

 <p>SHIVAJI UNIVERSITY, KOLHAPUR - 416004, MAHARASHTRA PHONE : EPABX – 2609000, www.unishivaji.ac.in, bos@unishivaji.ac.in शिवजी विद्यापीठ, कोल्हापूर - ४१६००४, महाराष्ट्र दूरध्वनी - ईपीएबीएक्स - २६०९०००, अभ्यासमंडळे विभाग दूरध्वनी विभाग २३१-२६०९०९३/९४</p>	<p>SHIVAJI UNIVERSITY, KOLHAPUR - 416004, MAHARASHTRA PHONE : EPABX – 2609000, www.unishivaji.ac.in, bos@unishivaji.ac.in शिवजी विद्यापीठ, कोल्हापूर - ४१६००४, महाराष्ट्र दूरध्वनी - ईपीएबीएक्स - २६०९०००, अभ्यासमंडळे विभाग दूरध्वनी विभाग २३१-२६०९०९३/९४</p>	
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SU/BOS/Science/ 44

Date: 18/ 10/ 2022

To,  
The Principal,  
All Affiliated Concerned Science Colleges/Institutions  
Shivaji University, Kolhapur.

**Subject :- Regarding syllabi of B. Sc. Part- I (NEP-2020) degree programme under the Faculty of Science and Technology as per National Education Policy 2020.**

Sir/Madam,

With reference to the subject mentioned above, I am directed to inform you that the university authorities have accepted and granted approval to the syllabi and Nature of question paper of **B. Sc. Part- I Information Technology** under the Faculty of Science and Technology as per National Education Policy 2020 .

Sr. No.	Faculty of Science and Technology	Programme/ Course B. Sc. Part- I
1	Zoology	Skill Based Course in Sericulture (Skill Enhancement Courses ) Skill Based Course in "Vermicompost" (Skill Enhancement Courses ) Skill Based Course in Apiculture(Skill Enhancement Courses )

This syllabi and nature of question paper shall be implemented from the Academic Year 2022-2023 onwards. A soft copy containing the syllabus is attached herewith and it is also available on university website [www.unishivaji.ac.in](http://www.unishivaji.ac.in) (students Online Syllabus)

You are, therefore, requested to bring this to the notice of all students and teachers concerned.

Thanking you,

Yours faithfully,

Dy Registrar

Copy to:

1	The Dean, Faculty of Science & Technology	7	Appointment Section
2	Director, Board of Examinations and Evaluation	8	P.G.Seminar Section
3	The Chairman, Respective Board of Studies	9	Computer Centre (I.T.)
4	B.Sc. Exam	10	Affiliation Section (U.G.)
5	Eligibility Section	11	Affiliation Section (P.G.)
6	O.E. I Section	12	P.G.Admission Section

# Proposed Syllabus

## Skill Based Course in “Vermicompost”

### Unit-I

15 hrs

1) **General Vermiculture / Vermicompost-** Introduction to Vermiculture, Definition, History, Habitat diversity, Ecology, Various species of Earthworms (Endemic and Exotic ) suitable for vermicomposting , Economic importance of earthworms , Key to identify Species of Earthworms .

#### Practical-

i) **Field trip for collection of endemic species of earthworms.**

ii) **Scientific classification of Earthworms**

ii) **Different types of earthworms species- Demonstration with the help of key.**

2) **Earthworm biology** - Biology of *Pheritima posthuma* (Indigenous or Indian earthworm), Systematic position, Habit and habitat, External features, Locomotion, Digestive system and Physiology of digestion, Reproductive system- Male and Female reproductive system, Copulation, Fertilization and Cocoon formation.

#### Practical- Demonstration of-

i) **External morphology of earthworm *Pheritima posthuma*.**

ii) **Digestive system.**

iii) **Male Reproductive system.**

iv) **Female Reproductive system.**

**v) Demonstration of life cycle and development.**

**Unit-II**

**15 hrs**

**3) Vermicompost technology (Methods and Products)-**

Small scale vermicompost unit, Vermicompost from kitchen waste, Large scale commercial vermicompost farming, Preparation of vermiculture bed, Basic requirements for preparation of vermicompost and vermiwash, , Chemical composition of vormicompost and vermiwash.

**Practical-**

**-Study of small scale vermicompost and vermiwash equipments - Pot, Wooden box, Crate etc.**

**4) Applied Vermiculture-** Effect of vermiwash on crop yield and quality of crops, Enemies of Earthworms, Economic Importance of vermicompost and vermiwash.

**Practical-**

**i) Study of effect of Vermicompost and vermiwash on any two short duration crops**

**ii) Study of Enemies of Earthworms- Red ants, Carnivorous birds,**

**iii) Demonstration of vermicompost and vermiwash**