

SCHEME AND SYLLABUS OF CERTIFICATE COURSE

IN

BIOCOMPOSTING

(w.e.f academic session 2022-2023)

Department of Microbiology and Bioinformatics

Atal Bihari Vajpayee Vishwavidyalaya

Bilaspur (C.G.)

**(A State University, Established by the Government of
Chhattisgarh)**

1. About the University

Atal Bihari Vajpayee Vishwavidyalaya (ABVV), a State University, established under the Chhattisgarh Act No. 7, 2012, is in existence since June, 2012. The University has affiliation of around 180 government and private colleges covering 5 major districts of the state. The University is catering the education needs of both graduation and post graduation courses of the various streams mainly covering Science, Commerce, Law, Education, and Research Centers.

2. About the Course

The certificate course provides job-oriented knowledge and applications in scientific methods which caters the need of society. The certificate program in Bio composting provides better understanding on biological concept of making Brown gold out of organic wastes and Acquire skills for entrepreneurship. Composting is the process of giving life back to your soil using organic materials. This technology is the only way for organic waste management that that great scope and application. Bio-compost is a natural fertilizer, it is a final product of composting processes, it is produced by transformation or bioconversion of organic material (plant and animal matter) through biological decomposition and stabilization into a soil-like material, which is stable and free of pathogens and can be beneficially applied to land. Certificate course would also help develop the skills and experiences necessary for entrepreneurship and for people who are looking for a mid- life career change. Those completing the course are awarded a CERTIFICATE and will be able to apply this knowledge for managing waste both at household and large scale and produce good quality of Organic compost and Vermicompost.

3. Outcome of the Course:

- Completing this certificate program will boost skills & abilities of learner for waste management.
- Students learn about why composting is so important and how easy it is to make compost entirely from organic matter.
- This course OFFERS practical knowledge about making compost at home with kitchen waste.
- By doing this course, students learn how to use organic waste to grown plants without chemical fertilizers.
- In addition students can save money not only for household gardens, but it can also help to balance city's budget.
- Students can generate income by making their own compost & selling it to farmers or organically growing fruits are high in demand.
- Students get knowledge about different types of compost preparation to save soil, they can become entrepreneur by setting up composting business and can literally “make out of trash”.

4. Eligibility Criteria

All those who have completed their Senior School Certificate Examination (Class XII) in any subject.

5. Fees Structure

One time registration/tuition fees of Rs. 5000/-

6. Intake Capacity – 15 seats

7. Course Duration – 6 months/ 24 weeks.

8. Attendance Minimum attendance of 75 % is required in the classes for appearing in the examination.

9. Examination Scheme

| S. No. | Papers | Maximum Marks | Minimum Marks | Credits |
|-------------|---------------------|---------------|---------------|---------|
| 1. | Paper I- Theory | 100 | 40 | 4 |
| 2. | Paper II- Practical | 100 | 40 | 2 |
| Total marks | | 200 | 80 | 6 |

All the theory and Practical examinations are of 3 hours duration. Internal Assessment would include field work and poster presentation. Certificate will be issued to the candidates after successful completion of the course

10. Syllabus

Theory

Title: Biocomposting

Module 1: Introduction to composting -an Eco-Friendly Approach. Waste materials: Classification their impact on environment. Composting at home.

Module 2: Composting Biota and their importance in composting process.

Module 3: Biodegradation mechanism in composting process.

Module 4:Types of composting: Phases and methods and Techniques of Composting

Module 5: Vermi-composting: Techniques and importance

Practicals

Title: Biocomposting Lab

Field visit with demonstrations and Lab visits

BUDGET PLAN FOR THE CERTIFICATE COURSE

| S.No. | Income /course | Amount (in Rupees) |
|-------|---|--------------------|
| a) | Intake- 15 candidates with course fee 5000 rupees | 75,000/- |
| S.No. | Expenditure Detail | Amount (in Rupees) |
| 1. | Instruments and tools (one time) | 20,000 |
| 2. | Contingencies | 5,000 |
| 3. | Stationary and printing | 5,000 |
| 4. | Travelling | 10,000 |
| 5. | Total | 50,000 |

Year wise plan

| S.No. | Expenditure Detail | Amount (in Rupees) |
|-------|--------------------|--------------------|
| 1. | For first year | 50,000/- |
| 2. | From second year | 20,000/- |