
6	Kavya N	21
7	Manasa G P	22
8	Megha T M	22
9	Mohammed Mustafa	23
10	Nandeesh kumar J M	24
11	Nanditha N	22
12	Manjunatha j	23
13	Neha twaseen	24
14	Obalesh B	25
15	Pooja C S	23
16	Praveen R	21
17	Rashimitha N	22
18	Raviteja L U	20
19	Shravani M P	21
20	Venkatesha G	23
21	Yashwanth N	22
22	Zoya hashmi	22
23	Akash N M	21
24	Anusha G	23
25	Darshan L	22
26	Manoj Kumar K N	21
27	Navyasri R	22
28	Prajwal L U	22
29	Raziq M	21
30	Sharath S	22


Head of the Department
Department of zoology
Chandravalli, H.L.K Road
S.J.M.College Chitradurga

S.J.M. College of Arts, Science & Commerce Chandravalli, Chitradurga
Marks List (Practical)
API CULTURE-2022-23

Sl.No	Student Name	
1	Haseeba Naz	19
2	Huzaifa Banu	18
3	K R Sandeep	18
4	Kanimesh S	20
5	Kavya M J	21
6	Kavya N	21
7	Manasa G P	22
8	Megha T M	23
9	Mohammed Mustafa	22
10	Nandeesh kumar J M	21
11	Nanditha N	20
12	Manjunatha j	21
13	Neha twaseen	22
14	Obalesh B	22
15	Pooja C S	23
16	Praveen R	21
17	Rashimitha N	22
18	Raviteja L U	23
19	Shravani M P	24
20	Venkatesha G	21
21	Yashwanth N	22
22	Zoya hashmi	23
23	Akash N M	21
24	Anusha G	20
25	Darshan L	21
26	Manoj Kumar K N	22
27	Navyasri R	23
28	Prajwal L U	21
29	Raziq M	22
30	Sharath S	20




Head of the Department
Department of zoology
Chandravalli, H.L. Road
S.J.M.College



S.J.M. COLLEGE
CHANDANOLI

Apiculture

Handwritten notes in a notebook on a student's desk. The text is partially legible and appears to be a list or series of points related to the lecture topic.



COURSE OUTCOME

S.J.M. College of Arts, Science & Commerce Department of Zoology had conducted a Certificate Course on “API CULTURE”. in this course the students.

- * The learner understands the basics about beekeeping tools, Equipment, and managing beehives.
- To understand the basic life cycle of the honeybees, beekeeping tools and equipments.
- To learner for managing beehives for honey production and pollination.
- The course is useful for providing self employment to learner.
- The bee keeping is useful in pollination of the flora.
- Learner will understand the marketing of various bee products.





SJM Vidyapeetha (R), Chitradurga
SJM COLLEGE OF ARTS, SCIENCE & COMMERCE

Chandravalli, Chitradurga - 577501
Accredited with 'A' Grade Third Cycle (CGPA-3.05)



DEPARTMENT OF ZOOLOGY

CERTIFICATE

This is to certify that Mr/Mrs Of B.Sc.
has successfully completed Certificate Course in **"APICULTURE"** during the
Academic Year 2022-23 in the Grade He / She completed 30 Course
hours (2 Credits).


Coordinator


Head of the Department


Principal