## S.I.C.E.S. DEGREE COLLEGE OF ARTS, SCIENCE AND COMMERCE, AMBERNATH (W)

**ENROLL** 

and be the

Certificate course on "Vermicomposting" (For UG students of all streams of SICES Degree college)

Offered by

## DEPARTMENT OF ZOOLOGY

Fees :Rs.300/-. Number of intake : 20students



For details Contact



9892389320

Join the Skill enhancement course

Understand the concept of vermicomposting,

Earn hands-on experience managing household waste

while learning and to become a self entrepreneur

COURSE CO-ORDINATOR

Dr. Jyothi V.Mallia

## S.I.C.E SOCIETY'S SICES DEGREE COLLEGE, AMBERNATH (W) Academic Calendar 2023-2024

## **Department of Zoology**

## Certificate course in "Hands on Training in Vermiculture

- Skill based course to understand the concept of vermin composting,
- Hands-on experience while learning
- Students can construct their own compost farm and can earn as 1 kg of vermin compost is about Rs.120/-
- Also can generate income by supplying vermiwash, live worms
- Students in flats can generate compost for house hold/Socoety's plants

Reducing Garbage is utmost necessary in today's world. So to sustain health and environment, join for recycling waste materials...

Learn the technique in our certificate course "Hands on Training in Vermiculture"



## South Indian Children's Education Society's Degree College of Arts, Science and Commerce

Jambhul Phata, Ambarnath - Badlapur Road, Ambarnath (west), 421505 Accredited by NAAC with B+ Grade

Permanently Affiliated to University of Mumbai

## Academic Year 2023-24

## CERTIFICATE COURSE APPLICATION FORM

	1. Full Name VIVEK DURGAPRASAD DOVA (In capital) (First Name) (Middle Name) (Sumarra)	(3)
	2. Department ST BCA	
	3. Roll numberDate of Birth 2 \( -\end{array} \) -2 \( \text{TV} \) \( \text{Age} \) \( \text{R} \)	ما وا
	4. Gender Mate.	
	5. Religion HPNDU Category Se.	
	6. Permanent Address Room No' 1617 14 2ndira Colony	
	The parvail a (amply Hmbranath (vorse))	
	7. WhatsApp/Contact No: 9096136607. E-mail Id dovovive @ 9moul Co	m.
	8. Name of the Certificate Course_\VERMICOMPOST8NG	
	I hereby certify that, the information given in this application is complete and correct.	Loomoo
	comply with the rules and regulations of the SICES Degree College.	agree to
	Place: Amburath Date: 23/8/23  Signature of the Applicant	<del>آخ</del> آ
20000	For Office Use only	
	Application No. 10. Date Received 23/8/20.2	3
	Total Course Fee: 30D/- Fee paid receipt no. 710	1
	Verification (Clerk)	
		BELOADER OF CHIEF
	ST S	
	Course Co-Ordinator Head of the Department Principal	



## Degree College of Arts, Science South Indian Children's Education Society's

1
Verification (Clerk)
Application No. O. Fee paid receipt no. 109
For Office Use only
Place: Date: 22/08 / 2023 Amberralk Signature of the Applicant
I hereby certify that, the information given in this application is complete and correct. I agree to comply with the rules and regulations of the SICES Degree College.
8. Name of the Certificate Course Vermicoposting
5. Religion Hindu Category Mahadev Koli 6. Permanent Address Near Meni Company, Khamkazuadi Ambernath (w) 7. WhatsApp/Contact No: 8 446012032.B-mail Id. Yachika Joshi @ Invail Com
8. Roll number <u>FM123005</u> Date of Birth 9.1.2005 Age 18
Full Name YADALIKA SAKHARAM JOSHI (In capital) (First Name) (Middle Name) (Surname)  Department Microbiology Class Fy85C
CERTIFICATE COURSE APPLICATION FORM
Academic Year 2023-24
Accredited by NAAC with B+ Grade  Permanently Affiliated to Thomas House, 10 Thomas Name of the Permanently Affiliated to Thomas Name of the Permanently Affiliated to Thomas Name of the

Course Co-Ordinator

Head of the Department

Principal



Jambhul Phata, Ambarnath - Badlapur Road, Ambarnath (west), 421505 Degree College of Arts, Science and Commerce South Indian Children's Education Society's Accredited by NAAC with B+ Grade Permanently Affiliated to University of Mumbai

LITICATE COLIRGE ADDITION FORM	
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8. Name of the Certificate Course Vermicom position is complete and correct. I agree to	opp to Sarvadaya gate, Am beynath (w), 421505 whatsApp/Contact No: 9521264715E-mail Id. Shreyakumari@rajbhar@gmail.kg	5. Religion Hindu Category Student	2. Department Collins College 18	1. Full Name SHRISTI RAJKAMAL RAJBHAR (In capital) (First Name) (Middle Name) (Sumame)  (Sumame) (Sumame)	CERTIFICATE COURSE APPLICATION FORM
rect. I agree to	1505 har@gmail.c			(do	

Place: Date: 21/10/23 comply with the rules and regulations of the SICES Degree College I hereby certify t Signature of the Applicant ( Showeti

Total Course Fee: 300/.	Application No. 66.		
Fee paid receipt no. 70 6	Date Received 2, /of/2.023	For Office Use only	

Course Co-Ordinator

Verification (Clerk)

Head

of the Department

Principal



South Indian Children's Education Society's

Jambhul Phata, Ambarnath - Badlapur Road, Ambarnath (west), 421505 Degree College of Arts, Science and Commerce Accredited by NAAC with B+ Grade

Permanently Affiliated to University of Mumbai

Academic Year 2023-24

Course Co-Ordinator

Head of the Department

Principal

Verification (Clerk)  Course Co-Ordinator	Application No. (23.	4. Gender Male  5. Religion Hindu -Acqri Category OBC  6. Permanent Address House No: 28 kodrap Goon 1  7. WhatsApp/Contact No: 45 45030445 E-mail Idwardigakar  8. Name of the Certificate Course Normiculture  8. Name of the rules and regulations of the SICES Degree College comply with the rules and regulations of the SICES Degree College.  Place: 16. Aug. 2023  Signature	Degree Colleg  Jambhul Phata, Ambar Accred  Parma  Parma  Parma  CERTIFICATE COURS  (Eirst Name)  (In capital)  Department & Zoology  Department & Zoology  Da  Roll number FM123010 Da
Principal Head of the Department	For Office Use only  Date Received 19/08/23  Fee paid receipt no. 963.	4. Gender Male  5. Religion Hindu -Acqri Category OBC  6. Permanent Address House No: 28 kohrap Googn   Near Near  7. WhatsApp/Contact No: 45 A3040475 E-mail Idwardi gaikar 21K @gmal.com  8. Name of the Certificate Course Normi culture  8. Name of the rules and regulations of the SICES Degree College.  comply with the rules and regulations of the SICES Degree College.  Place:  Date: 16 Aug. 2023  Signature of the Applicant	Degree College of Arts, Science and Commetce Accredited by NAAC with B+ Grade  Accredited by NAAC with B+ Grade  Academic Year 2023-24  Academic Year 2023-24  Full Name (First Name) (Middle Name)  Department & Zoology Class B. Sc (Fy)  Roll number FM123010 Date of Birth 03 [1012005 Age 17]

## SICES DEGREE COLLEGE, AMBERNATH (W) Academic Calendar 2023-2024

## Department of Zoology

## Certificate course in "Vermicomposting"

## Syllabus

## Unit 1 Vermiculture:

5L

Definition, Scope and importance, common species for culture, - breeding technique indoor and outdoor culture. Diffence between compost and Vermicompost

Monoculture & polyculture Merit &demerit

## Unit 2: Application

6 L

Vermicomposting of wastes in fieldpits, ground heaps, tank method, wedges & bin method, Application of Vermiculture

## Unit 3: Product

51.

Potential and constraints for vermiculture in India, vermiculture-quality control, , Funding facilities

Practical:

6L

1. Waste material classification and disposal & Quality checking

## 2. Field study

8L

- a) Introduction to different species of Earth worms
- b) Earth worm bed preparation
- c) Vermicompost/Compost preparation

Fees structure: Rs.300/-. Number of intake

20students

## Outcome

The course will make the students self sufficient with professional skills to change the organic wastes into valuable compost also impart knowledge of conserving soil by changing waste disposal habits. Also will develop technical skills on harvesting and management of vermicompost

Co-ordinator

## SICES DEGREE COLLEGE, AMBERNATH (W) Academic Calendar 2023-2024

## **Department of Zoology**

## Certificate course in "Vermicomposting"

## Report

course certificate Department of Zoology organized a Vermicomposting to empower students to the skills of changing organic waste into Compost/ Organic waste. Of the 16 students collected forms 10 students enrolled for the course of which 6 students successfully completed the course. The candidates were of FYBSc and SYBCA and the classes were begin from August 26,2024. A Field trip was organized at NISARGYAN- A bioresource Centre, Manmoli Gaon to get a practical skill and hands on experience to the candidates on 1st October 2024 and students learned the skill of Vermiculture of the Eisenia foetida

### Out come

- 1. Students realized the importance of sustainable waste management technique
- 2. Students understood different types of waste and importance of segregating them
- 3. Students got hands on experience for making compost/Vermicompost
- 4. Students imparted the knowledge of maintaining soil fertility
- 5. One student started a farm and successfully produced compost after 2 months and started venture as a entrepeneur
- 6. Oral presentation was made at International conference on topic management entitled Vermicomposting – sustainable solid waste technique

SICES DEGREE COLLEGE, AMBERNATH (W) Academic Year 2023-2024

## Department of Zoology

## Certificate course in "Vermicomposting

## Attendance of Students

Sr. Name no.  1 Adwait  2 Darshau 3 Satvend	Name of Students  Adwait M Gaikar  Darshan R.Uadhyay  Satyendra K. Dubey	Class FYBSc FYBSc FYBSc	26/08 12.30- 2.00pm P P	02/09 12.30- 2.00pm	60/60	30/08	01/10	01//10	14/10	74/01	10/67	10117
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,	M Gaikar In R.Uadhyay dra K. Dubey	FYBSc FYBSc FYBSc	4	Z.vopin	12.30-	12.30- 2.00nm	8.00am - 4pm	12.30 2.00pm	12.30 1.30pm	1.30 3.00pm	1.30- 4.00pm	3.30pm
	n R.Uadhyay dra K. Dubey	FYBSc	- a	2	D 0	D		A	4	A	4	4
	dra K. Dubey	FYBSc	a	P	ۻ	- a	3	2	2	Р	P	d
	in Deither			d	2	P	d	d	P	þ	d	, Q
4 Shristi	II K.Kalbilar	FYBCom	D	D	S S	12 N J						
5 Jul	Juli S.Tupe	FYBSc	b	d	Р	Р	P	4				4
6 Yadni	Yadnika S.Joshi	FYBSc	d	Ь	Þ	J	Ь	P		Q	0	d
7 Bhumika	Bhumika R.Meshram	FYBSc	A	Abs	Tw.	60	4/1	( b)	Ses			
8 Vive	Vivek D.Dova	SYBCA	P	2	d	P	4	d		2		4
9 Sanik	Sanika C.Todge	FYBSc	Я	,	NOF	poin	Jec p	· and	alzera	1 Ja A	1 class	
10 R	Ritu JG	FYBSc	В			A G	font.			>		

Dr. Jyothi V.Mallia

Co-ordinator



## DEPARTMENT OF ZOOLOGY

# EVALUATION OF CERTIFICATE COURSE IN VERMICOMPOSTING

DATE 01/02/2024.

Sr.No.	Name	Project report 10	Presentation 10	Test 15	Attendance 5	Total 40	5
<b>-</b>	Darslan Upadhyay	<u></u>	7	13	ps.	6.S	t d
×	Mawait Gaikas	1	B	<u>_</u>	est.	<u>~</u>	$\mathcal{C}$
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*	Yadnika Sakkwawa Joski	8	go	7	5	65 62	0
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9	VIVek . D. Dever	ĭ	8	11	4	24	A





## Accredited by NAAC with B+ Grade (CGPA-2.62) (Affiliated to University Of Mumbai)

## DEPARTMENT OF ZOOLOGY <u>CERTIFICATE COURSE IN VERMICOMPOSTING</u>

## All the questions are Compulsory

Each question carries equal marks (1M)

**Total 15 Marks** 

(d) All of the above

Time 30 minutes

	1 ime 30 mil
Tick	the Correct answer
1.	Which of the following is a commonly used earthworm species for the vermicomposting process?
	(a) Eisenia fetida
~	(b) Perionix fetida
	(c) Both (a) and (b)
	(d) None of the above
2.	The highly decomposed organic matter rich in minerals like nitrogen,
	phosphorus, and potassium, in particular, produced from the activity of
	car thworms is caned
	(a) Humus
	(b) Vermicompost
	(c) Worm casting
	(d) Compost bedding
3.	Vermicompost is used as a biofertilizer because it is rich in
	(a) Calcium
. (	(h) Nitrogen
+	(c) Phosphorus
	(d) All of the above
4.	Which of the following is false about vermicomposting?
	(a) Worms population doubles in 90 days
	(b) Worms eat double their body weight
	(e) The wooden bin is best for vermicomposting
	(d) Red worms are the best for vermicomposting
5.	Which of the following is true about vermicomposting?
	(a) Composting using rats
	(b) Composting using birds
	(c) Composting using worms
	(d) All of the above
6.	Which of the following is true about vermicompost?
	(a) Vermicompost is red in colour
\	(b) Vermicompost is black in colour
	(c) Vermicompost is white in colour
	(d) Vermicompost is brown in colour
7.	Which of the following are the best worms used for composting?
	(a) Maggots
	(b) Pink worms
	(e) Red wigglers

for vermicomposting should be between
8. The moisture level required for vermicomposting should be between
(a) Delow 30 per cerr
(a) Below 50 per cent (b) 40 and 50 per cent
(c) 70 and 80 per cent
(d) Above 90 per cent
(d) Above 90 per cent  9. The maximum temperature required for vermicomposting is
(a) 20C to 25C
(a) 20C to 25C (b) 25C to 30C
(c) 30C to 35C
(4) 25C to 40C
10. Which of the following is not raw material required for preparing composts:
(a) Cow dung
(a) Cow dung  (b) Weed biomass
(c) Dry straw and leaves
(d) All of the above
11. Which of the following procedures are used by the farmers to multiply the
earthworms?
(a) By adding cow dung
(b) By adding plant materials
(c) By mixing more amount of biodegradable wastes
All of the above
12. A liquid that is collected after the passage of water through a column of worm
action and is very useful as a foliar spray.  Vermiwash
b) Vermisol
c) Vermilin
d) Vermitol
13. The ideal carbon-to-nitrogen ratio for composting is
d) 40 to 45 parts early for every one part nitrogen
14. Which of the following worms are used for vermicomposting?
a. Flatworm
b. Roundworm  • Redworm
d. Pinworm
15 Character
15. Choose the correct statement regarding compost:
b. Decomposed remnant material
c. Fresh remnants of and inorganic material
d. Fresh remnants of inorganic material

Name of Candidate: Adward Gaikar
Signature with date 27/1124





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## DEPARTMENT OF ZOOLOGY

## CERTIFICATE COURSE IN VERMICOMPOSTING

## All the questions are Compulsory

Each question carries equal marks (1M)

**Total 15 Marks** 

Time 30 minutes

### Tick the Correct answer

1. Which of the following is vermicomposting process	s a commonly used earthworm species for the ss?
(1) Eisenia fetida	
(b) Perionix fetida	
(c) Both (a) and (b)	
(d) None of the above	:
2. The highly decomposed	organic matter rich in minerals like nitrogen,
phosphorus, and potass	ium, in particular, produced from the activity of
earthworms is called	•
(a) Humus	
(b) Vermicompost	
(c) Worm casting	
(d) Compost bedding	
	s a biofertilizer because it is rich in
(a) Calcium	
(b) Nitrogen	
(c) Phosphorus	
(d) All of the above	
4. Which of the following	is false about vermicomposting?
(a) Worms population	
(b) Worms eat doubl	is best for vermicomposting
	ne best for vermicomposting
	is true about vermicomposting?
(a) Composting usin	g rate
(b) Composting usin	
(e) Composting usin	
(d) All of the above	B
	is true about vermicompost?
(a) Vermicompost is	red in colour
(b) Vermicompost is	black in colour

(c) Vermicompost is white in colour (d) Vermicompost is brown in colour

(a) Maggots
(b) Pink worms
(c) Red wigglers
(d) All of the above

7. Which of the following are the best worms used for composting?



## DEPARTMENT OF ZOOLOGY

## ATTENDANCE OF CERTIFICATE COURSE IN VERMICOMPOSTING DATE 26/08/2023

Sr. no	. Name of Students	Class	Roll no.	Signature
	Darshan Opadhyay	fyrsc	fs23006	<u> </u>
1.	Yadnika Joshi	fyBsc	fMI23005	Pask
2.	Satyendra Dubey	FYBSC	FS-23027	
4.	Adwait Gaikar		FMI23010	30. 5
5.	Juili Tupe		EMI2001	3s typ=
6.	2/11/2		FB-Com42	NAVIT.
7.	Morel. D. Dova.	ST. BCA		4117
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				W/ -

Co-ordinator Dr. Jyothi V.Mallia



## **DEPARTMENT OF ZOOLOGY**

## ATTENDANCE OF CERTIFICATE COURSE IN VERMICOMPOSTING

DATE 02/09/2023 \$ 09/09/23

Name of Students	Class	Roll no.	Signature
Advait mailtan	fy Rsc	FMT 23010	J. Charles
Darshan Upadhyai	AYBSC	1928006	8
Saty endra duben	fyBSC	fs23027	3
Yadnika Tosh?	fyBsc	FMI23005	Joph
July Tupe	cy Bsc	FM123001	Is upo
Vivek. D. Daya	SI BCA		1
	Adwait Gailton Darshan Upadhyan Saty endra dubey	Adwait Gailton fy BSC Darshan Upadhyay fy BSC Saty endra dubey fy BSC	Adwait Gailton fy BSC FM723010  Dorshan Upadhyan fy BSC for 23027  Yadnika Tosh: Fy BSC FM23025  Toll: Tupe (y BSC FM123001)  Virek. D. Oara GIBCA

Coordinator



Date: 26.09.2023

## **NOTICE**

All the students of Certificate course in "Vermicomposting" and S.Y.B.Sc Zoology are hereby informed that the Department of Zoology has organized a "FIELD TRIP TO Nisargyan – A BioResource centre, Badlapur East on 1st October 2023, Sunday from 08:00 am to 5:00 pm. All the students should carry writing materials and dress properly with shoes for the field trip. Also submit the undertaking forms by 30.09.2023 (Saturday)

Dr. Jyothi V.Mallia

(IOD, Department of Zoology)

Dr. Swapna Samel Principal





## STO I S Degree College of Arts So to. & Commerce

1 of hot Phate Children Andrew Phate 121505

## UNDERTAKING FOR STUDY TRIP

SHANKAR TUPE

(Name of Parent) - end my son/daughter

Juili. S. Tupe

Roll No

FMI23001

for one day field topoto. Vermiculture farm

Nisargyan Bio Resc. - Centier Manmoli Gaon - egil 10 2023 (Sunday, Sinday)

7558624568

Mobile number of Studi int

7620710572 /9969033368
Mobile number of parent

Substance of parent



## UNDERTAKING FOR STUDY TRIP

Jyoti Sakharam Joshi	***************************************
(Name of Parent) agree to send my serv	Roll No
de de la constante de la const	hald trip to Vermiculture
FM T23005 for one day  Nisargyan- Bio Resource Centre, Manmoli Gao	on on 01.10.2023 (30007)
- 5.00 pm)	

Mobile number of Student: 9 2 84223664

Mobile number of parent 8446012032

Signature of parent



## Attendance of Study tour to Nisargyan- BioResource Research Center

Date: 01/09/2023

	Sr.no.	Name of Students	Class	Roll no.	Signature Morning	Signature Evening
			FUBSO	FMI2309	1 .	Joshi .
D		Yadnika Joshi		FM7-2301	1-	To the
1000	2.	Juili Tupe		5523030		Ly Web
100	3	Saloina Sayyed	541366	\$5 23025	fort	
-	· U.	Sara Solkar Jacoh Patil	SyBic	GS23002	day	Jan
-	5.	Jyon wit	5400	SC 23012	8	
0	6.	Satyendia Duber	SYBS	SM123010	Roster	- Shen
	.7	Roshani Yudan	LURG	£\$23006	Do	Rest.
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/	.9.	Jainab . S. Mark	5102	F C73/121	Ori kwac	Sparkunge
	10.	Jainal . N. Gaikwad	3.9.61			Rathod
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Field trip To NIsargyan – A vermicomposting Unit





Bed method of Cutlure



### <u>Details of Vermicompost farm Started by Student Name Mr. Vivek Durga Prasad Dova</u>

