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# S J M COLLEGE OF ARTS, SCIENCE & COMMERCE

Chandravalli, CHITRADURGA – 577501

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

### ABOUT THE COLLEGE

Sri Jagadguru Murugharajendra 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 reaccredited by National Assessment and Accreditation Council (NAAC) with "A" Grade (CGPA Score 3.05 on a 4 Point Scale in 3rd Cycle) on 28the March, 2017.

Sri Jagadguru Murugharajendra 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

COLLY Correspondent A COLLY

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 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-energing students.

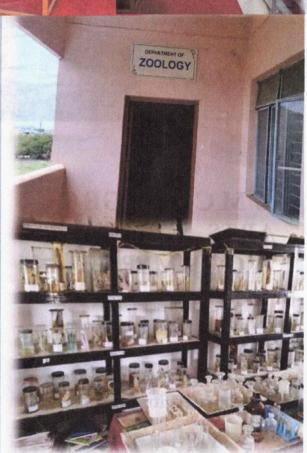
Admissions in the institutions are according to the norms of Davangere

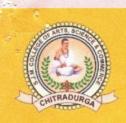


University and Regulations of Government of Karnataka. In the beginning of every academic year, one orientation program is conducted for degree students to familiarize them with the nature of courses offered, semester system, tests, assignments, project works, attendance and all the facilities available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

### ABOUT THE DEPARTMENT

The department of Zoology was established on 1<sup>st</sup> 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

# ASSOCIATION WITH DEPARTMENT OF ZOOLOGY





# **CERTIFICATE COURSE IN**

# **VERMICULTURE & VERMICOMPOSTING**

From: 02-03-2023 To 31-05-2023

2022-23

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

ಎಸ್.ಜೆ.ಎಂ.ವಿದ್ಯಾಪೀಠ (ರಿ.) ಚಿತ್ರದುರ್ಗ

🖀 ಕಛೇರಿ : 08194-222506

ಶ್ರೀ ಜಗದ್ಗರು ಮುರುಫರಾಜೇಂದ್ರ ಕಲಾ, ವಿಜ್ಞಾನ ಮತ್ತು ವಾಣಿಜ್ಯ ಮಹಾವಿದ್ಯಾಲಯ

ಚಂದ್ರವಳ್ಳಿ, ಚಿತ್ರ<mark>ದುರ್ಗ – 577 501. ಪ</mark>ೋಸ್ಟ್ ಬಾಕ್ಸ್ ನಂ. 88 ನ್ಯಾಕ್ ಪುನ್ನ<mark>ರಾಷ್ಟ್ರಕ್ಕೆ ಪಿ.ಚಿ.ಪಿ.ಎ. 3.05</mark>

### SRI JAGADGURU MURUGHARAJENDRA COLLEGE OF ARTS, SCIENCE & COMMERCE

Chandravalli, CHITRADURGA - 577 501. Post Box No. 88, Karnataka NAAC Reaccredited with 'A' Grade CGPA 3.05

ಕ್ರಮಾಂಕ: ಎಸ್.ಜೆ.ಎಂ.ಸಿ. /

/ 20 -20

ದಿನಾಂಕ : 28 2 22



### **NOTICE**

All the students are hereby informed that, the Certificate course on **Vermiculture and Vermicomposting** from the **02-03-2023**, interested students can enroll their names.

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

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

ಎಸ್.ಜೆ.ಎಂ.ವಿದ್ಯಾಪೀಠ (ರಿ.) ಚಿತ್ರದುರ್ಗ

🖀 ಕಛೇಠಿ : 08194-222506

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### SRI JAGADGURU MURUGHARAJENDRA COLLEGE OF ARTS, SCIENCE & COMMERCE

Chandravalli, CHITRADURGA - 577 501, Post Box No. 88, Karnataka NAAC Reaccredited with 'A' Grade CGPA 3.05

ಕ್ರಮಾಂಕ: ಎಸ್.ಜೆ.ಎಂ.ಸಿ. /

/20 -20

ದಿನಾಂಕ : 26/2/20

To.

### The Principal

SJM College of Arts, Science & Commerce Chandravalli, Chitradurga



Sub: Request to grant permission to start

> Vermiculture Certificate on Vermicomposting for the Academic Year

2022-23

Respected Sir,

As per the guidelines issued by IQAC, we would like to start the Certificate course on "Vermiculture and Vermicomposting" 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,

Chandravalli, H.L.K Road S.J.M.College Chitradurga http://www.sjmcascchitradurga.edu.in email:sjmasccta@rediffmail.com ಎಸ್.ಜಿ.ಎಂ.ವಿದ್ಯಾಪೀಠ (ರಿ.) ಚಿತ್ರದುರ್ಗ

🖀 ಕಛೇರಿ : 08194-222506

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### SRI JAGADGURU MURUGHARAJENDRA COLLEGE OF ARTS, SCIENCE & COMMERCE

Chandravalli, CHITRADURGA - 577 501, Post Box No. 88, Karnataka NAAC Reaccredited with 'A' Grade CGPA 3.05

ಕ್ರಮಾಂಕ: ಎಸ್.ಜೆ.ಎಂ.ಸಿ. /

/ 20 -20

ದಿನಾಂಕ: 26 02/22

Department of Zoology

Date: 01-03-2023

To,
The IQAC Coordinator
SJM College of Arts, Science & Commerce
Chandravalli, Chitradurga



Sub: About conducting the Certificate Course: Vermiculture and Vermicomposting

Respected Sir,

As per above mention subject the Department of Zoology wanted to conduct the Certificate Course on "Vermiculture and Vermicomposting" in the current academic year from 02-03-2023 to 31-05-2023. 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,

Head of the Department Department of zoology Chandravalli, H.L.K Road S.J.M.College Chitradurga http://www.sjmcascchitradurga.edu.in email:simasccta@rediffmail.com ಎಸ್.ಜೆ.ಎಂ.ವಿದ್ಯಾಪೀಠ (ರಿ.), ಚಿತ್ರದುರ್ಗ

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# SRI JAGADGURU MURUGHARAJENDRA COLLEGE OF ARTS, SCIENCE & COMMERCE

Chandravalli, CHITRADURGA - 577 501. Post Box No. 83 Kamataka NAAC Reaccredited with 'A' Grade CGPA 508

ಕ್ರಮಾಂಕ: ಎಸ್.ಜೆ.ಎಂ.ಸಿ. /

/ 20 -20

### **OFFICE ORDER**

27/0/21 27/0/21

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

PRINCIPAL.
Sri Jagadguru Murugharijandra College of Arts, Science & Commerce

http://www.sjmcascchitradurga.edu.in email:simasccta@rediffmail.com ಎಸ್.ಜೆ.ಎಂ.ವಿದ್ಯಾಪೀಠ (ರಿ.), ಚಿತ್ರದುರ್ಗ

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# SRI JAGADGURU MURUGHARAJ<mark>ENDRA COLLEGE</mark> OF ARTS, SCIENCE & COMMERCE

Chandravalli, CHITRADURGA - 577 501. Post Box No. 88, Karnataka NAAC Reaccredited with 'A' Grade CGPA 3.05

ಕ್ರಮಾಂಕ : ಎಸ್.ಜೆ.ಎಂ.ಸಿ. / TO / 20 -20

ದಿನಾಂಕ: & 7/02/27

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

Respsected Sir,

Sub: Regarding providing service as Chairman B.O.S for Certificate Course on Vermiculture & Vermicomposting

\*\*\*

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 Arta, Science & Commerce
CHITRADURGA

http://www.sjmcascchitradurga.edu.in email:simasccta@rediffmail.com ಎಸ್.ಜೆ.ಎಂ.ವಿದ್ಯಾಪೀಠ (ರಿ.), ಚಿತ್ರದುರ್ಗ

🖀 ಕಛೇರಿ : 08194-222506

ದಿನಾಂಕ: 27/02/8

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# SRI JAGADGURU MURUGHARAJ<mark>ENDRA COLLEGE</mark> OF ARTS, SCIENCE & COMMERCE

Chandravalli, CHITRADURGA - 577 501. Post Box No. 88, Karnataka NAAC Reaccredited with 'A' Grade CGPA 3.05

TO ಕ್ರಮಾಂಕ : ಎಸ್.ಜೆ.ಎಂ.ಸಿ. /

/ 20 -20

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

CHEROMECA A

Respsected Sir,

Sub: Regarding providing service as Member for B.O.S for Certificate Course on Vermiculture&Vermicomposting

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

http://www.sjmcascchitradurga.edu.in email:sjmasccta@rediffmail.com ಎಸ್.ಜೆ.ಎಂ.ವಿದ್ಯಾಪೀಠ (ರಿ.), ಚಿತ್ರದುರ್ಗ

**ಹ** ಕಛೇರಿ : 08194-222506

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Chandravalli, CHITRADURGA - 577 501. Post Box No. 88, Karnataka NAAC Reaccredited with 'A' Grade CGPA 3.05

ಕ್ರಮಾಂಕ : ಎಸ್.ಜೆ.ಎಂ.ಸಿ. / TO / 20 -20

ದಿನಾಂಕ: 22/02/23

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



Respsected Sir,

Sub: Regarding providing service as Member & Resource person for B.O.S for Certificate Course on Vermiculture & Vermicomposting

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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 & Resource person of Board of Studies for this Certificate Course.

Thanking you,

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

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

ಎಸ್.ಜೆ.ಎಂ.ವಿದ್ಯಾಪೀಠ (ರಿ.) ಚಿತ್ರದುರ್ಗ

🖀 ಕಛೇರಿ : 08194-222506

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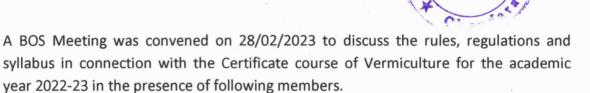
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ಕ್ರಮಾಂಕ: ಎಸ್.ಜೆ.ಎಂ.ಸಿ. /

/ 20 -20

### **BOS MEETING**



SI No	Name	Designation	Signature
1	Dr. Sathis Gowda 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	B
3	Prof. C.N. Venkatesh Asst Professor Dept of Zoology S J M College Of Arts, Science & Commerce, Chitradurga	Ch	partment of zo andravalli, H.L.R
4	Dr. Ramesh Iyyanahalli Associate Professor Dept of Zoology Govt Science College, Chitradurga	Member & Resource Person	M.College Chitch

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ಎಸ್.ಜೆ.ಎಂ.ವಿದ್ಯಾಪೀಠ (ರಿ.) ಚಿತ್ರದುರ್ಗ

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SRI JAGADGURU MURUGHARAJENDRA COLLEGE OF ARTS, SCIENCE & COMMERCE

Chandravalli, CHITRADURGA - 577 501. Post Box No. 88, Karnataka NAAC Reaccredited with 'A' Grade CGPA 3.05

ಕ್ರಮಾಂಕ: ಎಸ್.ಜೆ.ಎಂ.ಸಿ. /

-20/ 20

### :: MEETING PROCEEDINGS ::

The Meeting of BOS in Zoology under the Chairmanship of Dr.Sathish Gowda which was held on 28-02-2023 at S.J.M.College of Arts, Science & Commerce Chandravalli, Chitradurga.

The Syllabus for the Certificate Course on "Vermiculture and Vermicomposting" was unanimously approved by all the BOS Members.

Signature of BOS Members

M.College Chitradurga

Course Code Zoocc01

Hrs.: 30

# **Certificate Course on**

### **VERMICULTURE & VERMICOMPOSTING**

#### **INTRODUCTIONS:**

Vermiculture technology is known throughout the world, albeit in limited areas. It may consider a widely spread, though not necessarily popular technology. As a process for handling organic residuals, it represents an alternative approach in waste management, is as much as the material is neither land filled nor burned but is considered a resource that may be recycled. In this sense, vermicomposting is compatible with sound environmental principles that value conservation f resources and sustainable practices. Vermicomposting is akin to composting in that similar feedstock-organic residuals are used. Both systems utilize microbial activity to break down organic matter in the moist, aerobic environment. Vermicomposting is however faster, produces fewer odors and produces a superior to heat, high salt levels, high ammonia levels, and substances that may be toxic to earthworms. Of the 4400 identified earthworm species, specific species of litter dwelling earthworms are required for this purpose. Vermicomposting in developing countries could prove to be useful in many instances. In the past ten years an organization in India has promoted over 3000 farmers and institutions to switch from conventional chemicals to the organic fertilizer, Vermicomposting.

Vermiculture enables any scale or size of operation. Vermicompost is being in over 1,00,000 hectare cultivated area in almost all agro-climatic zones in India. Noted for its ability to increase organic matter and trace minerals in soil, vermiculture has been the primary focus at Maharashtra Agricultural Biotech's in India, an organization that has initiated both commercial and educational ventures to promote vermiculture. In 1985, Maharashtra Agricultural Biotech's was formed and established a small plant to manufacture vermicompost from agricultural waste.

In 1991-92, Maharashtra Biotech's and the India Department of Science and Technology promoted the adoption of vermicompost technology in 13 states in India. The group has also established a vermicompost unit ith Chitrakoot Gramodaya University, Madhya Pradesh & other states have started conducting certificate / diploma / regular courses on vermiculture, vermiculture biotechnology and vermiculture & Vermicompost technology. The duration of courses ranges form 10 days to six months. The Department of Zoology running this Certificate Course.

#### A BRIEF ABSTRACT OF THE EVENT

Vermicompost is one of the most important manures of organic farming. In this context the Skill Development Training has been organized in collaboration with Skill Development Cell. The Chairman of this program is **Dr. Sathis Gowda**, Associate Professor, Dept of Zoology, Govt Science College, Chitradurga. The training was started with the auspicious presence of the **Prof. Karibasappa C.**, Assistant Professor, Dept of Zoology, HPPC First Grade College, Challakere, **Dr.** 

**Ramesh Iyyanahalli,** Associate Professor, Dept of Zoology, Govt Science College, Chitradurga and **Prof. C.N. Venkatesh**, Assistant Professor, Dept. of Zoology of SJM College of Arts, Science & Commerce College. Along with 28 students from the SJM College of Arts, Science & Commerce College. This 30 days Certificate Course Program (from 02.03.2023 to 31.05.2023) had been sessions, participants gained a variety of knowledge related to Vermicomposting from the subject experts and resource persons who are invited from various Colleges and departments.

During this Certificate Course Program, the participant learned the various approaches to Vermicomposting. The students gained knowledge about the Vermicopmost preparation method, application method, management of Vermicompost, Varmiwash preparation, application of Varmiwash, and Management of Vermiwash tank.

At the end of this Certificate course Vermicompost production units, have been constructed by the participant. A Valedictory Program has been organized to provide the Certificate to the participants. The students were glad to participate in this course program and they said in the feedback session, that they learned a lot of things about Vermicompost and they will adopt it in the future as well as transfer this technology to other farmers.

#### AIMS AND OBJECTIVES OF THIS CERTIFICATE COURSE:

- Students will be able to compost in a limited space and describe the decomposing process.
- The interested Students will get the knowledge of composting.
- Students will get the employment.
- They can generate employments.
- They will also turn towards organic farming.
- Will help to maintain the environment pollution free and
- Will get the knowledge of biodiversity of local earthworms.

### **CERTIFICATE COURSE PROGRAM**

Content	Marks
Theory	25 (2 credit)
Practical	25 (2 credit)

#### **SYLLABUS: THEORY**

	UNIT I : VERMICULTURE	15L
1 .	Introduction to vermiculture, definition, meaning, history, economic	
	important, their value in maintenance of soil structure.	
2	Role in bio transformation of the residues generated by human activity	
	and production of organic fertilizers.	
3	The matter and humus cycle (product, qualities). Ground population,	

		l noi!
	transformation process in organic matter.	A CSETS
4	Choosing the right worm. Useful species of earthworms. Local species	Chanc
	of earthworms. Exotic species of earthworms. Complementary	an.
	activities of auto evaluation.	
5	Biology of Eisenia fetida.	
	a) Taxonomy, Anatomy, Physiology and reproduction of	
	Lumbricidac.	
	b) Vital cycle of Eisenia fetida: alimentation, fecundity, annual	
	reproducer potential and limit factors (Gases, diet, humidity,	
	temperature, PH, light and climatic factors)	
6	Classification of earthworms and their types.	
	UNIT II : VERMICOMPOSTING	15L
7	Small scale earthworm farming for home gardens	
	- Earthworm compost for home gardens	
8	Conventional commercial composting	
	- Earthworm composting larger scale.	
9	Earthworm farming (vermiculture), extraction (harvest),	*
	vermicomposting harvest and processing	
10	Nutritional composition of Vermicompost for plants, comparison with	
	other fertilzers	
11	Vermiwash collection, composition & use	
12	Enemies of Earthworms, sickness and worm's enemies, Frequent	
	problems. How to prevent and fix them. Complementary activities of	
	auto evaluation	
13	a) The working group experience with E. fetida populations	
	comportment with farm industrial residues (frigorific, cow	
	places, feed-lot, aviaries exploitations, and solid urban residues)	
	b) Lineaments to vermicompsting collaboration projects.	

### **SYLLABUS: PRACTICAL - 15L**

1	Key to identify different types of earthworms.
2	Field trip – Collection of native earthworms & their identification
3	Study of systematic position, habits, habitat & external characters of Eisenia fetida
4	Study of Life stages & development of Eisenia fetida
5	Study of Life stages & development of Eudrilus eugeniae
6	Comparison of morphology & life stages of Eisenia fetida & Eudrilus eugeniae
7	Study of Vermiculture, Vermiwash & Vermicompost equipments, devices

8	Preparation vermibeds, maintenance of vermicompost & climatic conditions.						
9	Harvesting, packaging, transport and storage of Vermicompost.						
10	Study the effects of vermicompost & vermiwash on any two short duration crop						
	plants.						
11	Study the effects of sewage water on development of worms.						

#### **REFERENCES**

- 1) Chaudhuri P.S. (2005). Vermiculture and Vermicomposting as biotechnology for conversion of organic wastes into animal protein and organic fertilizer. Asian Jr. of Microbiol. Biotech. Env. Sc. 7(3):359-37A
- 2) Chaudhuri P.S. (2006). Kenchor Jeevan Baichitra: Kencho Projukti. Jyan Bichitra Prakashani, Tripura, ISBN: 81-8266-088-2, Pages-1 II Das. M.C. QAD)
- 3) Charles Darrvin's Plough. Tools for Vermitechnology. I K International Publishing House. ISBN: 978-93-81 141-27, 182 Pages.
- 4) Ismail, S.A. (1997). Vermicology The Biology of Earthworms. Orient Longman, 92 Pages.
- 5) V. Kak R.D. (1998) Earthworms: Cinderella of organic farming. Prism Books Pvt. Ltd. Bangalore.
- Dash M.C., B.K. Senapati, P.C. Mishra (1980) "Verms and Vermicomposting" proceedings of the National Seminar on Organic waste utilization and Vermicomposting Dec. 5-8, 1984. (Part B) School of Life Sciences, Sambalpur University, Jyoti Vihar, Orissa.
- 7) Rahudakar V.B. (2004). Gandul Khatashivay Naisargeek Paryay, Atul Book Agency, Pune.
- 8) Satehel J.E. (1983) "Earthworm Ecology" Chapman hall, London.
- 9) Wallwork J.A. (1983) "Earthworm Biology" Edward Amold (Publishers) Ltd. London.

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



# DEPARTMENT OF ZOOLOGY

### Time-Table for Certificate Course in

### **VERMICULTURE AND VERMICOMPOSTING -2022-23**

DAY	I	II	III	IV	V	VI	VII
	8-9	9-10	10.10-	11.10-	12.10 to 1.10	2-3	3-4
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Sri Jagadguru Murugharajendra College
of Arts, Science & Commerce
CHITRADURGA

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# S.J.M.COLLEGE OF ARTS, SCIENCE AND COMMERCE Chandravalli, Chitradurga.

## DEPARTMENT OF ZOOLOGY

Students List for Certificate Course: Vermiculture

Sl.No	Name of the Student
1	AMOGHA T R
2	ASHITHA R
3	MANOJ C
4	BIDUSHREE S
5	JAYASURA H
6	SHARATH KUMAR MY
7	ZEBA SHAHEEN
8	DHANUSH B
9	RAVIKIRAN M D
10	RUCHITHA T
11	TEJASWINI V
12	AKASH C R
13	KAHE KUSH ANJUM
14	RAKSHITHA T
15	SHALINI R
16	ADARSH C P
17	PRAMOD PATGEL B N
18	CHANDANA B S
19	KRUTHIK J N
20	MANJUNATHA P T
21	SARIYA TEHREEM H/E
22	DHANRAJ R S
23	THIPPESWAMY B
24	YOGESH M
25	ULFATH BANU C K
26	MEGHANA V
27	KAVYA S
28	PAVAN D T

# **ATTENDANCE**

**COURSE: VERMICULTURE & VERMICOMPOSTING** 

**Certificate Course: Vermiculture (Attendance)** 24/2 Name of the Student 02 22 12 3 14/2 SL No 201 Amoghako Amoghako Amoghaka Amoghako Amoghako Amoghako Amoghako Amoghako Amoghako Amoghako AMOGHA K R ASHITHA R Achet no. P. Ashitho, D. Agritha, P. dehitho, P. dehitho, P. Schitha, P. Schithas Herrithas 2 Ashatha .P dehitta. R **MANOIC** Manof monof a manara manara monof monof monof monof monof monof 3 BINDUSHREES Ta Horwy Toyasurya. H Tayasurya. H **IAYASURYA H** Shel. Shil Shy SW luf. SHARATH KUMAR MY Say. 6 7 **ZEBA SHAHEEN** Pranet D Humsh B dunus, B Dhomes 6.0 8 **DHANUSH B** phones 3 Thomash : 3 Phones B Thomash B Thank'n Manush a RAVIKIRAN M D Gaui 4-aui 1-jauri Lawi 4 Lacel y facili 1 Laur <ani 1 Cresi Reclitus Richitus Ruchi tuo RUCHITHAT Puchitha Ruchitha Ruchitha Ruchitha Ruchitha 10 Quen Ruchitha **TEIASWINI V** Yejo-V Teis V Teja .V Jens-V Jeio-V Tend -V Jela -V Jeja V Teis V 11 Tens. V Alkalner Skalner Skaln er Wkalner Akalner Akalh Akalney Akalnin 12 AKASH CR **KAHE KUSH ANJUM** 13 0 Zakelie Dakehr Dole Rikely Sakelin **RAKSHITHA T** Pakehre ankehre 14 Shalini.R Shalini R Shaliw. R Shalin R Shalini. R Shalin R Shalini. R Shalini. P Shalini-P Shalini. P SHALINI R 15 ADARSH C P Adansu Adarsy Adaran Adaran Adaysu 16 Adaysh Adarsh Adavsy Adarsy . Adarsh 17 PRAMOD PATEL B N Pramid Pramid Pramod Pramod Pramod Pramod Pramod Parmed Parmid Chandana 18 **CHANDANA B S** Cn Ka **KRUTHIKA I N** CA 19 mantered particult rangered particult particult particult particult particult particult particult particult 20 **MANJUNATHA P T SARIYA TEHREEM H/E** 21 Drawsair, S Drawsay 75 Drawsay 4,8 Drawsay 4,9 Drawsay 7,8 Drawsay 4,8 Drawsay 2,4 Drawsay 7,5 Drawsay **DHANRAIRS** 22 THIPPESWAMY B 23 Sumous exact The sures escapit of wood sagint of mouse sagint Sures sagint of was escapit woods after the sagint **YOGESH M** 24 Jogahill Yogahim Yogahim Yogahim Yogahim Yoguh.M Yoguh.M Yoguh M Yoguhim Yoguhim Welth Wath Walh Wath illath alleith allett Math Whath West **ULFATH BANU K** 25 Meghano, V Michaw, V Meglouge Heghoury V Hag bourd Meglaner Heghanav pedelour Meghaner Meghowy 26 **MEGHANA V KAVYAS** Larya & Haupe S Layer S 27 Faryor,S Laup, & Loup. S Laip. S Kanye, S Department Trygge Kaya, S 28 **PAVANA D T** anara panara Davana Vavana

Chandravalli, H.L.K.R. o I M College Chitra ( -- )

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SL No	Name of the Student	eyla	0/10	10/01	11/1	13/19	12/14	18/4	20/4	26/9	25/4	
1	AMOGHA KOR	Amogha. Ki	Annogha ko	Amogha &R	Awrogher	Amogh.kn	Awagh Ki	Awagh-kn	Amogh ke	Amogh len	Anegh. k	R
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# S.J.M. COLLEGE OF ARTS, SCIENCE & COMMERCE

Chandravalli, Chitradurga - 577501

Affiliated to Davangere University, Davangere
Accredited with 'A' Grade Third Cycle (CGPA-3.05)



### **DEPARTMENT OF ZOOLOGY**

**SUBJECT: VERMICULTURE & VERMICOMPOSTING** 

### Multiple choice question

25 Marks

- 1. What of the following is a mixture of ingredients used to fertilize and improve the soil?
  - a) Phosphatic fertilizers
  - b) Mycelium
  - c) Compost
  - d) Alfa-alfa
- 2. Which of the following methods uses earthworms during composting?
  - a) Vermicomposting
  - b) Vertical composting
  - c) Window Composting
  - d) Burning
- 3. Which of the following is not a major objective of Vermicomposting?
  - a) To elevate the value of original material
  - b) To accelerate the rate of degradation
  - c) To obtain toxic products
  - d) To obtain products free of any pollutants
- 4. Which among the following is not a major reason for choosing earthworms for Vermicomposting?
  - a) Low incubation time
  - b) Digestion rate
  - c) Adaptability
  - d) Low growth rate

# 5. Which of the following species of earthworms is not suitable for Vermicomposting?

- a) Epifilis
- b) Endogens
- c) Aneciques
- d) Plasmodium

### 6. Which of the following species has a shorter body size?

- a) Epifilis
- b) Endogens
- c) Aneciques
- d) Endrilus

### 7. Which of the following species is most stable in Indian conditions?

- a) Perionyx
- b) Epifilis
- c) Endogens
- d) Eneciques

### 8. Which of the following cannot be established property in the field?

- a) Eisenia foetida
- b) Perionyx
- c) Epifilis
- d) Aneciques

### 9. Earthworms subsidize to the burial of wastes?

- a) True
- b) False

### 10. What is the major advantage of three-tire Vermiculture Technoogy?

- a) It can be applied to both solid and liquid wastes
- b) It cannot be applied to both solid and liquid wastes
- c) It involves chemical treatment
- d) It can degrade organic wastes

# 11. What of the following is not a method of worm cast harvesting or manufacturing?

- a) Homogenization
- b) Active feeding
- c) Drying under adequate light
- d) Separation of cocoons

### 12. Which of the following earthworm specie is not recommended for Vemicomposting?

- a) Endrilux engeniae
- b) Eisenia felida
- c) Perioayx excavates
- d) Pheretima Posthuma

### 13. Which of the following worms are used for Vermicomposting?

- a) Flatworm
- b) Roundworm
- c) Redworm
- d) Painworm

### 14. The use of earthworms to convert organic waste into fertilizer known as:

- a) Vermiculture
- b) Composting
- c) Vermicomposting
- d) None of these

### 15. Compost manure is formed from:

- a) Rotted vegetable and animal refuse
- b) Farmyard manure and green manure
- c) Farm refuse ad household refuse
- d) Organic wastes from which biogas has been exreacted

### 16. Choose the correct statement regarding compost:

- a) Decomposed remnants of organic material
- b) Decomposed remnants of inorganic material
- c) Fresh remnants of organic material

### d) Fresh remnants of inorganic material

### 17. Which of the following form the first layer of compost?

- a) Branches and twigs
- b) Leaves
- c) Grass clipping
- d) Kitchen scraps

### 18. What was the width of the second layer of compost?

- a) 4-6 inches
- b) 4-10 inches
- c) 6-10 inches
- d) 3-15 inches

### 19. Which of the following form the second layer of compost?

- a) Branches and twigs
- b) Twigs
- c) Water
- d) Leaves grass and kitchen scraps

### 20. What is the most widely used earthworm species for Vermicomposting?

- a) Lumbricus terrestris
- b) Eisenia andrel and Eisenia fetida
- c) Aporrectodea Limicola
- d) Aretiostrotus vancourerensis

### 21 Which of the following methods uses earthworms during composting?

- a) Vermicomposting
- b) Vertical composting
- c) Windrow composting
- d Burning

### 22 Which of the following is not a major objective of Vermicomposting?

- a) To elevate the value of original material
- b) To accelerate the rate of degradation
- c) To obtain toxic products
  - d) To obtain products free of any pollutants



- Which among the following is not a major reason for choosing earthworms for Vermicomposting?
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  - a) Epifilis
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  - c) Aneciques
  - d) Plasmodium
- Which of the following species has a shorter body size?
  - a) Epifilis
  - b) Endogens
  - c) Aneciques
  - d) Eudrilus

# S.J.M. COLLEGE OF ARTS, SCIENCE AND COMMERCE

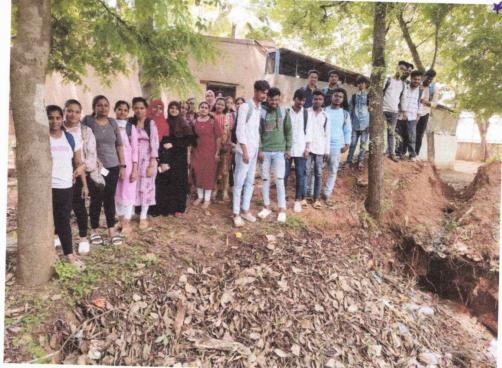
# Chandravalli, Chitradurga DEPARTMENT OF ZOOLOGY

Marks List for Certificate Course: Vermiculture

SL No	Name of the Student	Theory	Practical
1	AMOGHA K R	18	14
2	ASHITHA R	20	21
3	MANOJ C	19	20
4	BINDUSHREE S	22	22
5	JAYASURYA H	21	23
6	SHARATH KUMAR M Y	&ro	21
7	ZEBA SHAHEEN	A1	20
8	DHANUSH B	18	49
9	RAVIKIRAN M D	19	20
10	RUCHITHAT	19	21
11	TEJASWINI V	23	22
12	AKASH C R	20	21
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16	ADARSH C P	23	21
17	PRAMOD PATEL B N	20	20
18	CHANDANA B S	22	21
19	KRUTHIKA J N	22	21
20	MANJUNATHA P T	20	22
21	SARIYA TEHREEM H/E	21	21
22	DHANRAJ R S	23	21
23	THIPPESWAMY B	22	21
24	YOGESH M	21	20
25	ULFATH BANU K	20	21
26	MEGHANA V	23	22
27	KAVYA S	22	21
28	PAVANA D T	Q3	20
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Head of the Department







### **REPORT**

The main objective of the courses is to explore the possibilities with sustainable agriculture practices and various concepts from how to turn all kinds of waste garbage to valuable compost to impart the knowledge of converting the weeds into food of earthworms and preparing vermicompost and more



# 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 TEJASVINI

B.Sc. has successfully completed Certificate Course in "VERMICULTURE & VERMICOMPOSTING" during the Academic Year 2022-23 in the Grade .......

He/She completed 30 Course hours (2 Credits).

Coordinator

Need of the Department

Principal