

KEY INDICATOR

3.4.1 The Institution has several collaborations/linkages for Faculty exchange, Student exchange, Internship, Field trip, On-the- job training, research etc during the last five years

3.4.1.1 Number of linkages for faculty exchange, student exchange, internship, field trip, on-the- job training, research etc year wise during the last five years

7
14/02/16
Return
Due by Jan me
B. K. Dept.

कार्यालय जिला शिक्षा अधिकारी दुर्ग

आप क्रमांक/स्था.02/शिक्षण अभ्यास / बीएड/2015-16/ 189 प्रति. दुर्ग दिनांक 8-2-16

प्रार्थी
मिलाई महिला महाविद्यालय हास्पिटल सेक्टर
मिलाई, जिला दुर्ग (७०७०)

विषय :- बी.एड.प्रशिक्षित छात्र अध्यापको को विभिन्न स्कूलो में कक्षाएँ लिये जाने की अनुमति बाबत।
संदर्भ :- आपका पत्र क्र/2016/843/मिलाई दिनांक 25.01.16

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संचालक, राज्य शैक्षिक अनुसंधान एवं प्रशिक्षण परिषद् छ००७० शांकरनगर रायपुर के पत्र क्र. /शिक्षक-शिक्षा/30-1/बीएड/पाठ्यक्रम/2015-16 7803/रायपुर दिनांक 26.12.2015 के अनुसार प्रथम वर्ष 04 सप्ताह के शाला अनुभव कार्यक्रम के अन्तर्गत 02 सप्ताह मिडिल स्कूल में एवं 02 सप्ताह हाईस्कूल/हायर सेकेंडरी स्कूलों में शाला दर्ज संख्या के मान से कम से कम दो समूह (चार छात्राध्यापक) एवं अधिकतम चार समूह (आठ छात्राध्यापक) में प्रशिक्षार्थी को शिक्षण अनुभव कराये जाने का निर्देश दिए हैं। आपके महाविद्यालय में प्रशिक्षणरत छात्राध्यापको की संख्या 57 है। नियमानुसार बीएड प्रशिक्षण प्राप्त कर रहे छात्र-अध्यापको को दुर्ग जिले की निम्नलिखित शालाओं में शिक्षण अभ्यास कराये जाने हेतु दिनांक 09.02.16 से 08.03.16 तक के लिये अनुमति प्रदान किया जाता है।

तत्संबंध में उल्लेख है कि विद्यालय में प्रचलित पाठ्यक्रम का ही अध्यापन कराया जावेगा जिससे विद्यालय के निर्धारित पाठ्यक्रम में कोई भिन्नता न हो। आपके कॉलेज की अभ्यास कक्षा प्रारंभ करने से पूर्व संबंधित विद्यालय के प्राचार्य/प्रधान पाठक की सहमति आवश्यक होगा।

क्र.	पू.मा.शाला का नाम	अवधि	क्र.	हाईस्कूल/हायर सेकेंडरी शा. का नाम	अवधि
1	पू.मा.वि.महुआरी मडीदा	02 सप्ताह	1	शा.उ.मा.वि.सेक्टर-6 मिलाई	02 सप्ताह
2	पू.मा.वि.स्टेशन मडीदा	02 सप्ताह	2	शा.उ.मा.वि.सेक्टर-9 मिलाई	02 सप्ताह
3	पू.मा.वि.सेक्टर-9	02 सप्ताह	3	शा.उ.मा.वि.सेक्टर-7 मिलाई	02 सप्ताह
4	पू.मा.वि.खोपली दुर्ग	02 सप्ताह	4	शा.उ.मा.वि.पहडोर पाटन	02 सप्ताह
5	पू.मा.वि.कातरा दुर्ग	02 सप्ताह			
6	पू.मा.वि.उतई दुर्ग	02 सप्ताह			

जिला शिक्षा अधिकारी
दुर्ग

पू० क्रमांक/स्था.02/शिक्षण अभ्यास /बीएड/2015-16/ 1892 प्रति. दुर्ग दिनांक 8-2-16

संलग्नित संख्या प्रमुख को सूचनाार्थ एवं पालनार्थ। आप अपने संस्था में प्रचलित पाठ्यक्रम अनुसार उक्त महाविद्यालय के बी.एड. प्रशिक्षार्थियों को शिक्षण अभ्यास हेतु सहयोग कर व्यवस्था सुनिश्चित करें।

कार्यालय जिला शिक्षा अधिकारी दुर्ग

12/04/17
for D. N. S. Pambri
for N. A.

पत्र क्रमांक / स्वा.02 / शिक्षण अभ्यास / बीएड / 2017 / 5082

दुर्ग दिनांक
7 APR 2017

प्रसारण
भित्तौड़ी महिला महाविद्यालय सहकारी संघ
जिला दुर्ग (अ.स.स.)

विषय - बी.एड. प्रशिक्षित छात्र अभ्यासकों को विभिन्न स्कूलों में कक्षाएं सिके जाने की अनुमति काबत।
तारीख - आपका आवेदन पत्र दिनांक 21.02.2017

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कार्यालयीन पत्र क्रमांक स्वा.2 / शिक्षण अभ्यास / बीएड / 2016-17 / 518 दुर्ग दिनांक 20.01.2017 के द्वारा आपका बीएड प्रशिक्षण परत छात्र अभ्यासकों को विभिन्न शाखाओं में कक्षाएं सिके जाने की अनुमति जिन शाखाओं हेतु दिनांक 24.01.2017 से 23.02.2017 तक के लिए प्रदान किया गया था तन्ही शाखाओं में आपने प्राप्त आवेदन पत्र के अधार पर बीएड प्रशिक्षण परत छात्र अभ्यासकों को दिनांक 02.04.2017 से 30.04.2017 तक के लिए कक्षाएं सिके जाने की पुनः अनुमति प्रदान किया जाता है।

जिला शिक्षा अधिकारी
दुर्ग

पत्र क्रमांक / स्वा.02 / शिक्षण अभ्यास / बीएड / 2017 / 5083

दुर्ग दिनांक
7 APR 2017

प्रतिनिधि -

संयोजित संस्था गुरुकुल को सूर्यनाथ एवं कालनाथ। आप अपने शाखा में प्रचलित पाठ्यक्रम अनुसार उक्त महाविद्यालय को बी.एड. प्रशिक्षार्थियों को शिक्षण अभ्यास हेतु सहायक बन व्यवस्था सुनिश्चित करें।

जिला शिक्षा अधिकारी
दुर्ग

17-4/17 to 22-4/17
12-4-17



कार्यालय जिला शिक्षा अधिकारी दुर्ग

Dr. M. Pandit
95/01/2018

पत्र क्रमांक/स्था.02/शिक्षण अभ्यास/बीएड/2018/533
प्रति.

दुर्ग दिनांक

18 JAN 2018

प्राचार्य
भिलाई महिला महाविद्यालय
हॉस्पिटल सेक्टर भिलाई, जिला दुर्ग (छ0ग0)

विषय :- बी.एड.प्रशिक्षित छात्र अभ्यासको को विभिन्न स्कूलों में वितरण जिये जाने की अनुमति बाबत।
संदर्भ :- आपका पत्र क्र/ 778/2017-18/ दिनांक 08.01.2018

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संचालक, राज्य शैक्षिक अनुसंधान एवं प्रशिक्षण परिषद् छ00ग0 शंकरनगर रायपुर के पत्र क्र./शिक्षक-शिक्षा/30-1/बीएड/पाठ्यक्रम/2015-16 7803/रायपुर दिनांक 26.12.2015 के अनुसार प्रथम एवं द्वितीय वर्ष में 04 एवं 16 सप्ताह के शाला अनुभव कार्यक्रम सम्मिलित किये है। उपरोक्त निर्देश के तहत मिडिल स्कूल/हाईस्कूल/हायर सेकेंडरी स्कूलों में शाला दर्ज संख्या के मान से कम से कम दो समूह (चार छात्राध्यापक) एवं अधिकतम चार समूह (आठ छात्राध्यापक) में आपके महाविद्यालय में प्रशिक्षणरत छात्राध्यापको को शिक्षण अनुभव हेतु निम्नलिखित संस्थाओं में 04 सप्ताह के लिए अनुमति प्रदान किया जाता है।

तत्संबंध में उल्लेख है कि विद्यालय में प्रचलित पाठ्यक्रम का ही अध्यापन कराया जावेगा,जिससे विद्यालय के निर्धारित पाठ्यक्रम में कोई भिन्नता न हो। आपके कॉलेज की अभ्यास कक्षा प्रारंभ करने से पूर्व संबंधित विद्यालय के प्राचार्य/प्रधान पाठक की सहमति आवश्यक होगा।

क्र.	पू.मा.शाला का नाम	क्र.	हाईस्कूल/हायर सेकेंडरी शा. का नाम
1	शास.पू.मा.वि.सेक्टर-9 भिलाई	1	शा.उ.मा.वि.सेक्टर-9 भिलाई
2	शास.पू.मा.वि. सेक्टर-6 भिलाई	2	शा.उ.मा.वि.सेक्टर-6 भिलाई
3	शास.पू.मा.वि. सेक्टर-7 भिलाई	3	शा.उ.मा.वि.सेक्टर-7 भिलाई

जिला शिक्षा अधिकारी
दुर्ग

पू0 क्रमांक/स्था.02/शिक्षण अभ्यास/बीएड/2018/534
प्रतिलिपि:-

दुर्ग दिनांक 18 JAN 2018

संबंधित संस्था प्रमुख को सूचनार्थ एवं पालनार्थ। आप अपने

कार्यालय जिला शिक्षा अधिकारी दुर्ग

आप कर्मक/स्था.02/शिक्षण अभ्यास / बीएड/2018/ 7104

दुर्ग दिनांक

7 JUL 2019

प्रति,
प्राचार्य
मिलाई महिला महाविद्यालय
हास्पिटल सेक्टर मिलाई, जिला दुर्ग (8090)

विषय - बी.एड. प्रशिक्षित छात्र अध्यापकों को विभिन्न स्कूलों में क्वाएर लिये जाने की अनुमति बाबत।
संदर्भ - आपका पत्र क/ 2019/2019/ दिनांक 11.07.2019

संचालक, राज्य वैश्विक अनुसंधान एवं प्रशिक्षण परिषद्, छठगढ संकरनगर रायपुर के पत्र क/ शिक्षण-शिक्षा/30-1/बीएड/पाठ्यक्रम/2015-16 7803/रायपुर दिनांक 26.12.2015 के अनुसार प्रथम एवं द्वितीय वर्ष में 04 एवं 16 सप्ताह के शाला अनुभव कार्यक्रम सम्मिलित किये हैं। उपरोक्त निर्देश के तहत मिडिल स्कूल/हाईस्कूल/हायर सेकेण्डरी स्कूलों में शाला दर्ज संख्या के मान से कम से कम दो सप्ताह (चार छात्राध्यक्षक) एवं अधिकतम चार सप्ताह (आठ छात्राध्यक्षक) में आपके महाविद्यालय में प्रशिक्षणरत छात्राध्यक्षकों को शिक्षण अनुभव हेतु निम्नलिखित संस्थाओं में 16 सप्ताह के लिए अनुमति प्रदान किया जाता है।

तत्पश्च में उल्लेख है कि विद्यालय में प्रचलित पाठ्यक्रम का ही अध्ययन कराया जावेगा, जिससे विद्यालय के निर्धारित पाठ्यक्रम में कोई निम्नता न हो। आपके कॉलेज की अभ्यास कक्षा प्राप्त करने से पूर्व संबंधित विद्यालय के प्राचार्य/प्रधान अध्यापक की सहमति आवश्यक होगा।

क्र.	पू.ना.शाला का नाम	क.	हाईस्कूल/हायर सेकेण्डरी शा. का नाम
1	शास.पू.मा.वि.सेक्टर-9 मिलाई	1	शा.उ.मा.वि.सेक्टर-9, मिलाई
2	शास.पू.मा.वि. सेक्टर-6 मिलाई	2	शा.उ.मा.वि.सेक्टर-6, मिलाई
3	शास.पू.मा.वि. आदर्श कन्या दुर्ग	3	शा.उ.मा.वि.आदर्श कन्या दुर्ग
4	शास.पू.मा.वि. तिलक कन्या दुर्ग	4	शा.उ.मा.वि.तिलक कन्या दुर्ग
5	शास.पू.मा.वि. तितुरडोह क 2 दुर्ग	5	शा.उ.मा.वि.तितुरडोह दुर्ग
6	शास.पू.मा.वि. तितुरडोह क 2 दुर्ग	6	शहीद भगतसिंह उ.मा.वि. दुर्ग

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Stamp: R.N. 244, Dt. 23.7.19

Signature: M.S. Paudyal
जिला शिक्षा अधिकारी
दुर्ग
दुर्ग दिनांक 7 JUL 2019

पू.0 कर्मक/स्था.02/शिक्षण अभ्यास / बीएड/2018/ 7105

प्रतिनिधि:- संबंधित संस्था प्रमुख को सूचनाएं एवं पालकत्व। आप अपने संस्था में प्रचलित पाठ्यक्रम अनुसार उक्त महाविद्यालय को बी.एड. प्रशिक्षार्थियों को शिक्षण अभ्यास हेतु सहयोग कर व्यवस्था सुनिश्चित करें।

Signature: M.S. Paudyal
जिला शिक्षा अधिकारी
दुर्ग

प्रमाणित
जिला शिक्षा अधिकारी


Scanned by TapScanner

CERTIFICATE

This is to certified that the B.Ed. students of Bhilai Mahila Mahavidyalaya, Hospital sector, Bhilai had been completed their practice teaching from our school...Tik. Middle School 2408
from Date: 21/8/24 to Date: 25/08/24

S.No.	Name of Students	Father's Name
1	YANU DEWANGAN	RAMADHIN DEWANGAN
2	GODALART SAHU	LIMESH KUMAR
3		
4		
5		
6		
7		
8		
9		
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18		
19		
20		

PRINCIPAL


R. Prakash
Principal, Tik. Middle School
Bhilai (M.P.)

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FACULTY EXCHANGE

क्रमांक.../2017

कक्षा दिनांक...

प्रति,

डॉ. भावना पाण्डेय
माईकोबायोलॉजी विभाग
गिलाई महिला महाविद्यालय
कबीरघाम (प्र०ग०)

विषय :- जतिमि व्याख्यान हेतु।
नहोदया,

विषयान्तर्गत लेख हे. कि इस महाविद्यालय में माईकोबायोलॉजी विभाग द्वारा
'Selection V/S Screening' विषय पर जतिमि व्याख्यान का आयोजन किया जाना है।

इस हेतु स्वोत व्यक्ति के रूप में दिनांक 17.02.2017 को उपस्थित होने का कष्ट करें।

सूचनांक 1582/2017

प्रतिरिपि :-

1. प्राचार्य, गिलाई महिला महाविद्यालय को सूचनार्थ सम्भरित।

प्राचार्य
आचार्य पंथ श्री मृग मुनि नाम सोहन
शासकीय स्नातकोत्तर महाविद्यालय कपवा
जिला-कबीरघाम (प्र०ग०)
कक्षा दिनांक-15/2/2017

आचार्य पंथ श्री मृग मुनि नाम सोहन
शासकीय स्नातकोत्तर महाविद्यालय कपवा
जिला-कबीरघाम (प्र०ग०)

OFFICE OF THE PRINCIPAL
GOVT. DR. W.W. PATANKAR GIRLS' P.G. COLLEGE

NEAR KENDRIYA VIDYALAYA, JAIL ROAD, DURG (C.G.) PHONE 0788 2325773
Email - govtdr/patankarfeet@gmail.com Website - www.govtdr/patankarcollege.durg.com

LETTER. NO.

Date 24-09-2018

"National Wild Life Conservation Week Celebration"
(8th October to 14th October 2018)

To,

Dr. Bhawna Pandey
HOD, Biotechnology
Bhilai Mahila Mahavidyalaya, Bhilai

Sub : Invite as Resource Person / Guest Speaker

Madam ,

It's our privilege to invite you as the Resource person / Guest Speaker on 10th
October 2018, under a week's celebration of National Wildlife Conservation,
organized by the Department of Zoology.

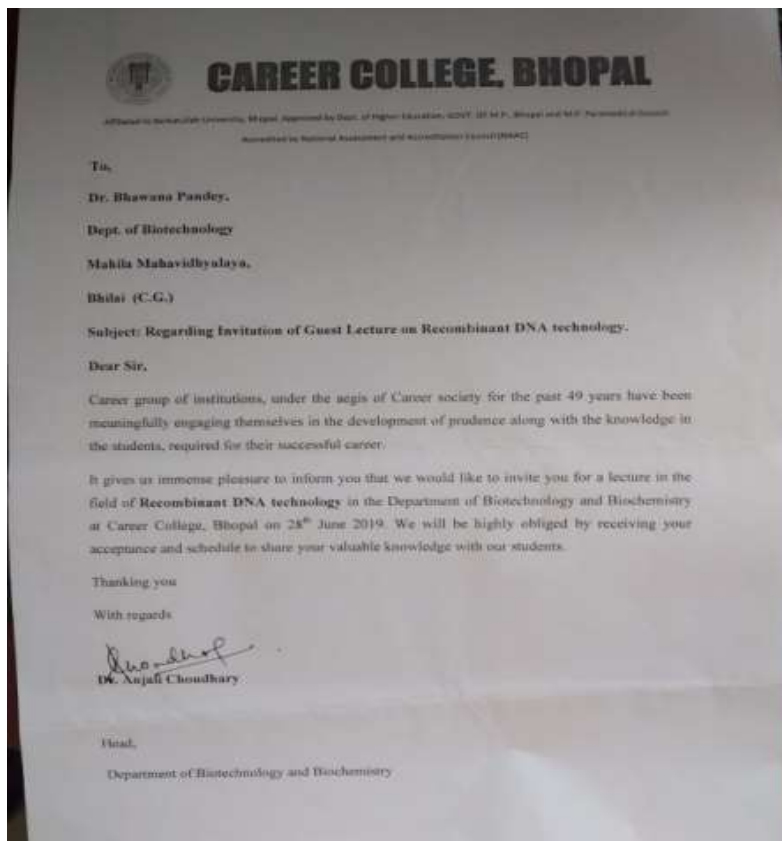
Kindly accept the invitation and grace the occasion by your presence.

Date : 10th October 2018
Time : 1: 00 PM onwards
Venue : Seminar Hall (New Campus)

HOD
Dept. of Zoology
Dr. Nisreen Husain

Principal
Dr. Sushil Chandra Tiwari

CC - The Principal, Bhilai Mahila Mahavidyalaya, Bhilai





SAI COLLEGE

(SAI MAHAVIDYALAYA)
Affiliated to Hemchandr Yodar University, Durg
& Under Section 2 (f) of the UGC Act

Ref. No. SMY/2020/1116

Date: 11/02/2020

To,

Dr. Bhawna Pandey
HOD Biotechnology
Bhilai Mahila Mahavidyalaya
Sector-9, Bhilai

Sub:- Invitation for being Keynote Speaker at SAICON 2020

Dear Sir,

Greetings from Sai College, Bhilai (CG)

Department of Science & Computer Science along with Department of Commerce and Management is organizing a National Conference on "Emerging Trends and Technologies in the area of IT, Science, Commerce & Management" on Feb. 26th & 27th 2020. We would like to request your kind self to be a part of the conference as an esteemed **Keynote Speaker** in the related subject.


In this regard it will be our pleasure if you could provide your kind consent to be the Chairperson and Keynote Speaker for the National Conference SAICON-2020.

We look forward for your kind confirmation at the earliest & oblige.

We would like to add that TA & DA for the above shall be paid by our institution.

Thanking you,

Your Sincerely,


Dr. Manu Singh
Convener-SAICON
H.O.D (Computer Sc.)
Mobile No. 9424137240


Dr. Bhawna Pandey
HOD Biotechnology
Bhilai Mahila Mahavidyalaya
Sector-9, Bhilai

STREET-69, SECTOR-6, BHILAI, CHHATTISGARH - 490006
Tel.: 0785-2284584, 2284023, Email : director@saicollege.in
www.saicollege.org

DEPARTMENT OF MICROBIOLOGY
GOVT. VVT PG AUTONOMOUS COLLEGE, DURG (S.)
(NAAC Accredited A+ Institution)

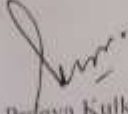
Durg: 02.01.2020

To,
Dr. Ranjana Sahu,
Dept. of Microbiology,
Bhilai Mahila Mahavidyalaya, Sec. 09,
Bhilai

Madam,

With reference to our telephonic talk, we are pleased to invite you to deliver a lecture on **14.01.2020** at Dept. of Microbiology for the benefit of P.G. and Ph.D. students. You are expected to highlight the concept of Bioinformatics in research in your lecture. It is further requested you to observe and judge of posters made by PG students during second session.

We look forward for your lecture which will be going to add new vision to our students. Once again, thank you for agreeing to speak to us.


Dr. Pragya Kulkarni
Head, Dept. of Microbiology

Student Exchange Program

A
PROJECT REPORT
ON

"Isolation, Identification and antimicrobial activity of Endophytic fungi isolated from *Calotropis procera*; and a study of physio-chemical analysis of degradation of domestic waste (vegetable)."

Submitted for the partial fulfilment of
THE DEGREE OF MASTER'S OF SCIENCE IN MICROBIOLOGY

PROJECT UNDERTAKEN
BHILAI MAHILA MAHAVIDYALAYA COLLEGE
BHILAI, 490009 (C.G.) INDIA



2016 - 2017

By

Ms. KALPANA TIGGA
M. sc, IV Sem,
Dept. of Microbiology

Under the supervision of

Dr. (Mrs.) BHAVNA PANDEY
HOD, Department of Microbiology & Biotechnology
Bhilai Mahila Mahavidyalaya College, Bhilai (C.G.)

Affiliated to Pt. Ravi Shankar University, Raipur (C.G.)

CERTIFICATE

This is to certify that dissertation work entitled below is submitted by Kalapna Tigga. She had completed project at, Bhilai Mahila Mahavidyalaya entitled "Isolation, Identification and antimicrobial activity of Endophytic fungi isolated from Calotropis procera; and a study of physio-chemical analysis of degradation of domestic waste (vegetable)." under the guidance of Dr. (Mrs.) Bhawana Pandey, HOD of Biotechnology and Microbiology, Bhilai Mahila Mahavidyalaya, Bhilai (C.G.).

During the entire project, she had actively participated in all programmes and had performed well.

Date - 28.5.17

Place - Bhilai

Bhagyashree
Ms Bhagyashree Deshpande
(Co Guide)

Pandey
Dr. (Mrs.) Bhawana Pandey

(Guide)

HOD, Dept. of Biotechnology and
Microbiology, Bhilai Mahila
Mahavidyalaya, Bhilai.

**"STUDY OF PHYTOCHEMICAL ANALYSIS AND ANTIMICROBIAL
ACTIVITY OF MEDICINAL PLANTS"**

A PROJECT REPORT

Submitted for the partial fulfillment of the requirement for the degree of
Master of Science in Microbiology

Submitted to



GOVT. V.Y.T.P.C.
AUTONOMOUS COLLEGE - 4
DURG, CHHATTISGARH, INDIA

Department of Microbiology

GOVT. V.Y.T.P.C. AUTONOMOUS COLLEGE DURG (C.G.)

(AFFILIATED TO HEMCHAND YADAV UNIVERSITY, DURG (C.G.))

(Session 2018-2019)

SUBMITTED BY

Jayshri

IVth Semester

M.Sc. Microbiology

CERTIFICATE

This is to certify that the work presented in this Project entitled "**STUDY OF PHYTOCHEMICAL ANALYSIS AND ANTIMICROBIAL ACTIVITY OF MEDICINAL PLANTS**" was carried out by **Jayshri** under my supervision towards the fulfillment of her thesis in **Master of Science in Microbiology**, Govt. Autonomous V. Y. T. PG. Science College, Durg. No part of this Project has been replicated and will not be submitted elsewhere for the award of any degree or diploma.



Dr. Bhawana Pandey
Supervisor

**ISOLATION AND IDENTIFICATION OF BACTERIAL MICROFLORA
FROM COW DUNG**

**Project Report
Submitted To**

MATS University

**towards partial fulfillment for the award of
Bachelor of Science in Microbiology**

**By
DENIS THOMAS
B. Sc. MICROBIOLOGY Semester V**

Under the Guidance of

Dr. Bhawana Pandey

Head, Department of Microbiology and Biotechnology

Bhilai Mahila Mahavidyalaya Sector-9, Bilai (C.G.)



**School of Biological and Chemical Sciences,
MATS University
Raipur, Chhattisgarh-492002.**

2015-18

(Write the Corresponding Academic Year)

Dr. (Mrs.) Bhawana Pandey
M.Sc., M.Ed., Ph.D., F.S.I.Sc.
Head of the Department
Biotechnology & Microbiology
Email: bhawanapandey15@gmail.com



Bhilai Mahila Mahavidyalaya,
Hospital Sector, Bhilai
(Affiliated to Pt. Ravishankar Shukla University)
Raipur, Chhattisgarh- 490009
Phone: (M) - 9424118308

Certificate

This is to certify that dissertation work entitled below is submitted by **Denis Thomas**. He had completed Project at **Bhilai Mahila Mahavidyalaya**, entitled " **Isolation and Identification of Bacterial Microflora from Cow Dung**," under the guidance of **Dr. (Mrs.) Bhawana Pandey**, **HOD of Biotechnology and Microbiology, Bhilai Mahila Mahavidyalaya.**

During the entire project, he had actively participated in all programmes and had performed well.

Date: 14/11/17

Place: Raipur

Bhawaney
Dr. (Mrs.) Bhawana Pandey
HOD of Biotechnology and Microbiology
Bhilai Mahila Mahavidyalaya
Dr. Bhawana Pandey
Head, Dept. of Biotechnology & Microbiology
Bhilai Mahila Mahavidyalaya
Bhilai (C.G.)

Microbial Screening of Industrial Soil of Bhilai Durg Region

**Project report
submitted to**

MATS University

towards partial fulfillment for the award of

**Bachelor of Science
Bachelor of Science in Microbiology**

By

**Akansha Naidu
B. Sc. Microbiology, Semester V**

Under the Guidance of

Dr. Bhawana Pandey

Head, Department of Microbiology and Biotechnology

Bhilai Mahila Mahavidyalaya Sector-9, Bhilai (C.G.)



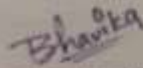
**School of Biological and Chemical Sciences,
MATS University
Raipur, Chhattisgarh-492002.**

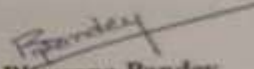
2016-17

Date: 18/11/19.....

CERTIFICATE

This is to certify that the work presented in this Project entitled "**Microbial Screening of Industrial Soil of Bhilai Durg Region**" was carried out by **Akansha Naidu** under my supervision towards the fulfillment of his thesis in **Bachelor of Science in Microbiology**, School of Biological and Chemical Sciences, MATS University, Raipur. No part of this Project has been replicated and will not be submitted elsewhere for the award of any degree or diploma.


Ms. Bhavika Sharma
Co-Supervisor


Dr. Bhawana Pandey
Supervisor
Dr. Bhawana Pandey
Head Dept. of Microbiology & Immunology
Bhilai Mats Mahavidyalaya
Bhilai (C.G.)

A
PROJECT REPORT
ON
Isolation and Characterization of Heavy Metal
Resistant Bacteria from Industrial Waste Water from
Durg Bhilai (C.G)

Submitted for the partial fulfillment for the award of degree of
The Degree of Master's of Science in Microbiology
GOVT. V. Y. T. P.G. AUTONOMOUS COLLEGE, DURG (C.G.)



MASTER OF SCIENCE
IN
MICROBIOLOGY

SUMMITTED BY
Miss Vaishali Jain
M.Sc. Microbiology

PROJECT SUPERVISION
Dr. Bhawana Pandey
Bhilai Mahila Mahavidyalaya, Hospital Sector,
Bhilai Nagar, (India)

Session 2017-18



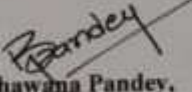
BHILAI MAHILA MAHAVIDYALAYA

HOSPITAL SECTOR, BHILAI NAGAR (C.G.) 490009
Affiliated to Durg University, Raipur (C.G.) & : 2242966 (P & T)
Under Section 2(f) and 12(B) of the UGC Act 1956

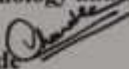
2896263 (BSP)
Website: www.bmmbihilai.com

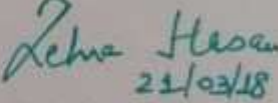
This is to certify that dissertation work entitled below is submitted **Ms. Vaishali Jain** by she had completed Project at **Bhilai Mahila Mahavidyalaya**, entitled "Isolation and Characterization of heavy metal resistant bacteria from industrial waste water from Durg Bhilai" under the guidance of **Dr. (Mrs.) Bhawana Pandey**, HOD of Biotechnology and Microbiology, **Bhilai Mahila Mahavidyalaya** and Co-guidance of **Mrs. Varsha Chandrakar**, Lecturer, Department of Biotechnology and Microbiology, **Bhilai Mahila Mahavidyalaya Hospital Sector, Bhilai Nagar** During the entire project, she had actively participated in all programmes and had performed well.

Project Guide


Dr. (Mrs.) Bhawana Pandey,
HOD of Biotechnology and Microbiology

Project Co- Guide


Mrs. Varsha Chandrakar
Asst. Prof., Biotechnology and Microbiology


Dr. Zehra Hasan
Principal

CERTIFICATE

This is to certify that dissertation work entitled below is submitted by Pritee Shukla .She had completed project at, Bhilai Mahila Mahavidyalaya entitled " isolation and identification of amylase producing bacteria from solid wastes (municipal waste , medical waste , agricultural and industrial waste.)" under the guidance of Dr. (Mrs.) Bhawana Pandey , HOD of Biotechnology and Microbiology, , Bhilai Mahila Mahavidyalaya.

During the entire project , she had actively participated in all programmes and had performed well.

Date-

Pritee Shukla
Mrs. Vansha Chandrakar
(Co-guide)

Pandey
Dr.(Mrs.)Bhawana Pandey

HOD of Biotechnology and Microbiology,
Head, Dept. of Biotechnology & Microbiology
Bhilai Mahila Mahavidyalaya
Bhilai (C.S.)

A
PROJECT REPORT
ON

"Isolation and identification of amylase producing bacteria from solid wastes
(municipal, agricultural, medical and industrial)"

Submitted for the partial fulfilment of
THE DEGREE OF MASTER'S OF SCIENCE IN MICROBIOLOGY

PROJECT UNDERTAKEN
BHILAI MAHILA MAHAVIDYALAYA COLLEGE
BHILAI, 490009 (C.G.) INDIA



2016 - 2017

By
PRITEE SHUKLA
M. sc. IV Sem.
Dept. of Microbiology

Under the supervision of

Dr. (Mrs.) BHAVNA PANDEY
HOD, Department of Microbiology & Biotechnology
Bhilai Mahila Mahavidyalaya College, Bilai (C.G.)

**"CITRIC ACID PRODUCTION FROM AGRICULTURE WASTE BY USING
ASPERGILLUS NIGER"**

A PROJECT REPORT

Submitted for the partial fulfillment of the requirement for the degree of
Master of Science in Microbiology

Submitted to



GOVT. V.Y.T.P.G.
AUTONOMOUS COLLEGE
DURG, CHHATTISGARH, INDIA

Department of Microbiology

GOVT. V.Y.T.P.G. AUTONOMOUS COLLEGE DURG (C.G.)

(AFFILIATED TO HEMCHAND YADAV UNIVERSITY, DURG (C.G.))

(Session 2018-2019)

SUBMITTED BY

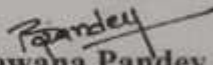
Manisha Sahu

IVth Semester

M.Sc. Microbiology

CERTIFICATE

This is to certify that the work presented in this Project entitled "CITRIC ACID PRODUCTION FROM AGRICULTURE WASTE BY USING *ASPERGILLUS NIGER*" was carried out by MANISHA SAHU under my supervision towards the fulfillment of her thesis in **Master of Science in Microbiology**, Govt. Autonomous V. Y. T. P.G. Science College, Durg. No part of this Project has been replicated and will not be submitted else where for the award of any degree or diploma.


Dr. Bhawana Pandey

Supervisor

DEPARTMENT OF MICROBIOLOGY

GOVT. E. RAGHAVENDRA RAO POSTGRADUATE SCIENCE COLLEGE, BILASPUR (C.G.)

Letter No. 270 / Micro / Project / 2020

Bilaspur, Date: 11-01-2020

To,

Principal
Bhilai Mahila Mahavidyalaya,
Sector-9, Bhilai
Durg (C.G.).

Subject: Project work for Post Graduate Students.

Sir,


We will feel a pleasure to recommend three students of M.Sc. fourth semester Microbiology from this college to your institution for the project work as prescribed in the curriculum. They are being referred here with for 60 days (15th January to 15th March 2020) laboratory work under the precious supervision of **Dr. Bhawana Pandey**, Department of Microbiology. They will have to follow the entire conditions and directions provided by you and department concerned.

It is for your kind consideration, proper permission and academic cooperation
With Regards'


(Dr. S.R. Kamlesh)
Principal

Principal
Govt. E.R. Rao P.G. Science College,
Bilaspur (C.G.)


End No., 271 / Micro / Project / 2020


(Dr. D. K. Shrivastava)
Head, Dept. of Microbiology
HEAD
Department of Microbiology
Govt. E.R.R.PG.Science College
Bilaspur (C.G.)
Bilaspur, Date: 11/01/2020

Copy To:-

1. The Controller, Examination, Autonomous Cell, Govt. E.R.R. Postgraduate, Science College, Bilaspur (C.G.) for your kind information and proper action.
2. Dr. Bhawana Pandey, Department of Microbiology, Bhilai Mahila Mahavidyalaya, Sector-9, Bhilai, Durg (C.G.).
3. The student concerned- (I) Ms. Manisha Dansena, (II) Ms. Yamini Sahu and (III) Yamuna Sahu for your proper presence and manner activities accordingly.
4. Departmental copy.


(Dr. S.R. Kamlesh)
Principal
Principal
Govt. E.R. Rao P.G. Science College
Bilaspur (C.G.)


(Dr. D. K. Shrivastava)
Head, Dept. of Microbiology
HEAD
Department of Microbiology
Govt. E.R.R.PG.Science College
Bilaspur (C.G.)



Kalyan Post Graduate College

Bhilai Nagar, Dist. - Durg, 490006 (Chhattisgarh)

College of Arts, Science, Education, Journalism, Commerce and Management & Research Centre

Declared by U.G.C. as College with Potential for Excellence

Phone : 0788-2223665, Fax : 2223352, E-mail : office@kalyanpgcollege.org,

Website : www.kalyanpgcollege.org

No. _____

Date : _____

To,
The Principal
Bhilai Mahila Mahavidyalaya College C.G.

Subject: Regarding dissertation work (M.Sc. IV Sem)

Dear Sir/Madam,

The KALYAN P.G. COLLEGE is one of the oldest and leading teaching institutes, affiliated to Bhilai Mahila Mahavidyalaya research College. As per the M.Sc. curriculum, the Students are allowed to do their projects on Microbiology, Genetic engineering, Animal cell science, Bio-processing, Molecular biology, Reproductive biology Plant tissue culture and Environmental biotechnology and have to complete his/her research work in the form of a or dissertation for a period of six months from January 2020 – June 2020.

In the same context, I am recommending Miss Pooja Sahu from our college. So, kindly provide her the opportunity to carry out her project work in your esteemed institute.

Your support in this regard will be highly solicited and will be duly acknowledged in the research papers and dissertations.

Thanking you.


Head of Department

Mrs. Soumya Khare

Head
Dept. of Biotechnology
Kalyan Mahavidyalaya
Bhilai Nagar (C.G.)


Principal 16-1-2020

DR. Y.R. KATRE

प्राचार्य

कल्याण पोस्टग्रेजुएट महाविद्यालय
भिलाई नगर (छ.ग.)

Department of Microbiology
Govt. V.Y.T. PG. Autonomous College Durg (C.G.)
(NAAC Accredited Grade 'A+', CPE Phase III, DBT STAR College)

Ref. 06/17/Micro.

Date: 30-3-17

To
Principal
Mabila Mahavidyalaya, Sec. 9
Bhilai

Subject: Placement of students for Project Work

Dear Sir/Madam,

Department of Microbiology, Govt. V.Y.T. P.G. Autonomous College offers postgraduate degree course in Microbiology. As per their syllabi, it is compulsory to do a Project work and submit report for partial fulfillment of the degree in lieu of two theory papers.


It will be a favor on us if you /your institution permit our students to work and complete their project. The topics may be given from your ongoing programs or any other related to microbiology. The students will be allowed to carry out the work from 01.06.17 to 30.08.17.

It will further highly appreciated if suitable accommodation is provided to the students in this regard.

With best regards,

Yours Faithfully

- 1) Vaishali Jain
- 2) Kumeshwari
- 3) Dhamesthwari


H. Professor In-Charge
Deptt. of Microbiology
Govt. V.Y.T. P.G. Auto. College DURG (C.G.)
Department of Microbiology
Govt. V.Y.T. P.G. Autonomous College.
Durg

Department of Microbiology
Govt. V.Y.T. PG. Autonomous College Durg (C.G.)
(NAAC Accredited Grade 'A+', CPE Phase III, DBT STAR College)

Ref. 18/18/Mico.

Date: 24.4.18

To

The HoD
Bhilai Mahila Mahavidyalaya
Bhilai Nagar

Subject: Placement of students for Project Work

Dear Sir/Madam,

Department of Microbiology, Govt. V.Y.T. P.G. Autonomous College offers postgraduate degree course in Microbiology. As per their syllabi, it is compulsory to do a Project work and submit report for partial fulfillment of the degree in lieu of two theory papers.

It will be a favor on us if you /your institution permit our students to work and complete their project. The topics may be given from your ongoing programs or any other related to microbiology. The students will be allowed to carry out the work from 01.06.18 to 30.08.18.

It will further highly appreciated if suitable accommodation is provided to the students in this regard.

With best regards,

Yours Faithfully

Taniya Sahu
M.Sc II Sem.



Head

Department of Microbiology
Govt. V.Y.T. P.G. Autonomous College,
Durg



MATS UNIVERSITY

Main Campus – Gullu (Aarang), Raipur – 493 441 CG
Raipur Campus - MATS Tower, Pandri, Raipur – 492 002 CG
Tel: 0771 – 4078995, 4078996 Fax: 0771 – 4078997

E-mail: msbcs@matsuniversity.ac.in, Website: www.matsuniversity.ac.in

Ref. No: MU/MSBCS/Ph.D/2018/85

Date: 11/05/2018

To,
Dr.(Mrs) Bhawana Pandey,
Asst. Professor & Head,
Department of Biotechnology & Microbiology,
Bhilai Mahila Mahavidyalaya,
Sector- 9, Hospital Sector,
Bhilai, Chhattisgarh.

Sub:- Recommendation for One Research Scholar of Biotechnology for her Partial Research Work

Respected Madam,

MATS University, Raipur (C.G.) is established under Chhattisgarh Act No. 29 of 2006 [Chhattisgarh Private Universities (Establishment and Operations) (Amendment) Act, 2006]. The University is recognized by UGC under section 2(f) of UGC Act, 1956. School of Biological and Chemical Sciences of the University aims at providing relevant global education in the field of Biotechnology, Microbiology, Biochemistry, Bioinformatics, Chemistry and other allied branches.

Herewith, I would like to inform you that One Research Scholar- Ms. Ruble Chandraker is doing her Ph.D Research in Biotechnology under the joint Supervision of Dr. Suruchi Parkhey & Dr. Ashish Saraf of our School of Biological and Chemical Sciences, MATS University, Raipur.

S. No.	Name of the Student	Subject	Supervisor Name
1.	Ms. Ruble Chandraker	Ph.D. Biotechnology	Dr. Suruchi Parkhey Dr. Ashish Saraf

Now, Ms. Ruble wants to carry out her few of the Research Work as Part Time Research Work in your Esteemed Organization towards the partial fulfilment of her **Ph.D (Biotechnology)** programme. Therefore, considering the application of the students, I herewith recommend above **One Research Scholar** for the said purpose. The duration of the research work and financial matter shall be as per your consent and approval. After completion of the Research Work, The Above Research Scholar have to submit Consolidated Attendance Report to the under signed duly forwarded by you as it is required for forwarding her thesis. The other official formalities shall be fulfilled from our end as and when required. I remain for your positive and genuine response in this regard.

Thanking you.

With Regards,

11/05/18
Dr. Amit Kumar Dutta, Ph.D.
Professor & Head,
School of Biological and Chemical Sciences
Mob: 0771-4078994, 95(Extn- 122)
E-mail: drakdutta@matsuniversity.ac.in





MATS UNIVERSITY

Main Campus - Gullu (Aarang), Raipur - 493 441 CG
Raipur Campus - MATS Tower, Pandri, Raipur - 492 002 CG
Tel: 0771 - 4078995, 4078996 Fax: 0771 - 4078997
E-mail: msbcs@matsuniversity.ac.in, Website: www.matsuniversity.ac.in

Ref. No: MU/MSBCS/Ph.D/2018/73

Date: 17/04/2018

To,
Dr.(Mrs) Bhawana Pandey,
Asst. Professor & Head,
Department of Biotechnology & Microbiology,
Bhilai Mahila Mahavidyalaya,
Sector- 9, Hospital Sector,
Bhilai, Chhattisgarh.

Sub:- Recommendation for One Research Scholar of Microbiology for her Partial Research Work

Respected Madam,

MATS University, Raipur (C.G.) is established under Chhattisgarh Act No. 29 of 2006 [Chhattisgarh Private Universities (Establishment and Operations) (Amendment) Act, 2006]. The University is recognized by UGC under section 2(f) of UGC Act, 1956. School of Biological and Chemical Sciences of the University aims at providing relevant global education in the field of Biotechnology, Microbiology, Biochemistry, Bioinformatics, Chemistry and other allied branches.

Herewith, I would like to inform you that One Research Scholar- Ms. Shristi Sharma is doing her Ph.D Research in Microbiology under the Joint Supervision of Dr. Prabodha Kumar Meher & Dr. Ashish Saraf of our School of Biological and Chemical Sciences, MATS University, Raipur.

S. No.	Name of the Student	Subject	Supervisor Name
1.	Ms. Shrishti Sharma	Ph.D. Microbiology	Dr. Prabodha Kumar Meher Dr. Ashish Saraf

Now, Ms. Shristi wants to carry out her few of the Research Work as Part Time Research Work in your Esteemed Organization towards the partial fulfillment of her **Ph.D (Microbiology)** programme. Therefore, considering the application of the students, I herewith recommend above **One Research Scholar** for the said purpose. The duration of the research work and financial matter shall be as per your consent and approval. After completion of the Research Work, The Above Research Scholar have to submit Consolidated Attendance Report to the under signed duly forwarded by you as it is required for forwarding her thesis. The other official formalities shall be fulfilled from our end as and when required. I remain for your positive and genuine response in this regard.

Thanking you.

With Regards,

17.04.18
Dr. Amit Kumar Dutta, Ph.D
Professor & Head
School of Biological and Chemical Sciences
Mob: 0771-4078994, 95(Extn- 122)
E-mail: drakdutta@matsuniversity.ac.in



Office fax no. ps
 Recd today
 21/10/2020

कार्यालय जिला शिक्षा अधिकारी दुर्ग
 /स्वा-2/ शिक्षण अभ्यास/2021/10517 दुर्ग विभाग
 23 SEP 2021

विषय- मिलाई महिला महाविद्यालय निकलईंगर
 सीएड प्रशिक्षणार्थियों की शाला अनुभव कार्यक्रम हेतु अनुमति प्रदान करने का
 संदर्भ- अध्यास पत्र क्रमांक/362/दिनांक 21/09/2021

संबन्धित राज्य शैक्षणिक अनुसंधान एवं प्रशिक्षण परिषद का कार्य- संशोधन एवं प्रशिक्षण/विभा-विभा/30-7/सीएड/कार्यक्रम/2019-20/362/संबन्धित दिनांक 21/09/2021
 संशोधक सीएड शैक्षणिक अनुसंधान एवं प्रशिक्षण परिषद द्वारा संशोधन कार्यों के 34 वीं
 शिक्षण-विभा/सीएड/2 वीं/2020/2020/संबन्धित दिनांक 21/09/2021 के अन्तर्गत शैक्षणिक प्रशिक्षण
 दिनांक 21 वीं का इलेक्ट्रॉनिक अनुसंधान प्रोग्राम केन्द्र 4 एवं 10 संशोधक के द्वारा प्रेषित किया गया है।
 किंतु वे कार्यक्रम निर्देश की शर्तों सिद्धि अनुसार/हार्डवेयर/हार्डवेयर संशोधक/स्कूलों में शाला दर्जसंख्या के
 अन्तर्गत जहाँ जहाँ 2 संशोधक कार्यवाही एवं अधिकतम चार संशोधक कार्यवाही करने के
 महाविद्यालय में प्रशिक्षण कार्यवाही को शिक्षण अनुभव हेतु निम्नलिखित संशोधक में एमपीईआरटी
 संपूर्ण शाला प्रवेश विदेशों का प्रदान करने हेतु दो सत्रों के लिए अनुसंधान इलेक्ट्रॉनिक प्रोग्राम आवेदन किंतु
 अनुभव हेतु अनुमति प्रदान किया जाता है।

संबन्धित में ध्यान देने की- विद्यालय में कक्षागत पाठ्यक्रम का ही अध्ययन करना चाहिए
 किन्तु विद्यालय में निम्नलिखित पाठ्यक्रम में कोई विन्यास या ही अन्य कार्य को करना नहीं
 करने ही पूर्व संबंधित विद्यालय के अध्यक्ष/प्रधानाचार्य की सहमति प्राप्त करना

क्र.	संशोधक का नाम	क्र.	संशोधक का नाम
1	शाम्भवी संशोधक-8	7	शाला जमाती 11-9
2	शाम्भवी संशोधक-8	8	शाला जमाती 12-9
3	शाम्भवी संशोधक दुर्ग	9	शाला जमाती 13-9
4	शाम्भवी शिक्षक दुर्ग	10	शाला जमाती 14-9
5	शाम्भवी शिक्षक क्र. 2 दुर्ग	11	शाला जमाती 15-9
6	शाम्भवी सुदीपार	12	शाला जमाती सुदीपार

जिला शिक्षा अधिकारी
 दुर्ग

क्रमांक / /स्वा-2/2021/ 10518
 प्रशिक्षण-2

संबन्धित संस्था प्रमुख- श्री रामेश्वर प्रसाद
 तथा अपने संस्था में प्रशिक्षण कार्यक्रम अनुसंधान जिला महाविद्यालय की शाला प्रशिक्षणार्थियों
 को शिक्षण अनुभव हेतु अनुमति कर संशोधक सुनिश्चित करें

copy to - H.O.D - B.Ed
 for information
 n.a. ps
 21/10/2020


जिला शिक्षा अधिकारी
 दुर्ग



CERTIFICATE

This is to certified that the B.Ed. students of Bhilai Mahila Mahavidyalaya, Hospital sector, Bhilai had been completed their practice teaching from our school
Lok Charti Middle School, 3rd, from Date. 06/08/21, to
Date. 06/09/21

Sl. No.	Name of Students	Father's Name
1	Yogita Thakur	Mr. Khuman Thakur
2	Aditi	Mr. Bankelal
3	Simran Kaur	Mr. Nadheer Singh
4	Kavita	Mr. Araiyya
5	Neha Pal	Mr. Ginish Pal
6	Varsha Like	Mr. Jetha Ram Netam
7	Manisha Netam	Mr. Ramji Netam
8	Seema	Mr. Rahas Das
9	Pinki	Mr. Dinesh Kumar Patel
10		


Principal
G.N.E.S.S.S.
SEC-06, BHILAI NAGAR

CERTIFICATE

This is to certified that the B.Ed. students of Bhilai Mahila Mahavidyalaya, Hospital sector, Bhilai had been completed their practice teaching from our school GURUNANAK ENGLISH SENIOR SECONDARY SCHOOL SEC-06, BHILAI NAGAR
from Date. 10/08/21, to Date 25/08/21

S.No.	Name of Students	Father's Name
1	ISHWARI KOSHARE	MR. RAMKISHUN KOSHARE
2	LOVELEEN MANIKPURI	MR. J. D. MANIKPURI
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PRINCIPAL
G.N.E.S.S.S.
SEC-06, BHILAI

25/08/2021

CERTIFICATE

This is to certified that the B.Ed. students of Bhilai Mahila Mahavidyalaya, Hospital sector, Bhilai had been completed their practice teaching from our school. Govt. Boys School, Kurchhari from Date. 6.8.21, to Date. 25.8.21

S.No.	Name of Students	Father's Name
1	Khushbu Mishra	Mr. Jagan Shukla
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[Signature]
Principal
Govt. Boys School (Boys) Kurchhari
Bhilai

CERTIFICATE

This is to certified that the B.Ed. students of Bhilai Mahila Mahavidyalaya, Hospital sector, Bhilai had been completed their practice teaching from our school GOVT. MIDDLE SCHOOL from Date. 10.08.21 to Date. 21.08.21 CHURHARI

Sl. No.	Name of Students	Father's Name
1	VISHARANI	GHANSHYAM BAWEL
2	SOHINI THAKUR	PARSHURAM THAKUR
3		
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[Signature]
Principal
Govt. Middle School (Boys) Kurchhari
Bhilai
21.8.2021


CERTIFICATE

This is to certify that the B.Ed. students of Bhalai Mahila Mahavidyalaya, MUSAIBAI sector,

Bhalai had been completed their practice teaching from our school
Shashika Prax Madhyamik from Date 16/08/2021 to

26/08/2021

SL. No.	Name of Students	Father's Name
1	PREETI DEWANGAN	PRAKASH CHANDRA DEWANGAN
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Head Master
Gov. H.S. Bhalai
Block-Gh. Bhalai (C.O.)