

PG Department of Biotechnology and Microbiology



Janta College Bakewar, Etawah

Affiliated to Chhatrapati Shahu Ji Maharaj University, Kanpur

□ **Courses**

Microbiology (PG) started – 2001

Biotechnology (PG) started – 2003

□ **Coordinator**

Dr. Lalit Gupta

(Professor and Head, Zoology)

□ **Teacher**

Dr. Shaili Yadav (Ph.D)

(Assistant Professor under Self Finance Scheme)

Supporting Staff

- 1. Mohd. Rashid Farooqi**
(Lab Assistant)

- 2. Mr. Indresh Tiwari**
(Lab Attendant under SF Scheme)

Teacher's Profile

B.Sc. (2007-2010) (Janta college, Bakewar)

M.Sc. (2010-2012) (Banasthali Vidyapith)

Ph.D. (2012-2019) (Banasthali Vidyapith, Newai, Rajasthan)

Research papers- 15

- 1) Evaluation of morpho-physiological and antioxidant responses of *Moringa oleifera* Lam. to lead exposure, 2023. **Journal of Trace Elements and Minerals- Elsevier**
- 2) Cadmium Phytoextraction and Induced Antioxidant Gene Response in *Moringa oleifera* Lam. 2017. **American Journal of Plant Physiology - Science Alert**
- 3) Cadmium induced Changes in Metallothioneins and Soluble Protein content in leaves of *Moringa oleifera* Lam. 2018. **Int. Journal of Plant Research & Biotechnology, -Scopus indexed, Vegetos**
- 4) Functional characterization of Phytochelatin gene in lead induced *Moringa* seedlings; **International Journal of Phytoremediation -Taylor and Francis** (Accepted)

Conference/workshop/presented – 12

- ❖ Workshop on Technological Empowerment of women organized by **The National Academy of Sciences, India-NASI** at Banasthali Vidyapith
- ❖ **DBT sponsored** national workshop on In Silico genome and Proteome Analysis at Banasthali Vidyapith , Rajasthan

Seats

	Biotechnology (UG)	Biotech (PG)	Microbiology (PG)
Intake	40	20	20
Current Strength	110	7	10

Course and Curriculum

Department follows 'New Education Policy-2020' –since 2021-22 as per instruction of university.

The Semester system

Elective Papers in PG

Sem	Microbiology	Biotechnology
1	-	-
2	virology 2 nd sem (1 Elective)	Consumer right and Behavior 2 nd Sem (1 Minor elective)
3	Agriculture and Environmental Microbiology 3 rd sem (1 Elective)	➤ Genomics and Proteomics 3 rd Sem ➤ Animal cell culture 3 rd Sem (2 Electives)
4	Intellectual property Rights 4 th sem ➤ Research dissertation 4 th sem (2 Electives)	Bioprocess, IPR, Microbial, envrionemntal Biotechnology in 4 th sem (Any 4 Electives) ➤ Research dissertation 4 th sem

Teaching methods

Chalk and talk

Practicals

- Project
- Model
- Assignment

Study Tour

Evaluation

Mid term Exam

End term Exam

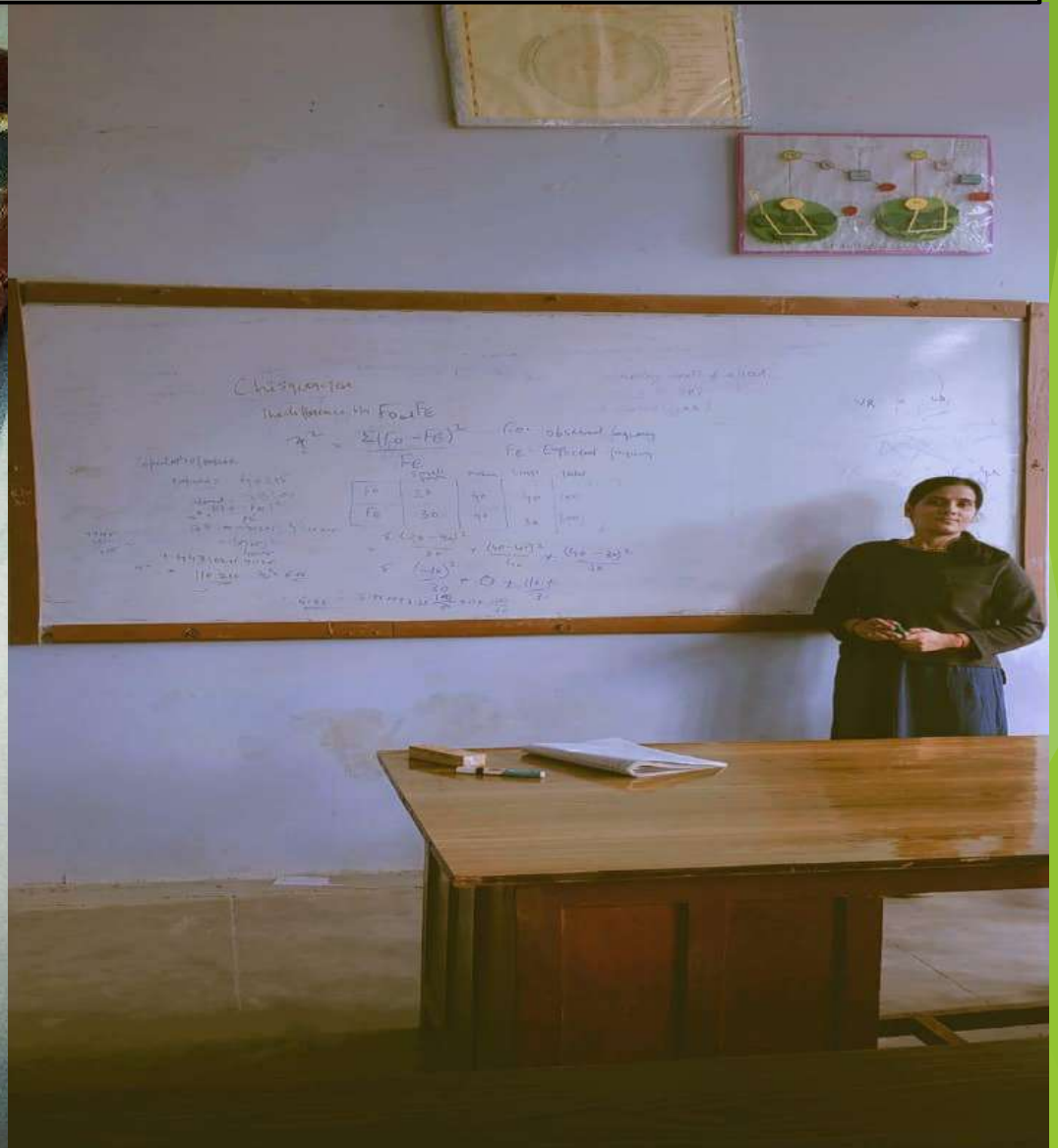
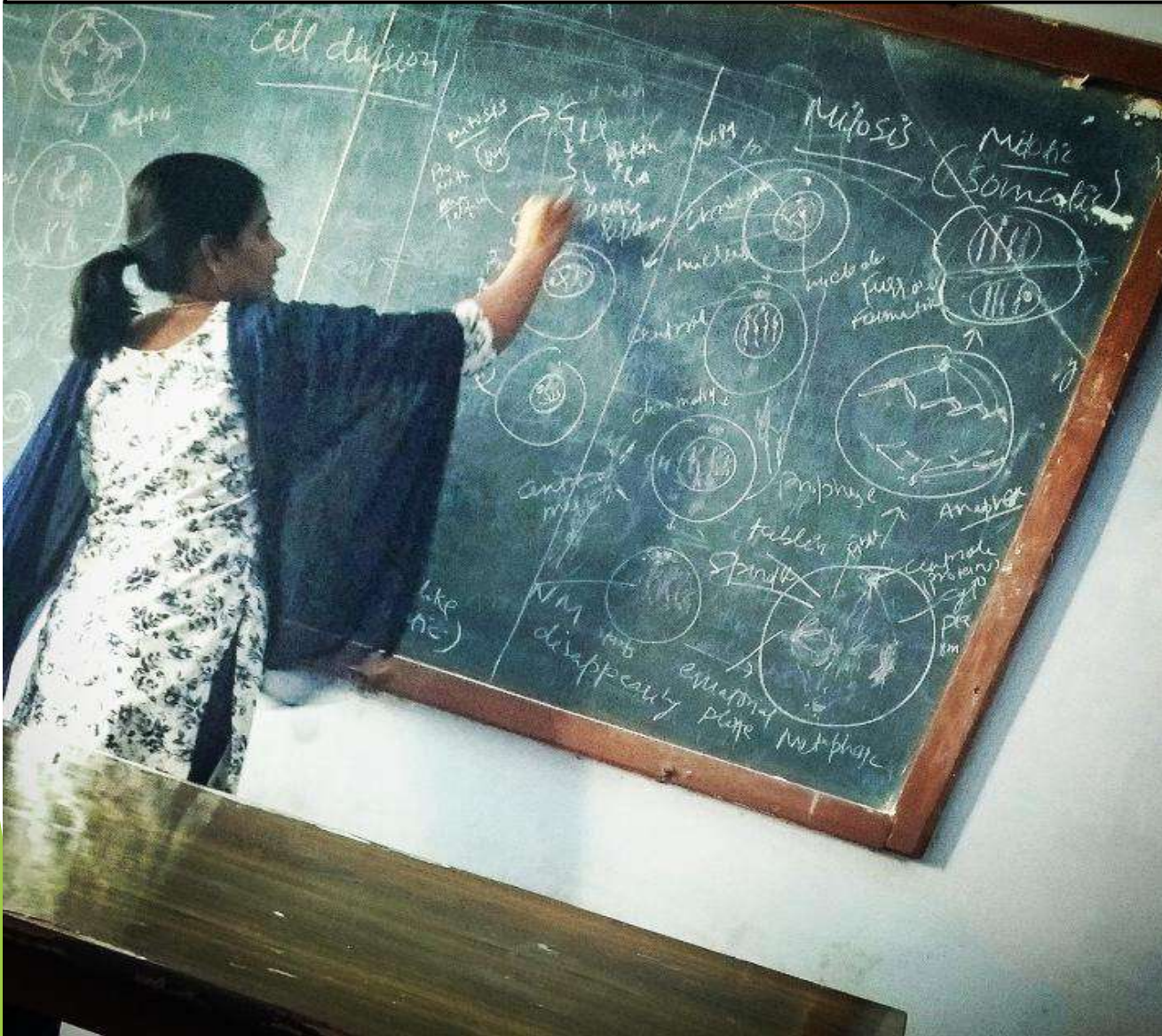
Dissertation report in M.Sc



WHATEVER IS WORTH DOING IS WORTH DOING WELL.



Lecture-Based Learning and Discussion



Online Classes

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Shaili is presenting

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GeeksforGeeks

Ti Plasmid: Structure, Diagram, & its Uses - GeeksforGeeks

Shaili is presenting

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Students Practicing Various Activities



During Internal Practical Assessment



While performing Agarose Gel Electrophoresis- DNA analysis

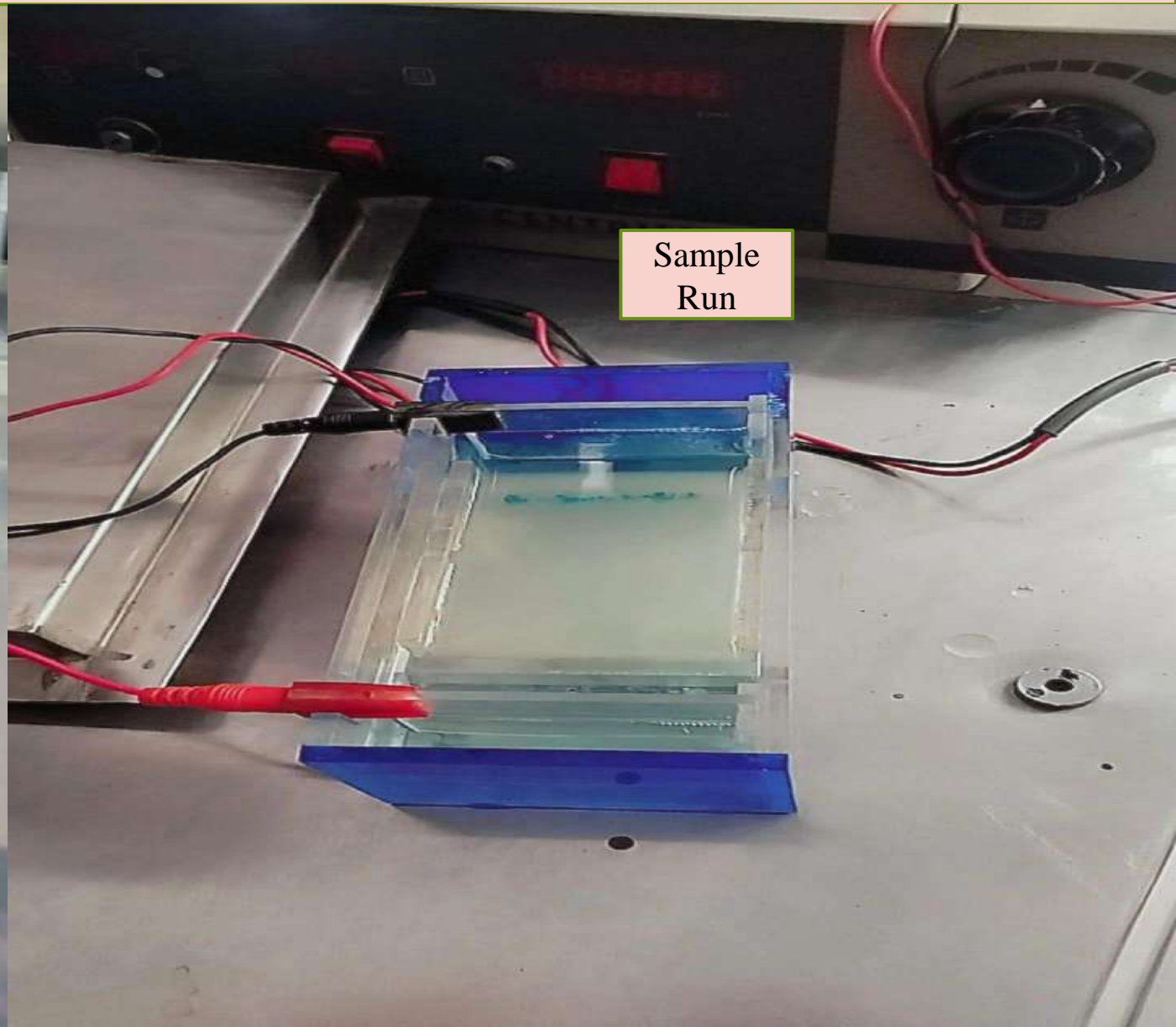
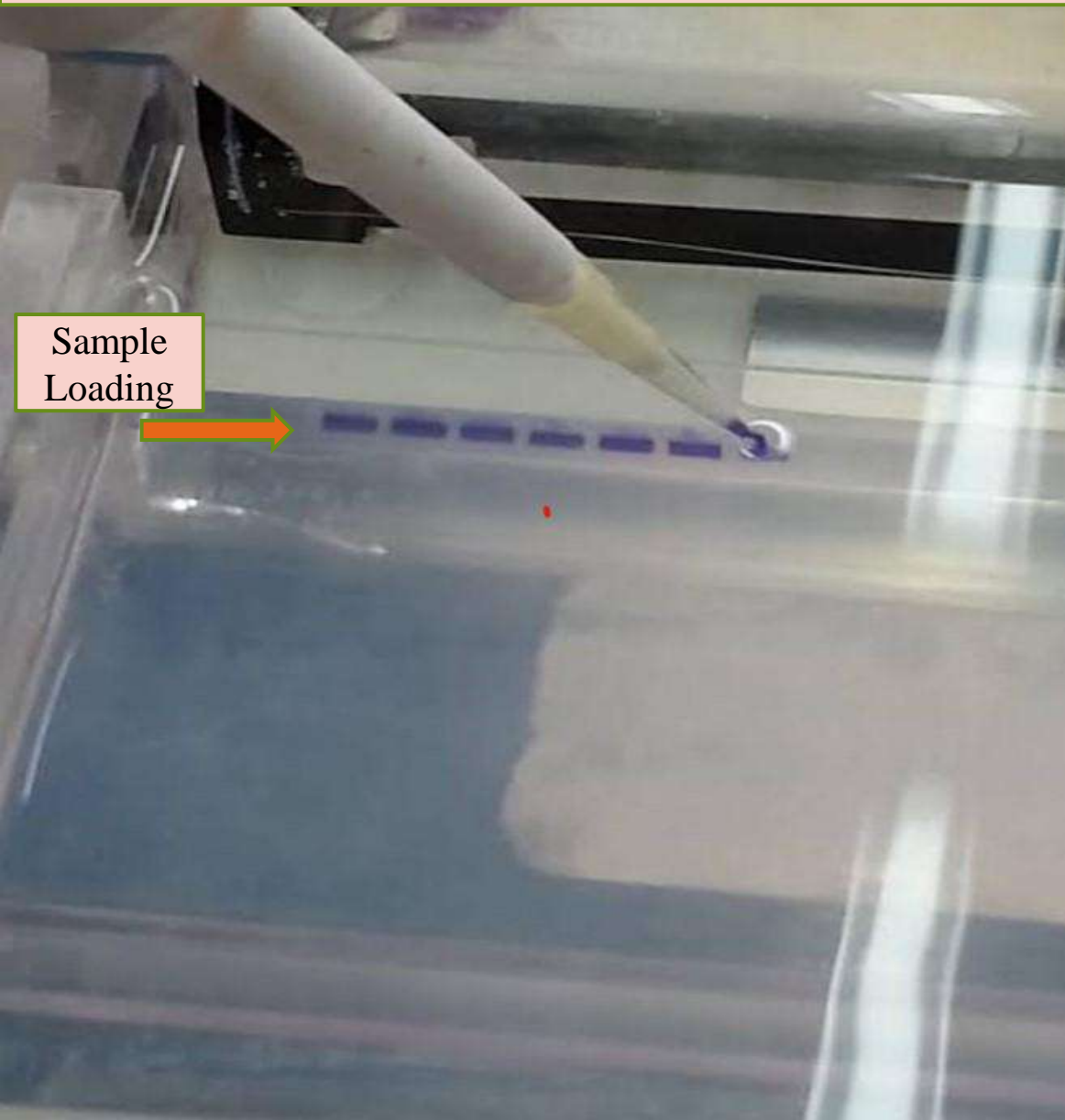


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Sep 11, 2023, 14:17

Protein Bands in Polyacrylamide Gel- SDS-PAGE



DNA Analysis through Agarose Gel Electrophoresis





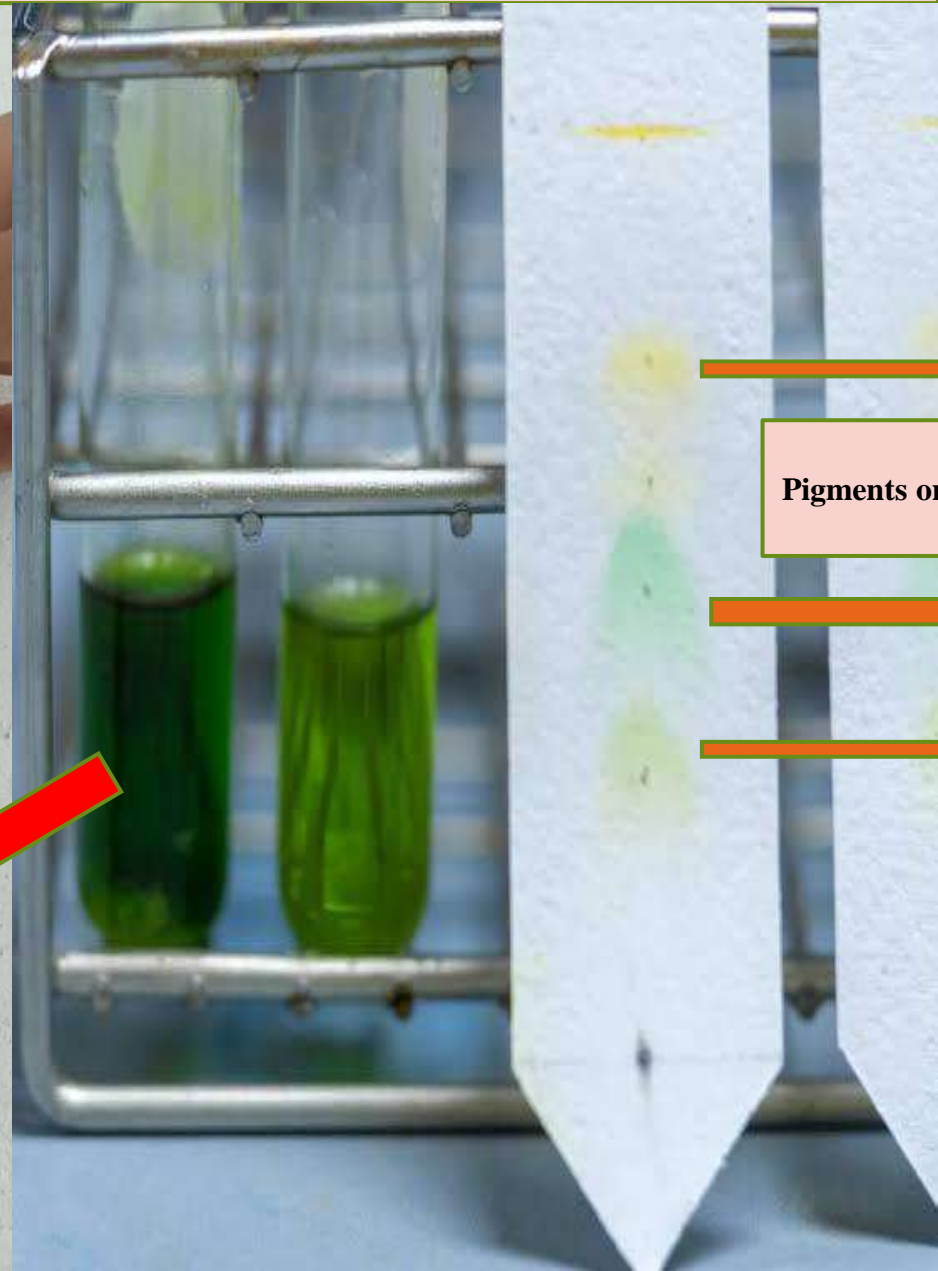
Bacterial Growth (In lumps) on Nutrient Agar Plate



Centrifugation of plant leaves and Paper Chromatography for pigments & compounds observation in leaf extract



**Leaf Extract
After centrifuge**



Pigments of

Alumna Working in Rajkumari Ratnawati Girls School (CITTA UK foundation) -Jaisalmer



Student Representing the College in President House

जनता कॉलेज बकेवर के छात्र हरशु शर्मा को मिला राष्ट्रपति भवन में नवाचारक सम्मान



बकेवर के प्रतिभावान छात्र एवं वैज्ञानिक हरशु शर्मा

जनता कॉलेज बकेवर में बीएससी कर रहे हर्षु शर्मा को 13 अप्रैल फेस्टिवल ऑफ़ इन्ोवेशन के दिन राष्ट्रपति भवन में आमंत्रित किया गया जहां उन्हें भारत के माननीय राष्ट्रपति द्वारा नवाचारक सम्मान से सम्मानित किया गया यह इतनी छोटी उम्र में उनके लिए एक बड़ी उपलब्धि है कि उन्हें भारत के राष्ट्रपति भवन में 13 अप्रैल को फेस्टिवल ऑफ़ इन्ोवेशन एंड एंटरप्रेन्योरशिप के तहत कार्यक्रम में महेवा निवासी बाल वैज्ञानिक हरशु शर्मा को आमंत्रित किया गया



प्रधानमंत्री एवं राष्ट्रपति सहित रक्षा मंत्री

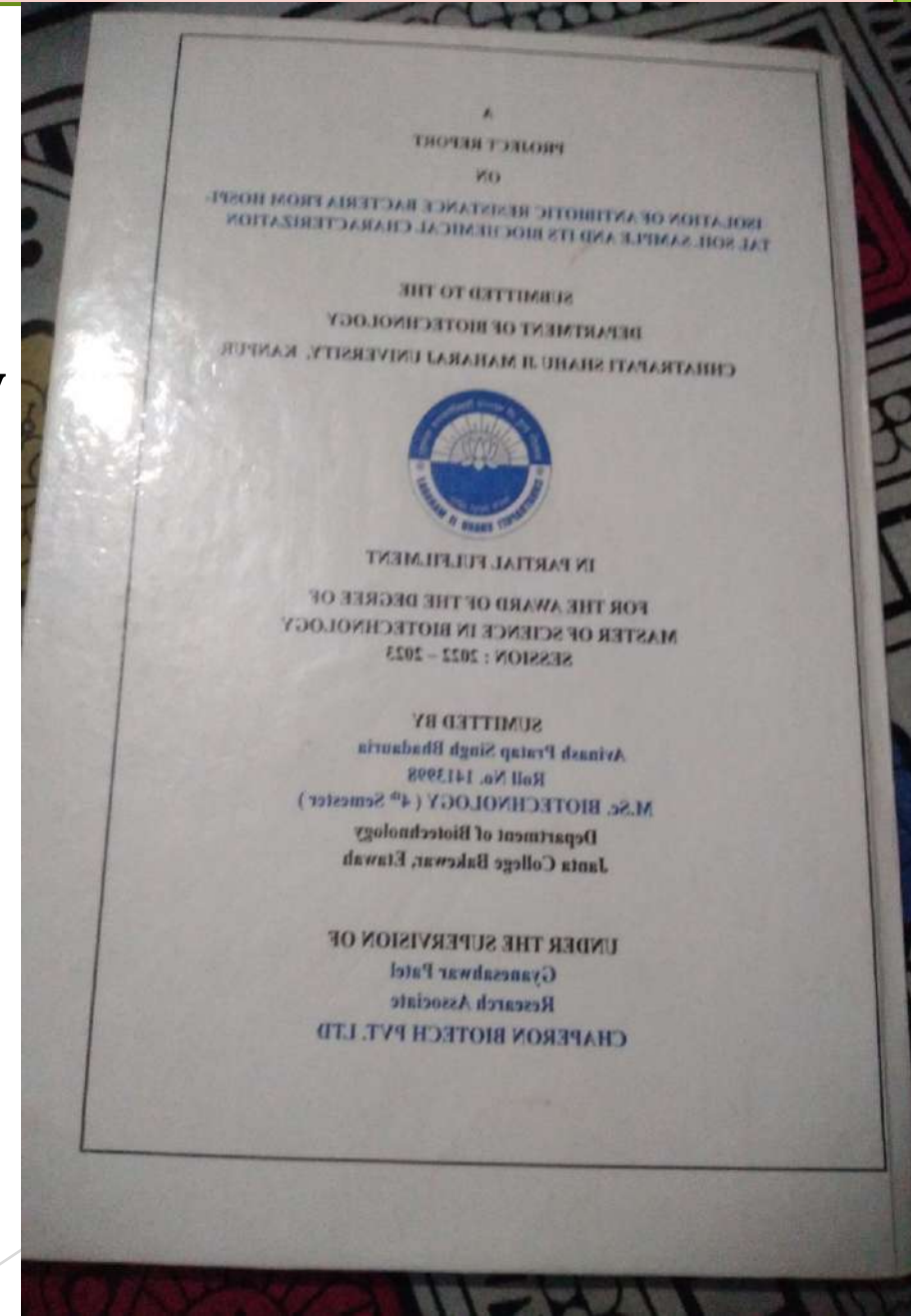
है। कार्यक्रम में वह विज़िटर के रूप में भाग लेंगे। वह जनता कॉलेज बकेवर से बीएससी कर रहे हैं। लोकमान्य रुरल इंटर कॉलेज से पिछले साल इंटर पास किया है। कार्यक्रम में राष्ट्रपति द्रौपदी मुर्मू व प्रधानमंत्री उपस्थित रहेंगे। लोकमान्य रुरल इंटर कॉलेज के पूर्व प्राचार्य डॉ. रामप्रकाश ओझा, प्रधानाचार्य डॉ. एसएस त्रिपाठी, चीफ प्रॉक्टर प्रताप नारायण तिवारी ने हर्ष व्यक्त किया है।

Results

Year	UG (%) Biotechnology	PG (%) Biotechnology	PG(%) Micro
2018-2019	91	100	100
2020-2021	98	–	100
2021-2022	95	100	
2022-2023	85	100	–
2023-2024	87	100	100

Dissertation Work

- ❑ All the students of PG do research project in 4th semester from various government or private research institutes.
- ❑ Their work in written format is evaluated by internal and external examiner.
- ✓ **Indian Agriculture Research Institute–PUSA New**
- ✓ **Chaperon Biotech, Pvt. Ltd.**
- ✓ **Helix BioGenseis Pvt. Ltd.**
- ✓ **Biotech park Lucknow**
- ✓ **Awastham Bioinformatics Centre Etawah**



Placements

Different biological and testing pvt. Ltd. companies have handed out job offers to our students.

1. Prashant Yadav (M.Sc Biotech-2023)

QA testing laboratory (coal, water, building material testing) PVt. Ltd., Noida

2. Madhuresh Tripathi (M.Sc Microbiotech-2018)

Supreme Test House/ NABL Laboratory, Delhi, as senior analyst

3. Mansi Porwal (M.Sc Biotech- 2022)

- ❑ Enhancement of working of diagnosis kit by RDT
- ❑ Currently as Researcher in Rajakumari Ratnawati girl'S College, Jaisalmer as project assistant

4. Raveena Yadav (M.Sc Biotech)

Doing Ph.D on **Pulmonary fibrosis**

5. Keshav Yadav (B.Sc Biotech. - batch 2022)

Got Government recruited in **Sainik School, Dholpur, Rajasthan**, as Lab Head cum teacher

Departmental Library (Total Books-277)



Instrument Laboratory



Participation of Students as volunteers in Medical Camp (with Gynecology and Cardiac Consultants) -2022



Participation of Biotechnology Department in Science Exhibition



Study Tour to NBRI (National Botanical Research Institute, Lucknow 2023)



Thank You