

SCHEME AND SYLLABUS OF CERTIFICATE COURSE

IN

BIOFERTILIZER

(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

This Certificate course gives a broad outline on biofertilizers screening, isolation, scaling up and their application.. Learners will be trained for the low cost media preparation and impart training of ecofriendly agricultural inputs in biofertilizer production. This would also help develop the skills and experiences necessary for entrepreneurship in biofertilizer industry.

3. Outcome of the Course:

- Ability to distinguish the types of biofertilizers and methods of application in agricultural field.
- Development of integrated management for best results using nitrogenous and phosphate potash biofertilizers.

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. 10,000/-

6. **Intake** – 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: Biofertilizer

Module 1: Introduction to biofertilizer, importance and Classification of Biofertilizers Nitrogen, Phosphorous and Potassium.

Module 2: Mechanism of biofertilization (Nitrogen fixation, Phosphate and Potassium solubilization)

Module 3: Bacterial Biofertilizer and production Technology

Module 4: Algal biofertilizer and production Technology

Module 5: Fungal Biofertilizer and production Technology.

Field visit with demonstrations

Practicals

Title: Biofertilizer Lab

(The practicals will be based on the theory topics provided as above)

BUDGET PLAN FOR THE CERTIFICATE COURSE

S.No.	Income /course	Amount (in Rupees)
a)	Intake- 30 candidates with course fee 8,000 rupees	1,20,000/-
S.No.	Expenditure Detail	Amount (in Rupees)
1.	Instruments and tools (one time)	75,000
2.	Contingencies	5,000
3.	Stationary and printing	5,000
4.	Travelling	5,000
5.	TA and conveyance	10,000
6.	Total	1,00,000

Year wise plan

S.No.	Expenditure Detail	Amount (in Rupees)
1.	For first year	1,00,000
2.	From second year	25,000/-