

## M.SC. Forestry& Environmental Sciences IV Sem 2022-23

#### **Forest Management**

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GURU GHASIDAS VISHWAVIDYALAYA, KONI, BILASPUR, CHHATTISGARH

(A CENTRAL UNIVERSITY ESTABLISHED UNDER CENTRAL UNIVERSITY ACT 2009, No.25 OF 2009)

(A CENTRAL UNIVERSITY)

A

Dissertation

On

"A study on the influence of coal mining on the soil's physical, chemical, and biological properties."

#### SUBMITTED FOR THE PARTIAL FULFILLMENT OF THE REQUIREMENT OF

#### THE MASTER'S DEGREE OF SCIENCE IN FORESTRY &

**ENVIRONMENTAL SCIENCES** 

**ACADEMIC SESSION: 2021-2023** 



#### SUBMITTED BY:

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M.SC. FORESTRY & ENVIRONMENTAL SCIENCES IV <sup>th</sup> SEMESTER ROLL NO: 21078102

ENROLLMENT NO: GGV/21/06701

#### **UNDER THE SUPERVISION OF:**

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## **CERTIFICATE**

I have great pleasure in certifying that Mr. Aayush Biswas S/o Mr. Devtosh Biswas is a regular student of M.Sc. Forestry & Environmental Sciences IV<sup>th</sup> semester during the session of 2021-2023 of Department of Forestry, Wildlife and Environmental Sciences. He has completed the dissertation entitled "A study on the influence of coal mining on the soil's physical, chemical, and biological properties" under my guidance. Submitted for partial fulfilment of Degree of Master of Science in Forestry & Environmental Sciences to Department of Forestry, Wildlife and Environmental Sciences.

I wish him all the success in his future academic endeavors.

PROF. S.C. TIWARI

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DEPARTMENT OF FORESTRY, WILDLIFE AND ENVIRONMENTAL SCIENCES

GURU GHASIDAS VISHWAVIDYALAYA

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(A CENTRAL UNIVERSITY ESTABLISHED UNDER CENTRAL UNIVERSITY ACT 2009, No.25 OF 2009)

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A Report

On

"FOREST ATTACHMENT: RAIGARH DIVISION"

## SUBMITTED FOR THE PARTIAL FULFILLMENT OF THE REQUIREMENT OF THE

#### MASTER OF SCIENCE IN FORESTRY & ENVIRONMENTAL SCIENCES

**ACADEMIC SESSION: 2021-2023** 



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I have great pleasure in certifying that Mr. Aayush Biswas S/o Mr. Devtosh Biswas is a regular student of M.Sc. Forestry & Environmental Sciences IV<sup>th</sup> semester during the session of 2021-2023 of Department of Forestry, Wildlife and Environmental Sciences. He has completed the dissertation entitled "FOREST ATTACHMENT TRAINING" in CHHATTISGARH under Forest Department of RAIGARH" under my guidance. Submitted for partial fulfilment of Degree of Master of Science in Forestry & Environmental Sciences, to Department of Forestry, Wildlife and Environmental Sciences.

I wish him all the success in his future academic endeavors.

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(A CENTRAL UNIVERSITY ESTABLISHED UNDER CENTRAL UNIVERSITY ACT 2009, No.25 OF 2009)

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A

Report

"INDUSTRIAL TRAINING AND INSTITUTE VISIT: SERICULTURE AND SILK INDUSTRY"

SUBMITTED FOR THE PARTIAL FULFILLMENT OF THE REQUIREMENT OF THE

MASTER DEGREE OF SCIENCE IN FORESTRY & ENVIRONMENTAL SCIENCES

ACADEMIC SESSION: 2021-2023



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GURU GHASIDAS VISHWAVIDYALAYA

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## गुरू घासीदास विश्वविद्यालय (केन्रीयविश्वविद्यालय अधिनयम 2009 क्र. 25 के अंतर्गत स्वागित केन्नीय विश्वविद्यालय) कोनी, बिलासपुर – 495009 (छ.ग.)



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A

Report

On

"INFORMATION AND COMMUNICATIONS TECHNOLOGY"

## SUBMITTED FOR THE PARTIAL FULFILLMENT OF THE REQUIREMENT OF THE BACHELOR DEGREE OF SCIENCE IN FORESTRY

ACADEMIC SESSION:2021-2023



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I wish him all the success in his future academic endeavors.

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#### DEPARTMENT OF FORESTRY, WILDLIFE AND ENVIRONMENTAL SCIENCES

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(A CENTRAL UNIVERSITY ESTABLISHED UNDER CENTRAL UNIVERSITY ACT 2009, No.25 OF 2009)

## A Study Cost on Nursery Production and Marketing Practices in Bilaspur City, Chhattisgarh

#### DISSERTATION

SUBMITTED FOR THE PARTIAL FULFILLMENT OF THE REQUIREMENT OF THE MASTER DEGREE OF SCIENCE IN FORESTRY AND ENVIRONMENTAL SCIENCES



Academic Session – 2022-23

(Forest Management)

#### **Under the Supervision of:**

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M.Sc. Forestry and Environmental Sciences

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(A central university established under Central Universities Act 2009, No. 25 of 2009)

## **CERTIFICATE**

This is to certify that this report entitled "A Study Cost on Nursery Production and Marketing Practices in Bilaspur City, Chhattisgarh". submitted by Mr. Abhishek Singh in partial fulfilment of the requirement for the award of the degree of Master of Science (Forestry and Environmental Sciences) under Guru Ghasidas Vishwavidyalaya, Bilaspur, Chhattisgarh, is the outcome of an original research work carried out by him under my supervision. The work has been carried out in the Nurseries of Bilaspur City, Chhattisgarh and the results embodied in this report is original and have not been previously submitted either in part or full to any other institution, for the award of any degree or diploma.

I wish him all success in his future endeavors.

Guru Grand Das Universität Guru Grand Das Universität Guru Grand Das Universität

Prof. S.C. Tiwari (Supervisor)

Department of Forestry Wildlife and Environmental Sciences

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Declaration

Acknowledgement

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GURU GHASIDAS VISHWAVIDYALAYA, KONI, BILASPUR, CHHATTISGARH

(A CENTRAL UNIVERSITY ESTABLISHED UNDER CENTRAL UNIVERSITY ACT 2009, No.25 OF 2009)

# An Industrial Training Report On Sericulture and Silk Industry

SUBMITTED FOR THE PARTIAL FULFILLMENT OF THE REQUIREMENT OF THE MASTER DEGREE OF SCIENCE IN FORESTRY AND ENVIRONMENTAL SCIENCES



#### Academic Session - 2022-23

Under the Supervision of:	Submitted By:
Prof. S.C. Tiwari	Abhishek Singh
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## **CERTIFICATE**

This is to certify that the student report entitled "An Industrial Training Report On Sericulture and Silk Industry" is submitted in partial fulfillment of the requirements for the Degree of Master of Science in Forestry, Guru Ghasidas Vishwavidyalaya, Bilaspur (Chhattisgarh). This report is the genuine record of the bonafide work carried out by Mr. Abhishek Singh under my supervision and guidance. His work was appreciable and satisfactory.

I wish him all the success in his future academic endeavors.

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(Supervisor)

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(A CENTRAL UNIVERSITY ESTABLISHED UNDER CENTRAL UNIVERSITY ACT 2009, No.25 OF 2009)

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GURU GHASIDAS VISHWAVIDYALAYA, KONI, BILASPUR, CHHATTISGARH

(A CENTRAL UNIVERSITY ESTABLISHED UNDER CENTRAL UNIVERSITY ACT 2009, No.25 OF 2009)

# A Report on Forest Attachment at Korba Forest Division, Chhattisgarh

SUBMITTED FOR THE PARTIAL FULFILLMENT OF THE REQUIREMENT OF THE MASTER DEGREE OF SCIENCE IN FORESTRY AND ENVIRONMENTAL SCIENCES



Academic Session - 2022-23

Under the Supervision of:	Submitted By:	
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Vishwavidyalaya, Bilaspur (C.G.)	Roll No. 21078103	
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(A CENTRAL UNIVERSITY ESTABLISHED UNDER CENTRAL UNIVERSITY ACT 2009, No.25 OF 2009)



## Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G.)

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## CERTIFICATE

This is to certify that Mr. Abhishek Singh, the student of M.Sc. Forestry & Environmental Sciences at the Department of Forestry, Wildlife and Environmental Science, Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G), has successfully completed the Forest Attachment Training in the Korba Forest Division under the supervision of Prof. S.C. Tiwari, Department of Forestry, Wildlife and Environmental Sciences, and Mr. Aravind PM, Divisional Forest Officer (D.F.O), Korba Forest Division.

During the attachment, Mr Abhishek Singh actively participated in various forestry and environmental conservation activities, gaining practical insights and hands-on experience in the field. His dedication, enthusiasm, and commitment to learning have been commendable.

We acknowledge his efforts and contribution to the conservation and sustainable management of forests during the period of attachment.

Seatment of Forester

(Supervisor)

Department of Forestry Wildlife and Environmental Sciences Guru Ghasidas Vishwavidyalaya,

Bilaspur (C.G.)



### Guru Ghasidas Vishwavidyalaya (A Central University Established by the Central Universities Act 2009 No. 25 of 2009) Koni, Bilaspur – 495009 (C.G.)

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(A CENTRAL UNIVERSITY ESTABLISHED UNDER CENTRAL UNIVERSITY ACT 2009, No.25 OF 2009)

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GURU GHASIDAS VISHWAVIDYALAYA, KONI, BILASPUR, CHHATTISGARH

(A CENTRAL UNIVERSITY ESTABLISHED UNDER CENTRAL UNIVERSITY ACT 2009, No.25 OF 2009)

## A Report on Information And Communication Technology (ICT) Training

SUBMITTED FOR THE PARTIAL FULFILLMENT OF THE REQUIREMENT OF THE MASTER DEGREE OF SCIENCE IN FORESTRY AND ENVIRONMENTAL SCIENCES



Academic Session - 2022-23

#### Under the Supervision of:

#### Submitted By:

## Prof. S.C. Tiwari

Department of Forestry, Wildlife & Environmental Sciences, Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G.)

## **Abhishek Singh**

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(4th Semester)

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This is to certify that the student report entitled "Information And Communication Technology (ICT) Training" submitted in partial fulfillment of the requirements for the Degree of Master of Science in Forestry to the Department of Forestry, Wildlife & Environmental Sciences, Guru Ghasidas Vishwavidyalaya, Bilaspur (Chhattisgarh). This report is the genuine record of the bonafide work carried out by Mr. Abhishek Singh under my supervision and guidance. His work was appreciable and satisfactory.

I wish him all the success in his future academic endeavors.

Guru Gheel Das University
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## "COMPARATIVE STUDY OF SOIL ORGANIC CARBON UNDER DIFFERENT TREE SPECIES"



#### A DISSERTATION SUBMITTED

TO

#### PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE

## DEGREE OF MASTER OF SCIENCE IN FORESTRY AND ENVIRONMENTAL SCIENCES (FOREST **MANAGEMENT**)

BY

#### AISHWARYA CHANDRA

Enrollment No: GGV/17/6012

Batch: 2021-23

UNDER THE SUPERVISION OF

**Prof S.C. TIWARI** 

DEPARTMENT OF FORESTRY WILDLIFE AND ENVIRONMENTAL SCIENCES

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I wish him all the success in his academics.

Professor & Supposison

Depant Forestry,"

Wildlife and Environmental Sciences

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#### FIELD TRAINING (ATTATCHMENT WITH STATE FOREST DEPARTMENT)



#### A REPORT SUBMITTED

TO

#### PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE

# DEGREE OF MASTER OF SCIENCE IN FORESTRY AND ENVIRONMENTAL SCIENCES

(FOREST MANAGEMENT)

BY AISHWARYA CHANDRA

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#### INDUSTRIAL TRAINING



#### A REPORT SUBMITTED

TO

#### PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE

# DEGREE OF MASTER OF SCIENCE IN FORESTRY AND ENVIRONMENTAL SCIENCES

(FOREST MANAGEMENT)

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CHAPTER	TOPIC
1.	MUSHROOM CULTIVATION TRAINING
2.	VERMICOMPOST
3.	APICULTURE
4.	PHOTO PLATES
5.	CONCLUSION AND REFERENCES



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(A CENTRAL UNIVERSITY ESTABLISHED UNDER CENTRAL UNIVERSITY ACT 2009, No.25 OF 2009)

(A CENTRAL UNIVERSITY)

A

**Dissertation** 

On

"Estimation of soil organic carbon level in organic farming & Conventional Agriculture farming system."

#### SUBMITTED FOR THE PARTIAL FULFILLMENT OF THE REQUIREMENT OF

#### THE MASTER'S DEGREE OF SCIENCE IN FORESTRY &

**ENVIRONMENTAL SCIENCES** 

**ACADEMIC SESSION: 2021-2023** 



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#### गुरू घासीदास विश्वविद्यालय (केन्रीय विश्वविद्यालय अधिनयम 2009 क्र. 25 के अंतर्गत स्वागित केन्रीय विश्वविद्यालय) कोनी, बिलासपुर - 495009 (छ.ग.)



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(A CENTRAL UNIVERSITY ESTABLISHED UNDER CENTRAL UNIVERSITY ACT 2009, No.25 OF 2009)

(A CENTRAL UNIVERSITY)

A Report

0n

"FOREST ATTACHMENT: RAIGARH DIVISION"

#### SUBMITTED FOR THE PARTIAL FULFILLMENT OF THE REQUIREMENT OF THE

#### MASTER OF SCIENCE IN FORESTRY & ENVIRONMENTAL SCIENCES

**ACADEMIC SESSION: 2021-2023** 



SUBMITTED BY: AJAY KUMAR PATEL

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I wish him all the success in his future academic endeavors.

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DEAN OF THE DEPARTMENT

DEPARTMENT OF FORESTRY, WILDLIFE AND ENVIRONMENTAL SCIENCES



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A

Report On

"INDUSTRIAL TRAINING AND INSTITUTE VISIT: SERICULTURE AND SILK INDUSTRY"

SUBMITTED FOR THE PARTIAL FULFILLMENT OF THE REQUIREMENT OF THE

MASTER DEGREE OF SCIENCE IN FORESTRY & ENVIRONMENTAL SCIENCES

**ACADEMIC SESSION:2021-2023** 



SUBMITTED BY: AJAY KUMAR PATEL

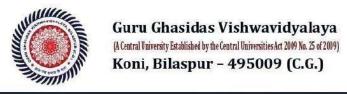
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PROF. S.C. TIWARI

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**ENVIRONMENTAL SCIENCES** 

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#### गुरू घासीदास विश्वविद्यालय (क्रेन्नीय विस्वविद्यालय अधिनयम 2009 क्र. 25 के अंतर्षत स्वागित केन्नीय विस्वविद्यालय) कोनी, बिलासपुर - 495009 (छ.ग.)



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#### Koni, Bilaspur - 495009 (C.G.)

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(A CENTRAL UNIVERSITY ESTABLISHED UNDER CENTRAL UNIVERSITY ACT 2009, No.25 OF 2009)

(A CENTRAL UNIVERSITY)

A

Report

On

"INFORMATION AND COMMUNICATIONS TECHNOLOGY"

## SUBMITTED FOR THE PARTIAL FULFILLMENT OF THE REQUIREMENT OF THE BACHELOR DEGREE OF SCIENCE IN FORESTRY

**ACADEMIC SESSION: 2021-2023** 



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(A CENTRAL UNIVERSITY ESTABLISHED UNDER CENTRAL UNIVERSITY ACT 2009, No.25 OF 2009)

S.No.	Title
1.	Computer Fundamentals
	Introduction to computer
	and History
2.	Microsoft office
3.	Computer science in
	natural Resources
4.	Computer Fundamental
5.	Introduction of Java and
	its application
6.	Role of RS and GIS in Forest
	conservation and
	management
7.	Learning outcomes
8.	Chat GPT

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(A Central University Established Under Central University Act 2009, No. 25 of 2009)

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A

**Dissertation** 

On

"Study of Plant species composition & Human population density in urban parks present in Bilaspur City"

# SUBMITTED FOR THE PARTIAL FULFILLMENT OF THE REQUIREMENT OF THE MASTER DEGREE OF SCIENCE IN FORESTRY, WILDLIFE AND ENVIRONMENTAL SCIENCE

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DEPARTMENT OF FORESTRY, WILDLIFE & ENVIRONMENTAL SCIENCES

GGV, BILASPUR, C.G



## DEPARTMENT OF FORESTRY, WILDLIFE AND ENVIRONMENTAL SCIENCES GURU GHASIDAS VISHWAVIDYALAYA, KONI, BILASPUR (C.G)-495009

(A Central University Established Under Central University Act 2009, No. 25 of 2009)



#### CERTIFICATE

This is to certify that Miss. Alin Xalxo D/o Mr. Kishor Xalxo is a regular student of M.Sc. Forestry and Environmental Sciences 4<sup>th</sup> Semester during the session of 2021-2023 of Department of Forestry, Wildlife and Environmental Sciences, GGV, Bilaspur. She has completed dissertation project under my supervision from Bilaspur division on entitled, "Study of Plant species composition and Human population density in urban parks present in Bilaspur city" under my guidance.

I wish her all success in her future academic Endeavour's.

Signature of the Guide

PROF. K. K CHANDRA

**PROFESSOR** 

DEPARTMENT OF FORESTRY, WILDLIFE & ENVIRONMENTAL SCIENCES





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GURU GHASIDAS VISHWAVIDYALAYA, KONI, BILASPUR (C.G)-495009

(A Central University Established Under Central University Act 2009, No. 25 of 2009)

(A CENTRAL UNIVERSITY)

A

Report

On

"FOREST ATTACHMENT: KORBA DIVISION"

## SUBMITTED FOR THE PARTIAL FULFILLMENT OF THE REQUIREMENT OF THE MASTER DEGREE OF SCIENCE IN FORESTRY, WILDLIFE AND ENVIRONMENTAL SCIENCE

**ACADEMIC SESSION: 2021-23** 



#### **SUBMITTED BY:**

**ALIN XALXO** 

M.SC. FORESTRY, WILDLIFE & ENVIRONMENTAL SCIENCES

IV<sup>th</sup> SEMESTER

ROLL NO: 21078106

ENROLLMENTNO: GGV/17/6015

**UNDER THE SUPERVISION OF:** 

PROF. K. K CHANDRA

**PROFESSOR** 

DEPARTMENT OF FORESTRY, WILDLIFE & ENVIRONMENTAL SCIENCES

GGV, BILASPUR, C.G





### DEPARTMENT OF FORESTRY, WILDLIFE AND ENVIRONMENTAL SCIENCES

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I wish her all success in her future academic Endeavour's

Signature of the Guide

11/8/223

PROF. K. K CHANDRA

**PROFESSOR** 

DEPARTMENT OF FORESTRY, WILDLIFE & ENVIRONMENTAL SCIENCES



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#### गुरू घासीदास विश्वविद्यालय (केन्रीय विस्वविद्यालय अधिनयम 2009 क्र. 25 के अंतर्गत स्वागित केन्नीय विस्वविद्यालय) कोनी, बिलासपुर - 495009 (छ.ग.)



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(A Central University Established Under Central University Act 2009, No. 25 of 2009)

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A

Report

On

"FOREST BASED INDUSTRIAL TRAINING IN SERICULTURE"

# SUBMITTED FOR THE PARTIAL FULFILLMENT OF THE REQUIREMENT OF THE MASTER DEGREE OF SCIENCE IN FORESTRY, WILDLIFE AND ENVIRONMENTAL SCIENCE

**ACADEMIC SESSION: 2021-23** 



#### **SUBMITTED BY:**

**ALIN XALXO** 

M.SC. FORESTRY, WILDLIFE & ENVIRONMENTAL SCIENCES

IV<sup>th</sup> SEMESTER

ROLL NO: 21078106

ENROLLMENTNO: GGV/17/6015

#### **UNDER THE SUPERVISION OF:**

PROF. K. K CHANDRA

**PROFESSOR** 

DEPARTMENT OF FORESTRY, WILDLIFE & ENVIRONMENTAL SCIENCES

GGV, BILASPUR, C.G

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I wish her all success in her future academic Endeavour's

Signature of the Guide

PROF. K. K CHANDRA

**PROFESSOR** 

DEPARTMENT OF FORESTRY, WILDLIFE & ENVIRONMENTAL SCIENCES



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(A Central University Established Under Central University Act 2009, No. 25 of 2009)

(A CENTRAL UNIVERSITY)

A

Report

On

"ICT TOOLS AND TECHNIQUES APPLICATION IN FORESTRY"

# SUBMITTED FOR THE PARTIAL FULFILLMENT OF THE REQUIREMENT OF THE MASTER DEGREE OF SCIENCE IN FORESTRY, WILDLIFE AND ENVIRONMENTAL SCIENCE

**ACADEMIC SESSION: 2021-23** 



#### **SUBMITTED BY:**

**ALIN XALXO** 

M.SC. FORESTRY, WILDLIFE & ENVIRONMENTAL SCIENCES

IVth SEMESTER

ROLL NO: 21078106

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#### **UNDER THE SUPERVISION OF:**

PROF. K. K CHANDRA

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DEPARTMENT OF FORESTRY, WILDLIFE & ENVIRONMENTAL SCIENCES

GGV, BILASPUR, C.G

## DEPARTMENT OF FORESTRY, WILDLIFE AND ENVIRONMENTAL SCIENCES GURU GHASIDAS VISHWAVIDYALAYA, KONI, BILASPUR (C.G)-495009

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I wish her all success in her future academic Endeavour's.

Signature of the Guide

PROF. K. K CHANDRA

**PROFESSOR** 

DEPARTMENT OF FORESTRY, WILDLIFE & ENVIRONMENTAL SCIENCES



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#### Koni, Bilaspur - 495009 (C.G.)

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#### DISSERTATION

On

Potential of sericulture for Gender development: A case study of Bilaspur, Chhattisgarh, India



Submitted For the Partial Fulfillment of the Requirement for the Master Degree of Science in Forestry and Environmental Science

(Academic Session - 2022-23)

(Forest Management)

Under Guidance: Submitted by:

Prof. K.K Chandra Ankit Kumar

Head of Department GGV/21/6703

(Department of Forestry, Wildlife & Environmental Science) M.Sc-4<sup>th</sup> semester

(Department of Forestry, Wildlife & Environmental Science)

GURU GHASIDAS VISHWAVIDYLAYA BILASPUR (C.G.)

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#### Guru Ghasidas Vishwavidyalaya

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Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G.)



(A central University established under Central Universities Act 2009, No. 25 of 2009)

#### CERTIFICATE

This is to certify that this report entitled "Potential of sericulture for gender development: A case study of Bilaspur, Chhattisgarh India". Submitted by Mr. Ankit Kumar in partial fulfillment of the requirement for the award of the degree of Master of Science in (Forestry and Environmental Science) under Guru Ghasidas Vishavidyalaya Bilaspur Chhattisgarh, is the outcome of an original research work carried out by her under my supervision. The work has been carried out in Department of Forestry & Environmental Sciences and the results embodied in this report is original and have not been previously submitted either in part or full to any other institution, for the award of any degree or diploma.

I wish him all success in his future endeavors.

Supervisor

Prof. K.K Chandra (Head of Department) Forestry, Wildlife and Environmental Science Guru Ghasidas Vishwavidyalaya,

Guru Gheel Des University BILASPUR (M.P.) 4950

- Bilaspur



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Koni, Bilaspur - 495009 (C.G.)

Report

On

Attachment with state Forest Department for analysis of Forest Management & Management Techniques



Submitted For the Partial Fulfillment of the Requirement for the Master Degree of Science in Forestry and Environmental Sciences

(Academic Session – 2021-23)

(Forest Management)

\_\_\_\_\_

Under guidance: Submitted by:

Prof. K.K Chandra Ankit Kumar

Head of Department GGV/21/6703

(Department of Forestry, Wildlife & Environmental Science) M.Sc-4<sup>th</sup> semester

(Department of Forestry, Wildlife & Environmental Sciences)

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#### Guru Ghasidas Vishwavidyalaya (A Central University Established by the Central Universities Act 2009 No. 25 of 2009)

Koni, Bilaspur - 495009 (C.G.)

Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G.)

A central university established under Central Universities Act 2009. No. 25 of 2009)



#### CERTIFICATE

This is to certify that this report entitled "Attachment with state Forest Department for analysis of Forest Management & Management Techniques" Submitted by Mr. Ankit Kumar in partial fulfillment of the requirement for the award of the degree of Master of Science in (Forestry and Environmental Sciences) under Guru Ghasidas Vishavidyalaya Bilaspur Chhattisgarh, is the outcome of an original research work carried out by her under my supervision. The work has been carried out in Department of Forestry & Environmental Sciences and the results embodied in this report is original and have not been previously submitted either in part or full to any other institution, for the award of any degree or diploma.

I wish him all success in his future endeavors

(Supervisor)

Prof. K. K. Chandra (Head of Department) Forestry Wildlife and Environmental Science Guru Ghasidas Vishwavidyalaya, Bilaspur C.G.



#### Guru Ghasidas Vishwavidyalaya (A Central University Established by the Central Universities Act 2019 No. 25 of 2009)

Koni, Bilaspur - 495009 (C.G.)

#### Report

On

#### Computational skill & Information and Communications Technology (ICT)



Submitted For the Partial Fulfillment of the Requirement for the Master Degree of Science in Forestry and Environmental Science

(Academic Session – 2022-23)

(Forest Management)

Under Guidance: Submitted by:

Prof. K.K Chandra Ankit Kumar

Head of Department GGV/21/6703

(Department of Forestry, Wildlife & Environmental Science) M.Sc-4<sup>th</sup> semester

(Department of Forestry, Wildlife & Environmental Science)

GURU GHASIDAS VISHWAVIDYLAYA BILASPUR (C.G.)

(A Central University Established Under Central University Act 2009, No.25 of 2009)

#### Guru Ghasidas Vishwavidyalaya (A Central University Established by the Central Universities Act 2009 No. 25 of 2009) Koni, Bilaspur – 495009 (C.G.)

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#### CERTIFICATE

This is to certify that this report entitled "Computational skill & Information and communications technology(ICT)". Submitted by Mr. Ankit Kumar in partial fulfillment of the requirement for the award of the degree of Master of Science in (Forestry and Environmental Science) under Guru Ghasidas Vishavidyalaya Bilaspur Chhattisgarh, is the outcome of an original research work carried out by her under my supervision. The work has been carried out in Department of Forestry & Environmental Sciences and the results embodied in this report is original and have not been previously submitted either in part or full to any other institution, for the award of any degree or diploma.

I wish him all success in his future endeavors.

Supervisor

Prof. K.K. Chandra (Head of Department) Forestry, Wildlife and Environmental Science Guru Ghasidas Vishwayidyalaya.

Guru Ghasi Das University

BILASPIN - 4 500



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#### CERTIFICATE

This is to certify that this report entitled "Industrial Attachment Report". Submitted by Mr. Ankit Kumar in partial fulfillment of the requirement for the award of the degree of Master of Science in (Forestry and Environmental Science) under Guru Ghasidas Vishavidyalaya Bilaspur Chhattisgarh, is the outcome of an original research work carried out by her under my supervision. The work has been carried out in Department of Forestry & Environmental Sciences and the results embodied in this report is original and have not been previously submitted either in part or full to any other institution, for the award of any degree or diploma.

I wish him all success in his future endeavors.

(Supervisor)

Prof. K.K. Chandra (Head of Department) Forestry Wildlife and Environmental Science Guru Ghasidas

Vishwavidyalaya, Bilaspur

Bepartment of Forestry Guru Ghasi Das University

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(A Central University Established by the Central Universities Act 2009 No. 25 of 2009)

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#### Report

On

#### **Industrial Attachment**



Submitted For the Partial Fulfillment Of The Requirement For The Master Degree Of Science In Forestry And Environmental Science

(Academic Session - 2022-23)

(Forest Management)

Under guidance: Submitted by:

Prof. K.K Chandra Ankit Kumar

Head of Department GGV/21/6703

(Department of Forestry, Wildlife & Environmental Science) M.sc-4<sup>th</sup> semester

DEPARTMENT OF FORESTRY, WILDLIFE & ENVIRONMENTAL SCIENCE,
GURU GHASIDAS VISHWAVIDYLAYA BILASPUR (C.G.)



#### Guru Ghasidas Vishwavidyalaya (A Central University Established by the Central Universities Act 2019 No. 25 of 2009) Koni, Bilaspur – 495009 (C.G.)

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#### Guru Ghasidas Vishwavidyalaya (A Central University Established by the Central Universities Act 2009 No. 25 of 2009) Koni, Bilaspur – 495009 (C.G.)

## CULTIVATION AND MARKETING OF LAC IN KANKER DISTRICT OF CHHATTISGARH



## **THESIS**

SUBMITED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF

M.Sc. IN FORESTRY AND ENVIRONMENTAL SCIENCES

Supervisor

Prof. K.K Chandra

Submitted by

Ayushi Pandey

Roll no. 21078109

Enrollment no. GGV/21/06705

DEPARTMENT OF FORESTRY, WILDLIFE AND ENVIRONMENTAL SCIENCES

GURU GHASIDAS VISHWAVIDYALAYA

BILASPUR-495009

(CHHATTISGARH)

#### Guru Ghasidas Vishwavidyalaya (A Central University Established by the Central Universities Act 2009 No. 25 of 2009)

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## CERTIFICATE -I

This is to certify that the thesis entitled "CULTIVATION AND MARKETING OF LAC IN KANKER DISTRICT OF CHHATTISGARH". Submitted in fulfilment of the requirements of the degree of MASTER OF SCIENCE in Forestry and Environmental Sciences of Guru Ghasidas Vishwavidyalaya, Bilaspur is a record of the bonafide research work carried out by Ms. Ayushi Pandey under my guidance and supervision. The subject of the thesis has been approved by the Student's Advisory Committee and the Director of Instructions.

All the assistance and help received during the course of the investigation has been acknowledged by her.

Place: Bilaspur

Date:

PROF.K. K CHANDRA

Supervisor

Bepartment of Forestry

Guru Ghasi Das University

BILAS PIJA \*\*\* - A\* F/K.



#### Guru Ghasidas Vishwavidyalaya (A Central University Established by the Central Universities Act 2009 No. 25 of 2009)

Koni, Bilaspur - 495009 (C.G.)

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Koni, Bilaspur - 495009 (C.G.)

# A REPORT ON FOREST BASED INDUSTRIAL TRAINING

SUBMITTED FOR THE PARTIAL FULTILLMENT OF THE REQUIREMENT OF THE MASTER DEGREE OF SCIENCE IN FORESTRY AND ENVIRONMENTAL SCIENCES



Academic Session – 2022-23 (Forest Management)

#### Under the Supervision of:

#### Submitted By:

#### Prof. K.K Chandra

Head of the Department of Forestry, Wildlife & Environmental Sciences Guru Ghasidas Vishwavidyalaya Bilaspur Chhattisgarh

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Koni, Bilaspur - 495009 (C.G.)

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I have great pleasure in certifying that Mrs. Ayushi Pandey D/o Awadhesh Pandey is a regular student of M.Sc. Forestry IV Semester(FM) during the session of 2022-23 of Department of Forestry, Wildlife and Environmental Sciences, GGU, Bilaspur. She has completed this training entitled "Forest Based Industrial Training" during this semester under my guidance.

I wish him all the success in his academics.

Prof. K.K Chandra Head of Department

Department of Forestry, wildlife And Environmental sciences

> Department of Forestry Guru Ghesi Das University

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#### Guru Ghasidas Vishwavidyalaya (A Central University Established by the Central Universities Act 2009 No. 25 of 2009)

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# DEPARTMENT OF FORESTRY, WILDLIFE & ENVIRONMENTAL SCIENCES GURU GHASIDAS VISHWAVIDYALAYA BILASPUR (C.G.)

(A central university established under Central Universities Act 2009, No. 25 of 2009

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## ATTACHMENT WITH STATE FOREST DEPARTMENT, BILASPUR FOREST CIRCLE

(Session: 2022-23)



## SUBMITTED FOR PARTIAL FULFILMENT FOR THE REQUIREMENT OF MASTER DEGREE OF SCIENCE IN FORESTRY AND ENVIRONMENTAL SCIENCES

#### SUBMITTED TO:

Prof.K.K. Chandra
Head of Department
Dept. of Forestry
Wildlife and Environmental
Sciences

#### SUBMITTED BY:

Ayushi Pandey
M.Sc. Forestry, Wildlife and
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IV Semester (F.M.)
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## CERTIFICATE



I have great pleasure in certifying that Mrs. Ayushi Pandey D/o Awadhesh Pandey is a regular student of M.Sc. Forestry IV Semester(FM) during the session of 2022-23 of Department of Forestry, Wildlife and Environmental Sciences, GGU, Bilaspur. She has completed this training entitled "Attachment with State Forest Department" during this semester under my guidance.

I wish him all the success in his academics.

Prof. K.K Chandral Head of Department Department of Forestry, wildlife And Environmental sciences

> Bepartment of Foresty Guru Gheel Das University BILASPUR (M ?) 49506.



#### Guru Ghasidas Vishwavidyalaya (A Central University Established by the Central Universities Act 2009 No. 25 of 2009) Koni, Bilaspur – 495009 (C.G.)

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# REPORT ON ICT TOOLS AND TECHNIQUES APPLICATIONS IN FORESTRY

(Session: 2022-23)



## SUBMITTED FOR PARTIAL FULFILMENT FOR THE REQUIREMENT OF MASTER DEGREE OF SCIENCE IN FORESTRY AND ENVIRONMENTAL SCIENCES

#### SUBMITTED TO:

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Head of Department
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#### CERTIFICATE



I have great pleasure in certifying that Miss. Ayushi Pandey D/o Awadhesh Pandey is a regular student of M.Sc. Forestry IV (FM) Semester during the session of 2022-23 of Department of Forestry, Wildlife and Environmental Sciences, GGU, Bilaspur. She has completed "ICT Tool and Techniques Applications in Forestry- during this semester under my guidance.

I wish him all the success in his academics.

Prof. K.K Chandra

Head of Department Dept. of Forestry, Wildlife And Environmental Sciences GGU, Bilaspur

Separtment of Forestry Guru Ghosi Des University RILASPUR (M.P.) 49505

#### गुरू घासीदास विश्वविद्यालय केन्रीयविस्तविद्यालय अधिनय 2008 क्र. 25 के अंतर्गत स्वापित केन्रीय विश्वविद्यालय) कोनी, बिलासपुर - 495009 (छ.ग.)



#### Guru Ghasidas Vishwavidyalaya (A Central University Established by the Central Universities Act 2009 No. 25 of 2009) Koni, Bilaspur – 495009 (C.G.)

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#### "STUDY ON DIFFERENT VARITS OF TREE SPECIES"



#### A DISSERTATION SUBMITTED

TO

#### PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE

## DEGREE OF MASTER OF SCIENCE IN FORESTRY AND ENVIRONMENTAL SCIENCES (FOREST **MANAGEMENT**)

 $\mathbf{BY}$ 

**Dushyant Kumar Sahu** 

Enrollment No: GGV/17/6031

Batch: 2021-23

UNDER THE SUPERVISION OF

Dr. GARIMA TIWARI

**Assistant Professor** 

DEPARTMENT OF FORESTRY WILDLIFE AND ENVIRONMENTAL SCIENCES

SCHOOL OF NATURAL RESOURCES

# DEPARTMENT OF FORESTRY, WILDLIFE & ENVIRONMENTAL SCIENCE { ICFRE A++ }



This is to certify that **Mr. DHUSHYANT KUMAR SAHU** bearing Enrolment number GGV/21/06709 of M.Sc. Forestry IV semester, Department of Forestry, Wildlife and Environmental Sciences.

GGV, Bilaspur, has completed his Dissertation entitled "STUDY ON

**DIFFERENT VARITS OF TREE SPECIES**" under my guidance.

I wish her all the success in her future academic endeavours.

PLACE: - BILASPUR, C.G

havinuz

**Supervisor** 

Dr. GARIMA TIWARI

(Assistant professor, Department of Forestry, Wildlife and Environmental Science)

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#### FIELD TRAINING (ATTATCHMENT WITH STATE FOREST DEPARTMENT)



#### A REPORT SUBMITTED

TO

#### PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE

## DEGREE OF MASTER OF SCIENCE IN FORESTRY AND ENVIRONMENTAL SCIENCES

(FOREST MANAGEMENT)

BY

**Dushyant Kumar Sahu** 

Enrollment No: GGV/17/6031

Batch: 2021-23

UNDER THE SUPERVISION OF Dr. GARIMA TIWARI

**Assistant Professor** 

DEPARTMENT OF FORESTRY, WILDLIFE AND ENVIRONMENTAL SCIENCES

SCHOOL OF NATURAL RESOURCES

#### DEPARTMENT OF FORESTRY, WILDLIFE & ENVIRONMENTAL SCIENCE

{ ICFRE A++ }



This is certified that **Mr. DHUSHYANT KUMAR SAHU**, the student of M.Sc. Forestry & Environmental Science at the Department of Forestry, Wildlife and Environmental Science, Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G), has successfully completed the Forest Attachment Training in Bilaspur Forest Division under the supervision of **Dr. Garima Tiwari**, Department of Forestry, Wildlife and Environmental Sciences.

During the attachment, Mr, DHUSHYANT KUMAR SAHU actively participated in various forestry and environmental conservation activities, gaining practical insights and hands-on experience in the field. His dedication, enthusiasm, and commitment to learning have been commendable.

We acknowledge his efforts and contribution to the conservation and sustainable management of Forests during the period of attachment.

Supervisor

Dr. Garima Tiwari

(Assistant professor, Department of Forestry, Wildlife and Environmental Science)

PLACE: - BILASPUR, C.G



#### Guru Ghasidas Vishwavidyalaya (ACentral University Established by the Central Universities Art 2009 No. 25 of 2009) Koni, Bilaspur – 495009 (C.G.)

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#### INDUSTRIAL TRAINING



#### A REPORT SUBMITTED

TO

#### PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE

## DEGREE OF MASTER OF SCIENCE IN FORESTRY AND ENVIRONMENTAL SCIENCES

(FOREST MANAGEMENT)

BY

**Dushyant Kumar Sahu** 

Enrollment No: GGV/17/6031

Batch: 2021-23

UNDER THE SUPERVISION OF

Dr. GARIMA TIWARI

**Assistant Professor** 

DEPARTMENT OF FORESTRY, WILDLIFE AND ENVIRONMENTAL SCIENCES

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PLACE: - BILASPUR, C.G

#### DEPARTMENT OF FORESTRY, WILDLIFE & ENVIRONMENTAL SCIENCE

{ ICFRE A++ }



#### CERTIFICATE

I have great pleasure in certifying that **Mr. DHUSHYANT KUMAR SAHU** is a regular student of M.Sc. Forestry 4<sup>th</sup> semester during the season of 2022-23 of Department of Forestry, Wildlife and Environmental Sciences. He has completed this report "**REPORT ON INDUSTRIAL TRAINING**". During this semester under my guidance. I wish her all the success in her academics.

**Supervisor** 

Dr. Garima Tiwari

(Assistant professor, Department of Forestry, Wildlife and Environmental Science)

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4.	PHOTO PLATES
5.	CONCLUSION AND REFERENCES





Guru Ghasidas Vishwavidyalaya (A Central University Established by the Central Universities Act 2009 No. 25 of 2009) Koni, Bilaspur – 495009 (C.G.)

## DEPARTMENT OF FORESTRY, WILDLIFE AND ENVIRONMENTAL SCIENCES

GURU GHASIDAS VISHWAVIDYALAYA, KONI, BILASPUR, CHHATTISGARH

(A CENTRAL UNIVERSITY ESTABLISHED UNDER CENTRAL UNIVERSITY ACT 2009, No.25 OF 2009)

(A CENTRAL. UNIVERSITY)

A

Dissertation

On

## "ROLE OF JFMC IN ENHANCING ECOTOURISM SITE" ( STUDY FROM KATGHORA-

- FOREST DIVISION)

#### SUBMITTED FOR THE PARTIAL FULFILLMENT OF THE REQUIREMENT OF

#### THE MASTER'S DEGREE OF SCIENCE IN FORESTRY &

ENVIRONMENTAL SCIENCE

ACADEMIC SESSION:2021-2023



SUBMITTED BY: DINESH MANHARE

M.Sc. FORESTRY &

ENVIRONMENTAL SCIENCE IVth

SEMESTER

ROLL NO: 21078111

ENROLLMENT NO.: GGV/21/06707

UNDER THE SUPERVISION Dr.GARIMA TIWARI

(ASSISTANT PROFESSOR)
Department of forestry and
environmental science



Guru Ghasidas Vishwavidyalaya (A Cestral University Established by the Central Universities Act 2009 No. 25 of 2009) Koni, Bilaspur – 495009 (C.G.)



#### CERTIFICATE

I have great pleasure in certifying that Mr DINESH MANHARE D/O AMARNATH MANHARE is a regular student of M.Sc. Forestry 4th Semester during the session of 2021-23 of Department of Forestry, Wildlife and Environmental Sciences. He has completed this student project entitled "ROLE OF JFMC IN ENHANCING ECOTOURISM SITE" (STUDY FROM KATGHORA FOREST DIVISION)." during this semester under my guidance. I wish him all the success in his academics.

Dr.GARIMA TIWARI

ASSISTANT PROFESSOR,

DEPARTMENT OF FORESTRY,

WILDLIFE AND ENVIRONMENTAL SCIENCES

GURU GHASIDAS VISHWAVIDYALAY

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#### Guru Ghasidas Vishwavidyalaya (&Central University Established by the Central Universities Act 2009 No. 25 of 2009) Koni, Bilaspur – 495009 (C.G.)

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GURU GHASIDAS VISHWAVIDYALAYA, KONI, BILASPUR, CHHATTISGARH

(A CENTRAL UNIVERSITY ESTABLISHED UNDER CENTRAL UNIVERSITY ACT 2009, No.25 OF 2009)

(A CENTRAL UNIVERSITY)

A

Report

On

"FOREST ATTACHMENT: "BALODABAZAR DIVISION"

#### SUBMITTED FOR THE PARTIAL FULFILLMENT OF THE REQUIREMENT OF

THE MASTER'S DEGREE OF SCIENCE IN FORESTRY &

ENVIRONMENTAL SCIENCE

ACADEMIC SESSION :2021-2023



SUBMITTED BY: DINESH MANHARE

M.Sc. FORESTRY &

**ENVIRONMENTAL SCIENCE IV<sup>th</sup>** 

SEMESTER

ROLL NO: 21078111

ENROLLMENT NO.: GGV/21/06707

UNDER THE SUPERVISION OF:

Dr.GARIMA TIWARI

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OF DEPARTMENT OF FORESTRY, WILDLIFE AND ENVIRONMENTAL SCIENCES

GGV, BILASPUR, C.G.





#### DEPARTMENT OF FORESTRY, WILDLIFE AND ENVIRONMENTAL SCIENCES

GURU GHASIDAS VISHWAVIDYALAYA, KONI, BILASPUR, CHHATTISGARH

(A CENTRAL UNIVERSITY ESTABLISHED UNDER CENTRAL UNIVERSITY ACT 2009, No.25 OF 2009)



#### CERTIFICATE

I have great pleasure in certifying that Mr. DINESH MANHARE D/O Mr. AMARNATH MANHARE is a regular student of M.Sc. Forestry 4th Semester (FM) during the session of 2021-23 of Department of Forestry, Wildlife and

Environmental Sciences. She has completed this student project entitled "Attachment with Sate Forest Department" during this semester under my guidance. I wish him all the success in his academics.

## Dr.Garima tiwari

ASSISTANT PROFESSOR,

DEPARTMENT OF FORESTRY,

WILDLIFE AND ENVIRONMENTAL SCIENCES

GURU GHASIDAS VISHWAVIDYALAYA

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#### DEPARTMENT OF FORESTRY, WILDLIFE AND ENVIRONMENTAL SCIENCES

GURU GHASIDAS VISHWAVIDYALAYA, KONI, BILASPUR, CHHATTISGARH

(A CENTRAL UNIVERSITY ESTABLISHED UNDER CENTRAL UNIVERSITY ACT 2009, No.25 OF 2009)

(A CENTRAL UNIVERSITY)

Δ

Report

On

#### "INDUSTRIAL TRAINING AND INSTITUTE VISIT: SERICULTURE AND SILK INDUSTRY"

#### SUBMITTED FOR THE PARTIAL FULFILLMENT OF THE REQUIREMENT OF

#### THE MASTER'S DEGREE OF SCIENCE IN FORESTRY &

ENVIRONMENTAL SCIENCE

ACADEMIC SESSION:2021-2023



#### SUBMITTED BY:

DINESH MANHARE

M.Sc. FORESTRY & ENVIRONMENTAL SCIENCE IV<sup>th</sup>

SEMESTER

ROLL NO: 21078111

ENROLLMENT NO.: GGV/21/06707

#### UNDER THE SUPERVISION OF:

Dr.GARIMA TIWARI

(ASSISTANT PROFESSOR)
DEPARTMENT OF FORESTRY
WILDLIFE ENVIRONMENTAL
SCIENCE





### DEPARTMENT OF FORESTRY, WILDLIFE AND ENVIRONMENTAL SCIENCES

GURU GHASIDAS VISHWAVIDYALAYA, KONI, BILASPUR, CHHATTISGARH

(A CENTRAL UNIVERSITY ESTABLISHED UNDER CENTRAL UNIVERSITY ACT 2009, No.25 OF 2009)



# CERTIFICATE

I have great pleasure in certifying that Mr Dinesh manhare ,D/O Mr. Amarnath Manhare is a regular student of M.Sc. Forestry & Environmental Science IV<sup>th</sup> semester during the session of 2021-23 of Department of Forestry, Wildlife and Environmental Sciences. He has completed field training entitled "INDUSTRIAL TRAINING AND INSTITUTE VISIT" under my guidance. Submitted for partial fulfilment of Degree of Bachelor of Science in Forestry, to Department of Forestry, Wildlife and Environmental Sciences.

I wish her all the success in her future academic endeavours.

Dr. Garima Tiwari

ASSISTANT PROFESSOR,

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GURU GHASIDAS VISHWAVIDYALAYA





Guru Ghasidas Vishwavidyalaya (A Central University Established by the Central Universities Act 2009 No. 25 of 2009) Koni, Bilaspur – 495009 (C.G.)

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A

Report

On

## "INFORMATION AND COMMUNICATIONS TECHNOLOGY"

# SUBMITTED FOR THE PARTIAL FULFILLMENT OF THE REQUIREMENT OF

#### THE MASTER'S DEGREE OF SCIENCE IN FORESTRY &

ENVIRONMENTAL SCIENCE

ACADEMIC SESSION:2021-2023



SUBMITTED BY: DINESH Manhare
M.Sc. FORESTRY & ENVIRONMENTAL

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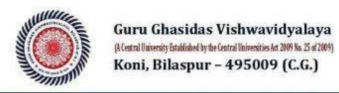
ROLL NO: 21078111

ENROLLMENT NO.: GGV/21/06707

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Dr.Garima Tiwari
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DEPARTMENT OF FORESTRY WILDLIFE
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## DEPARTMENT OF FORESTRY, WILDLIFE AND ENVIRONMENTAL SCIENCES

GURU GHASIDAS VISHWAVIDYALAYA, KONI, BILASPUR, CHHATTISGARH

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# CERTIFICATE

I have great pleasure in certifying that mr.DINESH MANHARE is a regular student of M.Sc. Forestry IV (FM) Semester during the session of 2021-23 of Department of Forestry, Wildlife and Environmental Sciences, GGU, Bilaspur. He has completed online" INFORMATION AND COMMUNICATIONS TECHNOLOGY" during this semester under my guidance.

I wish him all the success in his academics.

#### DR.GARIMA TIWARI

ASSISTANT PROFESSOR,

DEPARTMENT OF FORESTRY,

WILDLIFE AND ENVIRONMENTAL SCIENCES

GURU GHASIDAS VISHWAVIDYALAYA





Guru Ghasidas Vishwavidyalaya (A Central University Established by the Central Universities Act 2009 No. 25 of 2009) Koni, Bilaspur – 495009 (C.G.)

# DEPARTMENT OF FORESTRY, WILDLIFE AND ENVIRONMENTAL SCIENCES

GURU GHASIDAS VISHWAVIDYALAYA, KONI, BILASPUR, CHHATTISGARH

(A CENTRAL UNIVERSITY ESTABLISHED UNDER CENTRAL UNIVERSITY ACT 2009, No.25 OF 2009)

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#### "IMAPCT OF BALCO CSR ON ENVIRONMENTAL COMMITMENTS"



#### A DISSERTATION SUBMITTED

TO

## PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE

# DEGREE OF MASTER OF SCIENCE IN FORESTRY AND ENVIRONMENTAL SCIENCES (FOREST MANAGEMENT)

BY

**HEMLATA JAISWAL** 

Enrollment No: GGV/21/06709

Batch: 2021-23

UNDER THE SUPERVISION OF

Dr. GARIMA TIWARI

**Assistant Professor** 

DEPARTMENT OF FORESTRY WILDLIFE AND ENVIRONMENTAL SCIENCES

SCHOOL OF NATURAL RESOURCES

# DEPARTMENT OF FORESTRY, WILDLIFE & ENVIRONMENTAL SCIENCE { ICFRE A++ }



This is to certify that **Ms. HEMLATA JAISWAL** bearing Enrolment number GGV/21/06709 of M.Sc. Forestry IV semester, Department of Forestry, Wildlife and Environmental Sciences, GGV, Bilaspur, has completed his Dissertation entitled "**IMAPCT OF BALCO** 

CSR ON ENVIRONMENTAL COMMITMENTS" under my guidance.

I wish her all the success in her future academic endeavours.

PLACE: - BILASPUR, C.G

haine

Supervisor
Dr. GARIMA TIWARI

(Assistant professor, Department of Forestry, Wildlife and Environmental Science)

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### FIELD TRAINING (ATTATCHMENT WITH STATE FOREST DEPARTMENT)



#### A REPORT SUBMITTED

TO

## PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE

# DEGREE OF MASTER OF SCIENCE IN FORESTRY AND ENVIRONMENTAL SCIENCES

(FOREST MANAGEMENT)

BY
HEMLATA JAISWAL

Enrollment No: GGV/21/06709

Batch: 2021-23

UNDER THE SUPERVISION OF **Dr. GARIMA TIWARI** 

**Assistant Professor** 

DEPARTMENT OF FORESTRY, WILDLIFE AND ENVIRONMENTAL SCIENCES

SCHOOL OF NATURAL RESOURCES

PLACE: - BILASPUR, C.G

# DEPARTMENT OF FORESTRY, WILDLIFE & ENVIRONMENTAL SCIENCE

{ ICFRE A++ }



This is certified that **Ms. HEMLATA JAISWAL**, the student of M.Sc. Forestry & Environmental Science at the Department of Forestry, Wildlife and Environmental Science, Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G), has successfully completed the Forest Attachment Training in Bilaspur Forest Division under the supervision of **Dr. Garima Tiwari**, Department of Forestry, Wildlife and Environmental Sciences.

During the attachment, Ms, HEMLATA JAISWAL actively participated in various forestry and environmental conservation activities, gaining practical insights and hands-on experience in the field. His dedication, enthusiasm, and commitment to learning have been commendable.

We acknowledge his efforts and contribution to the conservation and sustainable management of Forests during the period of attachment.

Supervisor

Dr. Garima Tiwari

(Assistant professor, Department of Forestry, Wildlife and Environmental Science)



# Guru Ghasidas Vishwavidyalaya (ACentral University Established by the Central Universities Act 2009 No. 25 of 2009) Koni, Bilaspur – 495009 (C.G.)

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# Guru Ghasidas Vishwavidyalaya (ACentral University Established by the Central Universities Act 2009 No. 25 of 2009) Koni, Bilaspur – 495009 (C.G.)

# INDUSTRIAL TRAINING



#### A REPORT SUBMITTED

TO

### PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE

# DEGREE OF MASTER OF SCIENCE IN FORESTRY AND ENVIRONMENTAL SCIENCES

(FOREST MANAGEMENT)

BY

**HEMLATA JIASWAL** 

Enrollment No: GGV/21/06709

Batch: 2021-23

UNDER THE SUPERVISION OF Dr. GARIMA TIWARI

**Assistant Professor** 

DEPARTMENT OF FORESTRY, WILDLIFE AND ENVIRONMENTAL SCIENCES

SCHOOL OF NATURAL RESOURCES

PLACE: - BILASPUR, C.G

# DEPARTMENT OF FORESTRY, WILDLIFE & ENVIRONMENTAL SCIENCE

{ ICFRE A++ }



## **CERTIFICATE**

I have great pleasure in certifying that **Ms. HEMLATA JAISWAL** is a regular student of M.Sc. Forestry 4<sup>th</sup> semester during the season of 2022-23 of Department of Forestry, Wildlife and Environmental Sciences. He has completed this report "**REPORT ON INDUSTRIAL TRAINING**". During this semester under my guidance. I wish her all the success in her academics.

**Supervisor** 

Dr. Garima Tiwari

(Assistant professor, Department of Forestry, Wildlife and Environmental Science)

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1.	MUSHROOM CULTIVATION TRAINING
2.	VERMICOMPOST
3.	APICULTURE
4.	PHOTO PLATES
5.	CONCLUSION AND REFERENCES

# Study on the Ethnobotanical Practice Performed by Tribal Communities in Surajpur Forest area, Chhattisgarh

# Dissertation

Submitted for partial fulfillment of the requirement

for the Degree of Master of Science

In

Forestry and Environmental Sciences



(Session: 2022-23)

Under the Supervision of:

Dr. Ajay Kumar Singh

Assistant Professor
Department of Forestry, Wildlife
& Environmental Sciences, GGV, Bilaspur

Submitted By:

Khilesh Kumar Tekam

M.Sc. Forestry 4<sup>th</sup> sem Enrl No: GGV/17/6043 Roll No. 21078116

DEPARTMENT OF FORESTRY, WILDLIFE & ENVIRONMENTAL SCIENCES GURU GHASIDAS VISHWAVIDYALAYA BILASPU (C.G.)

(A Central university Established under central University Act 2009, No.25 of 2009)

# गुरु घासीदास विश्वविद्यालय (केन्नीयविश्वविद्यालय अधिनय 2009 क्र. 25 के अंतर्गत स्वापित केन्नीय विश्वविद्यालय) कोनी, बिलासपुर - 495009 (छ.ग.)



# Guru Ghasidas Vishwavidyalaya

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Koni, Bilaspur - 495009 (C.G.)

# डॉ. अजय कुमार सिंह

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# **CERTIFICATE**

I have great pleasure in certifying that Mr. Khilesh Kumar Tekam S/o Mr. Sumarsai Tekam is a regular student of M.Sc. Forestry 4<sup>th</sup> Semester (Forest Management) during the session of 2022-23 of Department of Forestry, Wildlife & Environmental Sciences, GGV, Bilaspur, Chhattisgarh. He has completed the Dissertation entitled "Study on the Ethnobotanical Practice performed by tribal communities in Surajpur Forest area Chhattisgarh"

I wish him all the success in his future academics.

(Dr. Ajay Kumar Singh) Assistant Professor & Supervisor

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# A Report

# On

# FOREST BASED INDUSTRIAL TRAINING

Submitted for partial fulfillment of the requirement

for the Degree of Master of Science

In

Forestry and Environmental Sciences



(Session: 2022-23)

Under the Supervision of:

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Department of Forestry, Wildlife

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Submitted By:

Khilesh Kumar Tekam

M.Sc. Forestry 4th sem Enrl No: GGV/17/6043 Roll No. 21078116

DEPARTMENT OF FORESTRY, WILDLIFE & ENVIRONMENTAL SCIENCES GURU GHASIDAS VISHWAVIDYALAYA BILASPU (C.G.)

(A Central university Established under central University Act 2009, No.25 of 2009)

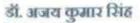
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# Guru Ghasidas Vishwavidyalaya

(A Central University Established by the Central Universities Act 2009 No. 25 of 2009)

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I have great pleasure in certifying that Mr. Khilesh Kumar Tekam S/o Mr. Sumarsai Tekam is a regular student of M.Sc. Forestry 4<sup>th</sup> Semester (Forest Management) during the session of 2022-23 of Department of Forestry, Wildlife & Environmental Sciences, GGV, Bilaspur, Chhattisgarh. He has completed the Report entitled "Forest Based Industrial Training" I wish him all the success in his future academics.

(Dr. Ajay Kumar Singh) Assistant Professor & Supervisor

# Guru Ghasidas Vishwavidyalaya (A Central University Established by the Central Universities Act 2009 No. 25 of 2009)

Koni, Bilaspur - 495009 (C.G.)

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# A Report

On

# ATTACHMENT WITH STATE FOREST DEPARTMENT BILASPUR, BILASPUR FOREST CIRCLE

Submitted for partial fulfillment of the requirement

for the Degree of Master of Science

In

Forestry and Environmental Sciences



(Session: 2022-23)

Under the Supervision of:

Dr. Ajay Kumar Singh Assistant Professor Department of Forestry, Wildlife & Environmental Sciences, GGV, Bilaspur Submitted By:

Khilesh Kumar Tekam M.Sc. Forestry 4<sup>th</sup> sem Enrl No: GGV/17/6043 Roll No. 21078116

DEPARTMENT OF FORESTRY, WILDLIFE & ENVIRONMENTAL SCIENCES GURU GHASIDAS VISHWAVIDYALAYA BILASPU (C.G.)

(A Central university Established under central University Act 2009, No.25 of 2009)

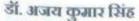
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# Guru Ghasidas Vishwavidyalaya

(A Central University Established by the Central Universities Act 2009 No. 25 of 2009)

Koni, Bilaspur - 495009 (C.G.)



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# Dr. Ajay Kumar Singh

Assistant Professor
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I wish him all the success in his future academics.

(Dr. Ajay Kumar Singh) Assistant Professor & Supervisor



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# ASSESSMENT OF FISH DIVERSITY AND ANTHROPOGENIC PRESSURE ON KOPRA WETLAND OF BILASPUR DISTRICT OF CHHATTISGARH



#### A DISSERTATION SUBMITTED FOR

# PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE DEGREE OF MASTER OF SCIENCE IN FORESTRY AND ENVIRONMENTAL SCIENCES (FOREST MANAGEMENT)

BY

#### MANISHA SHYAMCHETTI

Enrollment No: GGV/17/6046

Roll No: 21078117

Batch: 2021-2023

UNDER THE SUPERVISION OF

Dr. AJAY KUMAR SINGH

**Assistant Professor** 

DEPARTMENT OF FORESTRY WILDLIFE AND ENVIRONMENTAL SCIENCES,

SCHOOL OF NATURAL RESOURCES

GURU GHASIDAS VISHWAVIDYALAYA

(A Central University established by the Central Universities Act 2009, No. 25 of 2009)

KONI, BILASPUR (C.G) 495009

# Department of Forestry, Wildlife and Environmental Sciences Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G.)

(A Central University established under Central University Act 2009, No.25 of 2009)



# **CERTIFICATE**

This is to certify that the Dissertation entitled ASSESSMENT OF FISH DIVERSITY AND ANTHROPOGENIC PRESSURE ON KOPRA WETLAND OF BILASPUR DISTRICT OF CHHATTISGARH submitted in partial fulfilment of the requirements for the Degree of Master of Science in Forestry and Environmental Sciences in Department of Forestry, Wildlife & Environmental Sciences, Guru Ghasidas Vishwavidyalaya, Bilaspur (Chhattisgarh) is the work carried out by Ms. MANISHA SHYAMCHETTI under my supervision and guidance

I wish her all the success in her academics

Place: Bilaspur

Dr. Ajay Kumar Singh (Supervisor)

Assistant Professor of

Department of Forestry, Wildlife &

Environmental Sciences, GGU, Bilaspur

#### FOREST ATTACHMENT WITH STATE FOREST DEPARTMENT



#### A REPORT SUBMITTED FOR

# PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE DEGREE OF MASTER OF SCIENCE IN FORESTRY AND ENVIRONMENTAL SCIENCES (FOREST MANAGEMENT)

#### BY

#### MANISHA SHYAMCHETTI

Enrollment No: GGV/17/6046

Batch: 2021-23

UNDER THE SUPERVISION OF

Dr. AJAY KUMAR SINGH

**Assistant Professor** 

DEPARTMENT OF FORESTRY WILDLIFE AND ENVIRONMENTAL SCIENCES,

SCHOOL OF NATURAL RESOURCES

GURU GHASIDAS VISHWAVIDYALAYA

(A Central University established by the Central Universities Act 2009, No. 25 of 2009)

KONI, BILASPUR (C.G) 495009

# Department of Forestry, Wildlife and Environmental Sciences Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G.)

(A Central University established under Central University Act 2009, No.25 of 2009)



# **CERTIFICATE**

This is to certify that Ms. MANISHA SHYAMCHETTI is a regular student of M.Sc. Forestry & Environmental Sciences IV Semester during the session of 2021-23 of Department of Forestry, Wildlife and Environmental Sciences, GGU, Bilaspur. She has completed this training entitled "Forest Attachment with state forest department)" during this semester under my guidance.

I wish her all the success in her academics.

Place: Bilaspur

Dr. Ajay Kumar Singh (Supervisor)

Assistant Professor of

Department of Forestry, Wildlife &

Environmental Sciences, GGU, Bilaspu

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## INDUSTRIAL TRAINING



#### A REPORT SUBMITTED FOR

# PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE DEGREE OF MASTER OF SCIENCE IN FORESTRY AND ENVIRONMENTAL SCIENCES

(FOREST MANAGEMENT)

#### **MANISHA SHYAMCHETTI**

Enrollment No: GGV/17/6046

Roll No: 21078117

Batch: 2021-23

UNDER THE SUPERVISION OF

Dr. AJAY KUMAR SINGH

**Assistant Professor** 

DEPARTMENT OF FORESTRY WILDLIFE AND ENVIRONMENTAL SCIENCES,

SCHOOL OF NATURAL RESOURCES

GURU GHASIDAS VISHWAVIDYALAYA

(A Central University established by the Central Universities Act 2009, No. 25 of 2009)

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Koni, Bilaspur - 495009 (C.G.)

# Department of Forestry, Wildlife and Environmental Sciences Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G.)

(A Central University established under Central University Act 2009, No.25 of 2009)



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I wish her all the success in her academics.

Place: Bilaspur

Dr. Ajay Kumar Singh (Supervisor)

Assistant Professor of

Department of Forestry, Wildlife &

Environmental Sciences, GGU, Bilaspur

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गुरू घासीदास विश्वविद्यालय (क्न्रीयविश्वविद्यालय अधिनयम 2009 क्र. 25 के अंतर्गत स्वापित केन्द्रीय विश्वविद्यालय) कोनी, बिलासपुर – 495009 (छ.ग.)



# Guru Ghasidas Vishwavidyalaya (A Central University Established by the Central Universities Act 2009 No. 25 of 2009)

Koni, Bilaspur - 495009 (C.G.)

FLORAL DIVERSITY ITS COMPOSITION AND ECOLOGICAL CHARACTERISTICS ASSESSMENT OF TROPICAL FORESTOF RATANPUR AREA OF BILASPUR, CHHATTISGARH.



#### A DISSERTATION SUBMITTED FOR

# PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE DEGREE OF MASTER OF SCIENCE IN FORESTRY AND ENVIRONMENTAL SCIENCES (FOREST MANAGEMENT)

# NARENDRA SAHU

 $\mathbf{BY}$ 

Enrollment No: GGV/16/6236

Batch: 2021-2023

UNDER THE SUPERVISION OF

Dr. AJAY KUMAR SINGH

**Assistant Professor** 

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# Department of Forestry, Wildlife and Environmental Sciences Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G.)

(A Central University established under Central University Act 2009, No.25 of 2009)



# **CERTIFICATE**

This is to certify that the Dissertation entitled **FLORAL DIVERSITY ITS COMPOSITION AND ECOLOGICAL CHARACTERISTICS ASSESSMENT OF TROPICAL FORESTOF RATANPUR AREA OF BILASPUR, CHHATTISGARH.** submitted in partial fulfilment of the requirements for the Degree of **Master of Science in Forestry and Environmental Sciences** in Department of Forestry, Wildlife & Environmental Sciences,
Guru Ghasidas Vishwavidyalaya, Bilaspur (Chhattisgarh) is the work carried out by **Mr. NARENDRA SAHU** under my supervision and guidance

I wish him all the success in his academics

Place: Bilaspur

Dr. Ajay Kumar Singh (Supervisor)

Assistant Professor of

Department of Forestry, Wildlife &

Environmental Sciences, GGU, Bilaspur

#### FOREST ATTACHMENT WITH STATE FOREST DEPARTMENT



#### A REPORT SUBMITTED FOR

# PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE DEGREE OF MASTER OF SCIENCE IN FORESTRY AND ENVIRONMENTAL SCIENCES (FOREST MANAGEMENT)

#### BY

#### **NARENDRA SAHU**

Enrollment No: GGV/16/6236

Batch: 2021-23

UNDER THE SUPERVISION OF

Dr. AJAY KUMAR SINGH

**Assistant Professor** 

DEPARTMENT OF FORESTRY WILDLIFE AND ENVIRONMENTAL SCIENCES,

SCHOOL OF NATURAL RESOURCES

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# Department of Forestry, Wildlife and Environmental Sciences Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G.)

(A Central University established under Central University Act 2009, No.25 of 2009)



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This is to certify that Mr. Narendra sahu is a regular student of M.Sc. Forestry & Environmental Sciences IV Semester during the session of 2021-23 of Department of Forestry, Wildlife and Environmental Sciences, GGU, Bilaspur. He has completed this training entitled "Forest Attachment with state forest department)" during this semester under my guidance.

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Dr. Ajay Kumar Singh (Supervisor)

Assistant Professor of

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#### INDUSTRIAL TRAINING



#### A REPORT SUBMITTED FOR

# PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE DEGREE OF MASTER OF SCIENCE IN FORESTRY AND ENVIRONMENTAL SCIENCES

(FOREST MANAGEMENT)

#### **NARENDRA SAHU**

Enrollment No: GGV/16/6236

Batch: 2021-23

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DEPARTMENT OF FORESTRY WILDLIFE AND ENVIRONMENTAL SCIENCES,

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# Department of Forestry, Wildlife and Environmental Sciences Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G.)

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Place: Bilaspur

Dr. Ajay Kumar Singh (Supervisor)

Assistant Professor of

Department of Forestry, Wildlife &

Environmental Sciences, GGU, Bilaspur

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गुरू घासीदास विश्वविद्यालय (क्न्रीयविश्वविद्यालय अधिनयम 2009 क्र. 25 के अंतर्गत स्वापित केन्द्रीय विश्वविद्यालय) कोनी, बिलासपुर – 495009 (छ.ग.)



## Guru Ghasidas Vishwavidyalaya (A Central University Established by the Central Universities Act 2009 No. 25 of 2009)

Koni, Bilaspur - 495009 (C.G.)

# SEED GERMINATION AND SEEDLING VIGOR OF DALBERGIA LATIFOLIA AND CASSIA AFISTULA ON THE USE OF GROWTH REGULATORS



# A DISSERTATION SUBMITTED TO PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE

# DEGREE OF MASTER OF SCIENCE IN FORESTRY AND ENVIRONMENTAL SCIENCES (FOREST MANAGEMENT)

BY

NIDHI NAG

Enrollment No: GGV/21/06713

Batch: 2021-23

#### UNDER THE SUPERVISION OF

Dr. ATUL KUMAR BHARADWAJ

**Assistant Professor** 

#### DEPARTMENT OF FORESTRY WILDLIFE AND ENVIRONMENTAL SCIENCES

SCHOOL OF NATURAL RESOURCES

#### **GURU GHASIDAS VISHWAVIDYALAYA**

(A Central University established by the Central Universities Act 2009, No. 25 of 2009)

KONI, BILASPUR (C.G) 495009

2024

# DEPARTMENT OF FORESTRY, WILDLIFE & ENVIRONMENTAL SCIENCE

{ ICFRE A++ }



## **CERTIFICATE**

This is to certify that **NIDHI NAG** bearing Enrolment number GGV/21/06713 of M.Sc.Forestry IV semester, Department of Forestry, Wildlife and Environmental Sciences, GGV, Bilaspur, has completed his Dissertation entitled "SEED GERMINATION AND SEEDLING VIGOR OF DALBERGIA LATIFOLIA AND CASSIA AFISTULA ON THE USE OF GROWTH REGULATORS" under my guidance.

I wish her all the success in her future academic endeavours.

PLACE: - BILASPUR, C.G

**Supervisor** 

Dr. ATUL KUMAR BHARADWAJ

(Assistant professor, Department of Forestry, Wildlife and Environmental Science)

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## FIELD TRAINING (ATTATCHMENT WITH STATE FORESTDEPARTMENT)



#### A REPORT SUBMITTED

TO

#### PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE

# DEGREE OF MASTER OF SCIENCE IN FORESTRY AND ENVIRONMENTAL SCIENCES

(FOREST MANAGEMENT)

BY

**NIDHI NAG** 

Enrollment No: GGV/21/06713

Batch: 2021-23

UNDER THE SUPERVISION OF Dr. ATUL KUMAR BHARADWAJ

**Assistant Professor** 

DEPARTMENT OF FORESTRY, WILDLIFE AND ENVIRONMENTAL SCIENCES

SCHOOL OF NATURAL RESOURCES

# DEPARTMENT OF FORESTRY, WILDLIFE & ENVIRONMENTAL SCIENCE

{ ICFRE A++ }



This is certified that the **NIDHI NAG** student of M.Sc. Forestry & Environmental Science at the Department of Forestry, Wildlife and Environmental Science, Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G), has successfully completed the Forest Attachment Training in Bilaspur Forest Division Chhattisgarh under the supervision of **Dr. Atul Kumar Bhardwaj**, Department of Forestry, Wildlife and Environmental Sciences,

During the attachment, NIDHI NAG actively participated in various forestry and environmental conservation activities, gaining practical insights and hands-on experience in the field. Her dedication, enthusiasm, and commitment to learning have been commendable.

We acknowledge her efforts and contribution to the conservation and sustainable management of Forests during the period of attachment.

**Supervisor** 

PLACE: - BILASPUR, C.G

Dr. Atul Kumar Bharadwaj

(Assistant professor, Department of Forestry, Wildlife and Environmental Science)

# गुरू घासीदास विश्वविद्यालय (केन्रीयविस्तरिवालय अधिनम 2009 क्र. 25 के संतर्गत स्वापित केन्नीय विश्वविद्यालय) कोनी, बिलासपुर – 495009 (छ.ग.)



## Guru Ghasidas Vishwavidyalaya (ACentral University Established by the Central Universities Act 2009 No. 25 of 2009) Koni, Bilaspur – 495009 (C.G.)

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## INDUSTRIAL TRAINING



#### A REPORT SUBMITTED

TO

#### PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE

# DEGREE OF MASTER OF SCIENCE IN FORESTRY AND ENVIRONMENTAL SCIENCES

(FOREST MANAGEMENT)

BY NIDHI NAG

Enrollment No: GGV/21/06713

Batch: 2021-23

UNDER THE SUPERVISION OF Dr. ATUL KUMAR BHARADWAJ

**Assistant Professor** 

DEPARTMENT OF FORESTRY, WILDLIFE AND ENVIRONMENTAL SCIENCES

SCHOOL OF NATURAL RESOURCES

# DEPARTMENT OF FORESTRY, WILDLIFE & ENVIRONMENTAL SCIENCE

{ ICFRE A++ }



#### CERTIFICATE

I have great pleasure in certifying that **NIDHI NAG** is a regular student of M.Sc. Forestry4<sup>th</sup> semester during the season of 2021-23 of Department of Forestry, Wildlife and Environmental Sciences. She has completed this report "INDUSTRIAL TRAINING". During this semester under my guidance. I wish her all the success in her academics.

PLACE: - BILASPUR, C.G

Dr. Atul Kumar Bharadwaj

**Supervisor** 

(Assistant professor, Department of Forestry, Wildlife and Environmental Science)

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गुरू घासीदास विश्वविद्यालय (केन्रीयविश्वविद्यालय अधिनस्म 2009 क्र. 25 के अंतर्गत स्वामित केन्नीय विश्वविद्यालय) कोनी, बिलासपुर – 495009 (छ.ग.)



## Guru Ghasidas Vishwavidyalaya (A Central University Established by the Central Universities Art 2009 No. 25 of 2009)

Koni, Bilaspur - 495009 (C.G.)

#### STUDENT PROJECT DISSERTATION

#### ON

Installation cost and benefits of household biogas system in budeli, raigarh district, Chhattisgarh.



#### SESSION 2022-2023

MASTERS OF SCIENCE IN FORESTRY (2YEARS)

DEPARTMENT OF FORESTRY, WILD LIFE AND ENVIRONMENTAL SCIENCES GURU GHASIDAS VISHWAVIDYALAYA, BILASPUR

#### SUBMITTED TO:

Dr. Atul Kumar Bhardwaj

Assistant professor

Department of forestry, wildlife and Environmental sciences

#### SUBMITTED BY:

PRASHANT SINGH

M.Sc. forestry 4th semester

Roll No. - 21078123

Enrollment No. GGV/21/06715

# Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G)

(A central university established under Central Universities Act 2009, No.25 of 2009)



## **CERTIFICATE**

I have great pleasure in certifying that Mr. PRASHANT SINGH is a regular student of M.Sc. Forestry 4<sup>th</sup> Semester during the session of 2022-23 of Department of Forestry, Wildlife and Environmental Sciences. He has completed this student project entitled "Installation cost and benefits of household biogas system in budeli, raigarh district, Chhattisgarh" during this semester under my guidance. I wish him all the success in his academics.

Dr. Atul Kumar Bhardwaj

Assistant Professor, Department of Forestry, Wildlife and Environmental Science

Department of Forestry Guru Ghasi Dus University BILASPUR (M M) 49506



## Guru Ghasidas Vishwavidyalaya (A Central University Established by the Central Universities Act 2009 No. 25 of 2009) Koni, Bilaspur – 495009 (C.G.)

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#### REPORT ON

# ICT TOOLS AND TECHNIQUES APPLICATION IN FORESTRY.

BILASPUR, CHHATTISGARH



#### **SESSION 2022-2023**

MASTERS OF SCIENCE IN FORESTRY (2YEARS)

DEPARTMENT OF FORESTRY, WILD LIFE AND ENVIRONMENTAL SCIENCES GURU GHASIDAS VISHWAVIDYALAYA, BILASPUR

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Dr. Atul Kumar Bhardwaj Assistant professor Department of forestry, wildlife and Environmental sciences

#### SUBMITTED BY:

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M.Sc. forestry 4<sup>th</sup> semester
Roll No. – 21078123
Enrollment No. GGV/21/06715

# Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G)

(A central university established under Central Universities Act 2009, No.25 of 2009)

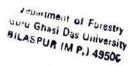


# **CERTIFICATE**

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Dr. Atul Kumar Bhardwaj

Assistant Professor, Department of Forestry, Wildlife and Environmental Science



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#### REPORT ON

# INSTITUTIONAL TRAINING ON SERICULTURE RESEARCH AND DEVELOPMENT.

Koni, Bilaspur, Chhattisgarh



#### SESSION 2022-2023

MASTERS OF SCIENCE IN FORESTRY (2YEARS)

DEPARTMENT OF FORESTRY, WILD LIFE AND ENVIRONMENTAL SCIENCES GURU GHASIDAS VISHWAVIDYALAYA, BILASPUR

#### **SUBMITTED TO:**

Dr. Atul Kumar Bhardwaj

Assistant professor

Department of forestry, wildlife and Environmental sciences

#### SUBMITTED BY:

PRASHANT SINGH

M.Sc. forestry 4th semester

Roll No. - 21078123

Enrollment No. GGV/21/06715

# Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G)

(A central university established under Central Universities Act 2009, No.25 of 2009)



#### CERTIFICATE

I have great pleasure in certifying that Mr. PRASHANT SINGH is a regular student of M.Sc. Forestry 4<sup>th</sup> Semester during the session of 2022-23 of Department of Forestry, Wildlife and Environmental Sciences. He has completed this report "REPORT ON INSTITUTIONAL TRAINING. SERICULTURE RESEARCH AND DEVELOPMENT. during this semester under my guidance. I wish him all the success in his academics.

Dr. Atul Kumar Bhardwaj

Assistant Professor, Department of Forestry, Wildlife and Environmental Science

Gepartment of Forestry Guru Ghasi Das University BILASPUR (M P.) 49500

# Guru Ghasidas Vishwavidyalaya

(A Central University Established by the Central Universities Act 2009 No. 25 of 2009)

Koni, Bilaspur - 495009 (C.G.)



# कार्यालय संयुक्त संचालक रेशम अनुसंधान विकास एवं प्रशिक्षण, कोनी बिलासपुर (छ.ग.)

# प्रमाण-पत्र

प्रमाणित किया जाता है कि श्री/कु. प्रशांत सिंह पिता/पित श्री रजोल सिंह छात्र/छात्रा, एम.एस. सी अंतिम वर्ष, वानिकी, वन्यजीव एवं पर्यावरण विभाग गुरू घासीदास के.वि.वि.विलासपुर को रेशम अनुसंघान केन्द्र कोनी बिलासपुर में टसर नर्सरी, पौधरोपण, कृमिपालन, बीज उत्पादन तकनीक, विपणन एवं उद्यमिता आदि विषय पर प्रशिक्षण, प्रशिक्षण सत्र 2023—24 में दिनांक 23.05.2023 से 29.05.2023 तक प्रदान किया गया हैं।

हम आपके उज्जवल भविष्य की कामना करते हैं।

बिलासपुर

दिनांक:- 29.05.2023

श्रीराम मीणा

संयुक्त संचालक रेशम अनुसंघान विकास एवं प्रशिक्षण बिलासपुर (छ.ग.)

#### REPORT ON

# FOREST ATTACHMENT AT RAIGARH FOREST DIVISION RAIGARH (C.G.)



#### **SESSION 2022-2023**

MASTERS OF SCIENCE IN FORESTRY (2YEARS)

DEPARTMENT OF FORESTRY, WILD LIFE AND ENVIRONMENTAL SCIENCES GURU GHASIDAS VISHWAVIDYALAYA, BILASPUR

#### SUBMITTED TO:

Dr. Atul Kumar Bhardwaj

Assistant professor

Department of forestry, wildlife and Environmental sciences

#### SUBMITTED BY:

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Roll No. - 21078123

Enrollment No. GGV/21/06715

# Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G)

(A central university established under Central Universities Act 2009, No. 25 of 2009)

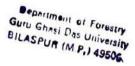


## CERTIFICATE

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Dr. Atul Kumar Bhardwaj

Assistant Professor, Department of Forestry, Wildlife and Environmental Science



## Guru Ghasidas Vishwavidyalaya

(A Central University Established by the Central Universities Act 2009 No. 25 of 2009)

Koni, Bilaspur - 495009 (C.G.)

# Divisional Forest Officer Raigarh Division, Raigarh (C.G.)

☎□ 07762-224426 (O), 07762-222178 (R), 07762-225047 (F) E-mail: 
☑dfo\_raigarh@yahoo.co.in

No-1 2546

/2023/ Raigarh Date: 08/05/2023

#### CERTIFICATE OF COMPLETION OF TRAINING

This is to certify that Mr. Prashant Singh has successfully completed a one-month training program under the Chhattisgarh Forest Department of Raigarh Division. The training program covered the following major ranges:

- Raigarh Range
- **☐ Tamnar Range**
- ☐ Gharghoda Range
- Gomarda Abhyaran
- □ Sarangarh Range (₩・೬・)

During the training program, Mr. Prashant Singh gained knowledge and skills in various aspects of forest management, conservation, and protection. The trainee actively participated in various activities and tasks, including:

- Forest surveys and assessments
- Wildlife monitoring and tracking
- Community outreach and education
- Forest protection and law enforcement
- Mursery and plantation management
- Fire management and prevention

The trainee demonstrated a high level of dedication, enthusiasm, and professionalism throughout the training program. The trainee also showed a strong commitment to the conservation and sustainable use of forest resources.

Based on the trainee's performance and achievements, we hereby certify that Mr. Prashant Singh has successfully completed the training program and is deemed competent in the relevant knowledge and skills.

Divisional Forest Officer Raigarh Division, Raigarh (C.G.)

## Guru Ghasidas Vishwavidyalaya (A Central University Established by the Central Universities Act 2009 No. 25 of 2009) Koni, Bilaspur – 495009 (C.G.)

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		5.2 Assessment of Existing Training Programs

# Study on carbon sequestration potential of tree situated in public garden bilaspur chhattisgarh



# A DISSERTATION SUBMITTED TO PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE

# DEGREE OF MASTER OF SCIENCE IN FORESTRY AND ENVIRONMENTAL SCIENCES (FOREST MANAGEMENT)

BY

Sadhana Yadav

Enrollment No: GGV/16/6253

Batch: 2021-23

#### UNDER THE SUPERVISION OF

Dr. ATUL KUMAR BHARADWAJ

**Assistant Professor** 

#### DEPARTMENT OF FORESTRY WILDLIFE AND ENVIRONMENTAL SCIENCES

SCHOOL OF NATURAL RESOURCES

#### GURU GHASIDAS VISHWAVIDYALAYA

(A Central University established by the Central Universities Act 2009, No. 25 of 2009)

KONI, BILASPUR (C.G) 495009

2024

# DEPARTMENT OF FORESTRY, WILDLIFE & ENVIRONMENTAL SCIENCE { ICFRE A++ }



This is to certify that **SADHANA YADAV** bearing Enrolment number GGV/16/6253 of M.Sc. Forestry IV semester, Department of Forestry, Wildlife and Environmental Sciences, GGV, Bilaspur, has completed his Dissertation entitled "**Study on carbon sequestration potential of tree situated in public garden bilaspur chhattisgarh**" under my guidance.

I wish her all the success in her future academic endeavours.

PLACE: - BILASPUR, C.G

Supervisor
Dr. ATUL KUMAR BHARADWAJ

(Assistant professor, Department of Forestry, Wildlife and Environmental Science)

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## FIELD TRAINING (ATTATCHMENT WITH STATE FORESTDEPARTMENT)



#### A REPORT SUBMITTED

TO

#### PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE

# DEGREE OF MASTER OF SCIENCE IN FORESTRY AND ENVIRONMENTAL SCIENCES

(FOREST MANAGEMENT)

# BY SADHANA YADAV

Enrollment No: GGV/16/6253

Batch: 2021-23

UNDER THE SUPERVISION OF Dr. ATUL KUMAR BHARADWAJ

**Assistant Professor** 

DEPARTMENT OF FORESTRY, WILDLIFE AND ENVIRONMENTAL SCIENCES

SCHOOL OF NATURAL RESOURCES

## DEPARTMENT OF FORESTRY, WILDLIFE & ENVIRONMENTAL SCIENCE

{ ICFRE A++ }



This is certified that the **SADHANA YADAV** student of M.Sc. Forestry & Environmental Science at the Department of Forestry, Wildlife and Environmental Science, Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G), has successfully completed the Forest Attachment Training in Bilaspur Forest Division Chhattisgarh under the supervision of **Dr. Atul Kumar Bhardwaj**, Department of Forestry, Wildlife and Environmental Sciences,

During the attachment, YOGITA KAUSHAL actively participated in various forestry and environmental conservation activities, gaining practical insights and hands-on experience in the field. Her dedication, enthusiasm, and commitment to learning have been commendable.

We acknowledge her efforts and contribution to the conservation and sustainable management of Forests during the period of attachment.

**Supervisor** 

PLACE: - BILASPUR, C.G

Dr. Atul Kumar Bharadwaj

(Assistant professor, Department of Forestry, Wildlife and Environmental Science)

# गुरू घासीदास विश्वविद्यालय (केन्रीयविस्तरिवालय अधिनम 2009 क्र. 25 के अंतर्गत स्वापित केन्नीय विस्तरिवालय) कोनी, बिलासपुर - 495009 (छ.ग.)



## Guru Ghasidas Vishwavidyalaya (ACentral University Established by the Central Universities Act 2009 No. 25 of 2009) Koni, Bilaspur – 495009 (C.G.)

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## INDUSTRIAL TRAINING



#### A REPORT SUBMITTED

TO

#### PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE

# DEGREE OF MASTER OF SCIENCE IN FORESTRY AND ENVIRONMENTAL SCIENCES

(FOREST MANAGEMENT)

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Enrollment No: GGV/16/6253

Batch: 2021-23

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#### CERTIFICATE

I have great pleasure in certifying that **SADHANA YADAV** is a regular student of M.Sc. Forestry 4<sup>th</sup> semester during the season of 2021-23 of Department of Forestry, Wildlife and Environmental Sciences. She has completed this report "INDUSTRIAL TRAINING". During this semester under my guidance. I wish her all the success in her academics.

PLACE: - BILASPUR, C.G

Dr. Atul Kumar Bharadwaj

**Supervisor** 

(Assistant professor, Department of Forestry, Wildlife and Environmental Science)

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गुरू घासीदास विश्वविद्यालय (केन्रीयविख्वविद्यालय अधिनस्म 2009 क्र. 25 के संतर्गत स्वामित केन्नीय विद्वविद्यालय) कोनी, बिलासपुर – 495009 (छ.ग.)



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Koni, Bilaspur - 495009 (C.G.)

# EVALUTION OF PHYSIOCHEMICAL PROPERTIES AND WQI OF THE DRINKING WATER IN URBAN AREA OF BILASPUR CHHATTISGARH



#### A DISSERTATION SUBMITTED FOR

# PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE DEGREE OF MASTER OF SCIENCE IN FORESTRY AND ENVIRONMENTAL SCIENCES (FOREST MANAGEMENT)

BY

#### SANDHYA TIRKEY

Enrollment No: GGV/17/6074

Batch: 2021-23

UNDER THE SUPERVISION OF

Dr. BRIJENDRA PRATAP SINGH

**Assistant Professor** 

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#### **CERTIFICATE**

This is to certify that the Dissertation entitled "EVALUTION OF PHYSIOCHEMICAL PROPERTIES AND WQI OF THE DRINKING WATER IN URBAN AREA OF BILASPUR CHHATTISGARH" submitted in partial fulfilment of the requirements for the Degree of Master of Sciencein Forestry and Environmental Sciences in Department of Forestry, Wildlife & Environmental Sciences, Guru Ghasidas Vishwavidyalaya, Bilaspur (Chhattisgarh) is the work carried out by Ms. SANDHYA TIRKEY under my supervision and guidance

I wish her all the success in her academics

Place: Bilaspur

Dr. Brijendra Pratap Singh (Supervisor)

Assistant Professor of
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#### FOREST ATTACHMENT WITH STATE FOREST DEPARTMENT)



#### A REPORT SUBMITTED FOR

# PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE DEGREE OF MASTER OF SCIENCE IN FORESTRY AND ENVIRONMENTAL SCIENCES (FOREST MANAGEMENT)

#### BY SANDHYA TIRKEY

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Place: Bilaspur

Dr. Brijendra Pratap Singh (Supervisor)

**Assistant Professor of** Department of Forestry, Wildlife & Environmental Sciences, GGU, Bilaspu

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#### INDUSTRIAL TRAINING



#### A REPORT SUBMITTED FOR

# PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE DEGREE OF MASTER OF SCIENCE IN FORESTRY AND ENVIRONMENTAL SCIENCES

(FOREST MANAGEMENT)

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I wish her all the success in her academics.

Place: Bilaspur

Dr. Brijendra Pratap Singh (Supervisor)

Assistant Professor of

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(A CENTRAL UNIVERSITY ESTABLISHED UNDER CENTRAL UNIVERSITY ACT 2009, No.25 OF 2009)

(A CENTRAL. UNIVERSITY)

A

**Dissertation** 

On

#### "POSITIVE AND NEGATIVE INFLUENCE OF SOCIAL MEDIA VIDEO ON ENVIRONMENT AND IT'S ROLE IN ENVIRONMENT EDUCATION AND CONSERVATION"

#### SUBMITTED FOR THE PARTIAL FULFILLMENT OF THE REQUIREMENT OF

THE MASTER'S DEGREE OF SCIENCE IN FORESTRY &

**ENVIRONMENTAL SCIENCE** 

ACADEMIC SESSION: 2021-2023



#### **SUBMITTED BY:**

M.Sc. FORESTRY & ENVIRONMENTAL SCIENCE IV<sup>th</sup> SEMESTER ROLL NO: 2108130

ENROLLMENT NO.: GGV/17/6079

#### **UNDER THE SUPERVISION OF:**

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Koni, Bilaspur - 495009 (C.G.)



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I have great pleasure in certifying that **Ms. Shivani namdeo D/O JITENDRA NAMDEO** is a regular student of M.Sc. Forestry 4th Semester during the session of 2021-23 of Department of Forestry, Wildlife and Environmental Sciences. He has completed this student project entitled "**POSITIVE AND NEGATIVE INFLUENCE OF SOCIAL MEDIA VIDEO ON ENVIRONMENT AND IT'S ROLE IN ENVIRONMENT EDUCATION AND CONSERVATION.**" during this semester under my guidance. I wish him all the success in his academics.

PROF. Brijendra Pratap Singh

ASSISTANT PROFESSOR,

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GURU GHASIDAS VISHWAVIDYALAY



#### Guru Ghasidas Vishwavidyalaya (A Central University Established by the Central Universities Act 2009 No. 25 of 2009) Koni, Bilaspur – 495009 (C.G.)

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#### DEPARTMENT OF FORESTRY, WILDLIFE AND ENVIRONMENTAL SCIENCES

GURU GHASIDAS VISHWAVIDYALAYA, KONI, BILASPUR, CHHATTISGARH

(A CENTRAL UNIVERSITY ESTABLISHED UNDER CENTRAL UNIVERSITY ACT 2009, No.25 OF 2009)

(A CENTRAL UNIVERSITY)

A

Report

On

#### "FOREST ATTACHMENT: BILASPUR DIVISION"

#### SUBMITTED FOR THE PARTIAL FULFILLMENT OF THE REQUIREMENT OF

#### THE MASTER'S DEGREE OF SCIENCE IN FORESTRY &

**ENVIRONMENTAL SCIENCE** 

ACADEMIC SESSION: 2021-2023



#### **SUBMITTED BY:**

#### SHIVANI NAMDEO

M.Sc. FORESTRY & ENVIRONMENTAL SCIENCE IV<sup>th</sup> SEMESTER

ROLL NO: 2108130

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#### **UNDER THE SUPERVISION OF:**

**PROF. BRIJENDRA PRATAP SINGH** PROFESSOR

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#### DEPARTMENT OF FORESTRY, WILDLIFE AND ENVIRONMENTAL SCIENCES

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#### **CERTIFICATE**

I have great pleasure in certifying that **Ms. Shivani namdeo D/O Mr. Jitendra namdeo** is a regular student of M.Sc. Forestry 4th Semester (FM) during the session of 2021-23 of Department of Forestry, Wildlife and Environmental Sciences. She has completed this student project entitled "**Attachment with Sate Forest Department**" during this semester under my guidance. I wish him all the success in his academics.

PROF. Brijendra Pratap Singh

ASSISTANT PROFESSOR,

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GURU GHASIDAS VISHWAVIDYALAYA

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(A CENTRAL UNIVERSITY ESTABLISHED UNDER CENTRAL UNIVERSITY ACT 2009, No.25 OF 2009)

(A CENTRAL UNIVERSITY)

A

Report

0n

#### "INDUSTRIAL TRAINING AND INSTITUTE VISIT: SERICULTURE AND SILK INDUSTRY"

# SUBMITTED FOR THE PARTIAL FULFILLMENT OF THE REQUIREMENT OF THE MASTER'S DEGREE OF SCIENCE IN FORESTRY &

**ENVIRONMENTAL SCIENCE** 

ACADEMIC SESSION: 2021-2023



#### **SUBMITTED BY:**

**SHIVANI NAMDEO** 

M.Sc. FORESTRY & ENVIRONMENTAL SCIENCE IV<sup>th</sup> SEMESTER

ROLL NO: 2108130

**ENROLLMENT NO.: GGV/17/6079** 

#### **UNDER THE SUPERVISION OF:**

PROF. BRIJENDRA PRATAP SINGH

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GGV, BILASPUR, C.G



#### DEPARTMENT OF FORESTRY, WILDLIFE AND ENVIRONMENTAL SCIENCES

GURU GHASIDAS VISHWAVIDYALAYA, KONI, BILASPUR, CHHATTISGARH

(A CENTRAL UNIVERSITY ESTABLISHED UNDER CENTRAL UNIVERSITY ACT 2009, No.25 OF 2009)



#### **CERTIFICATE**

I have great pleasure in certifying that Ms. Shivani namdeo D/O Mr. Jitendra namdeo is a regular student of M.Sc. Forestry & Environmental Science IV<sup>th</sup> semester during the session of 2021-23 of Department of Forestry, Wildlife and Environmental Sciences. He has completed field training entitled "INDUSTRIAL TRAINING AND INSTITUTE VISIT" under my guidance. Submitted for partial fulfilment of Degree of Bachelor of Science in Forestry, to Department of Forestry, Wildlife and Environmental Sciences.

I wish her all the success in her future academic endeavours.

PROF. Brijendra Pratap Singh

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GURU GHASIDAS VISHWAVIDYALAYA





#### Guru Ghasidas Vishwavidyalaya (A Central University Established by the Central Universities Act 2009 No. 25 of 2009) Koni, Bilaspur – 495009 (C.G.)

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(A CENTRAL UNIVERSITY)

A

**Report** 

On

#### "INFORMATION AND COMMUNICATIONS TECHNOLOGY"

# SUBMITTED FOR THE PARTIAL FULFILLMENT OF THE REQUIREMENT OF THE MASTER'S DEGREE OF SCIENCE IN FORESTRY & ENVIRONMENTAL SCIENCE

ACADEMIC SESSION:2021-2023



#### **SUBMITTED BY:**

M.Sc. FORESTRY & ENVIRONMENTAL SCIENCE IVI

**SEMESTER** 

**ROLL NO: 2108130** 

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#### DEPARTMENT OF FORESTRY, WILDLIFE AND ENVIRONMENTAL SCIENCES

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I wish him all the success in his academics.

PROF. Brijendra Pratap Singh

ASSISTANT PROFESSOR,

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GURU GHASIDAS VISHWAVIDYALAYA





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#### TREE DIVERSITY IN AGRO ECOSYSTEM OF MUNGELI DISTRICT



#### A DISSERTATION SUBMITTED FOR

#### PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE

DEGREE OF MASTER OF SCIENCE IN FORESTRY AND ENVIRONMENTAL SCIENCES

(FOREST MANAGEMENT)

BY

#### **SHIWANGI GOSAWAMI**

Enrollment No: GGV/21/06717

Batch: 2021-23

UNDER THE SUPERVISION OF

Dr. CHOWLANI MANPOONG

**Assistant Professor** 

DEPARTMENT OF FORESTRY WILDLIFE AND ENVIRONMENTAL SCIENCES,

SCHOOL OF NATURAL RESOURCES

**GURU GHASIDAS VISHWAVIDYALAYA** 

(A Central University established by the Central Universities Act 2009, No. 25 of 2009)

KONI, BILASPUR (C.G) 495009

## Department of Forestry, Wildlife and Environmental Sciences Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G.)

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#### CERTIFICATE

This is to certify that the Dissertation entitled "TREE DIVERSITY IN AGRO ECOSYSTEM OF MUNGELI DISTRICT" submitted in partial fulfilment of the requirements for the Degree of Master of Science in Forestry and Environmental Sciences in Department of Forestry, Wildlife & Environmental Sciences, Guru Ghasidas Vishwavidyalaya, Bilaspur (Chhattisgarh) is the work carried out by Ms. SHIWANGI GOSWAMIunder my supervision and guidance

I wish her all the success in her academics

Place: Bilaspur

Dr. Chowlani Manpoong (Supervisor)

Assistant Professor of
Department of Forestry, Wildlife &
Environmental Sciences, GGU, Bilaspur

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गुरू घासीदास विश्वविद्यालय (क्रेन्रीयविश्वविद्यालय विश्वविद्यालय) कोनी, बिलासपुर - 495009 (छ.ग.)



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#### FOREST ATTACHMENT WITH STATE FOREST DEPARTMENT)



#### A REPORT SUBMITTED FOR

# PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE DEGREE OF MASTER OF SCIENCE IN FORESTRY AND ENVIRONMENTAL SCIENCES (FOREST MANAGEMENT)

BY

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Enrollment No: GGV/21/06717

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#### **CERTIFICATE**

This is to certify that Ms. SANDRA DAS K D/o RAMDAS KUNNOTH is a regular student of M.Sc. Forestry & Environmental Sciences IV Semester during the session of 2021-23 of Department of Forestry, Wildlife and Environmental Sciences, GGU, Bilaspur. He has completed this training entitled "Forest Attachment with state forest department)" during this semester under my guidance.

I wish her all the success in her academics.

Place: Bilaspur

Dr. Chowlani Manpoong (Supervisor)

Assistant Professor of

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#### INDUSTRIAL TRAINING



#### A REPORT SUBMITTED FOR

# PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE DEGREE OF MASTER OF SCIENCE IN FORESTRY AND ENVIRONMENTAL SCIENCES

(FOREST MANAGEMENT)

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This is to certify that Ms. Shiwangi Goswami. is a regular student of M.Sc. Forestry & Environmental Sciences IV Semester during the session of 2021-23 of Department of Forestry, Wildlife and Environmental Sciences, GGU, Bilaspur. he has completed this training entitled "Training report on Industrial Training" during this semester under my guidance.

I wish her all the success in her academics.

Place: Bilaspur

Dr. Chowlani Manpoong (Supervisor)

Assistant Professor of

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# A DISSERTATION ON ASSESSMENT OF SOIL AGGREGATION PATTERN IN DIFFERENT PLANTATION SOILS

#### SUBMITTED FOR THE PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THEDEGREE OF MASTERS OF SCIENCE IN FORESTRY AND ENVIRONMENTAL SCIENCE



#### **Submitted By**

Uma M.Sc. Forestry 4<sup>th</sup>Semester Roll No. 21078132

Under the Supervision of

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Department of Forestry, Wildlife & Environmental Science

Guru Ghasidas Vishwavidyalaya (A Central University)
Bilaspur-495009, Chhattisgarh

Session-2023

### Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G.)

(A central university established under Central Universities Act 2009, No. 25 of 2009)

#### Department of Forestry, Wildlife and Environmental Sciences



This is to certify that the Dissertation entitled Assessment of Soil Aggregation Pattern in Different Plantation Soils submitted in partial fulfilment of the requirements for the Degree of Master of Science in Forestry and Environmental Sciences in Department of Forestry, Wildlife & Environmental Sciences, Guru Ghasidas Vishwavidyalaya, Bilaspur (Chhattisgarh) is the work carried out by Ms. Uma D/o Mr.Dayasagar Patel under my supervision and guidance.

I wish all the success in her academics.

Place: Bilaspur

Date: ...../July/2023.

Dr.Chowlani Manpoong
Assistant Professor
(Supervisor)



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#### A Report on Forest Attachment at Raigarh Division, Chhattisgarh



Submitted By Uma M.Sc. Forestry 4<sup>th</sup> semester Roll No. 21078132

Under the Supervision of Dr. Chowlani Manpoong Assistant Professor

DEPARTMENT OF FORESTRY, WILDLIFE & ENVIRONMENTAL SCIENCES

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#### CERTIFICATE

This is to certify that **Uma**, Department of Forestry, Wildlife and Environmental Science, has successfully completed the Forest Attachment Training in the Raigharh Forest Division under the supervision of **Dr.Chowlani Manpoong**, Department of Forestry, Wildlife and Environmental Science, and **Ms. Stylo Mandavi, Divisional Forest Officer (D.F.O)**, Raigharh Forest Division.

During the attachment, **Uma** actively participated in various forestry and environmental conservation activities, gaining practical insights and hands-on experience in the field. Her dedication, enthusiasm, and commitment to learning have been commendable.

We acknowledge his efforts and contribution to the conservation and sustainable management of forests during the period of attachment.

> Dr.Chowlani Manpoong Assistant Professor (Supervisor)

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Declaration

Acknowledgement

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#### Guru Ghasidas Vishwavidyalaya

(A Central University Established by the Central Universities Act 2009 No. 25 of 2009)

Koni, Bilaspur - 495009 (C.G.)

A Report on Industrial Training Sericulture and Silk Industry under the Joint Director Sericulture R.D. & Training Bilaspur (C.G.)



Submitted By Uma M.Sc. Forestry 4<sup>th</sup> semester Roll No. 21078132

Under the Supervision of Dr. Chowlani Manpoong Assistant Professor

SESSION: (2023)

DEPARTMENT OF FORESTRY, WILDLIFE & ENVIRONMENTAL SCIENCES

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Department of Forestry, Wildlife and Environmental Sciences



This is to certify that the Dissertation entitled a report on industrial training sericulture and silk industry under the joint director sericulture R.D. Meena submitted in partial fulfilment of the requirements for the Degree of Master of Science in Forestry and Environmental Sciences in Department of Forestry, Wildlife & Environmental Sciences, Guru Ghasidas Vishwavidyalaya, Bilaspur (Chhattisgarh) is the work carried out by Ms. Uma D/o Mr.Dayasagar under my supervision and guidance.

I wish all the success in her academics.

Place: Bilaspur Date: ...../July/2023.

> Dr.Chowlani Manpoong Assistant Professor (Supervisor)

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Koni, Bilaspur - 495009 (C.G.)

# A Report on Information and Communication

Technology (ICT) Training
SUBMITTED FOR THE PARTIAL FULFILLMENT OF THE REQUIREMENT OF THE
MASTER DEGREE OF SCIENCE IN FORESTRY AND ENVIRONMENTAL SCIENCE



#### Submitted By

Uma

M.Sc. Forestry 4<sup>th</sup>Semester Roll No. 21078132

#### Under the Supervision of

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Session-2023

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#### CERTIFICATE

This is to certify that the student report entitled "Information And Communication Technology (ICT) Training" submitted in partial fulfillment of the requirements for the Degree of Master of Science in Forestry to the Department of Forestry, Wildlife & Environmental Sciences, Guru Ghasidas Vishwavidyalaya, Bilaspur (Chhattisgarh). This report is the genuine record of the bonafide carried out by Ms. Uma under my supervision and guidance. Her work was appreciable and satisfactory.

I wish her all the success in his future academic endeavors.

Place: Bilaspur

Date: ...../July/2023.

Dr.Chowlani Manpoong Assistant Professor (Supervisor)

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## Diversity Assessment of Odonates in the Campus of Guru Ghasidas Vishwavidyalaya

#### A Dissertation

submitted to the Department of Forestry, Wildlife & Environmental Sciences for the partial fulfilment of the requirement of degree of Masters of Science in Forestry & Environmental Sciences



Session - 2023

By Yash Nirmalkar MSc Forestry 4th Semester

Under the Supervision of
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This is to that Mr. Yash Nirmalkar S/O Mr. Dayalu Ram Nirmalkar bearing enrollment number GGV/17/6096 of M.Sc. Forestry, 4th Semester, Department of Forestry, Wildlife and Environmental Sciences has completed his project entitled "Diversity Assessment of Odonates in the Campus of Guru Ghasidas Vishwavidyalaya" under my guidance. I wish him all the success in his academics.

Supervisor: -

Dr. Chowlani Manpoong

Assistant Professor,

Department of Forestry, Wildlife

& Environmental Sciences

Bepartment of Forestry Guru Gheel Das University BILASPUR (M.P.) 49506

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#### Report on

#### Forest Attachment at Gariyaband Division,

#### Chhattisgarh

submitted to the Department of Forestry, Wildlife & Environmental Sciences for the partial fulfilment of the requirement of degree of Masters of Science in Forestry & Environmental Sciences



Session - 2023

By

Yash Nirmalkar

MSc Forestry 4th Semester

Under the Supervision of

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#### CERTIFICATE

This is to that Mr. Yash Nirmalkar S/O Mr. Dayalu Ram Nirmalkar bearing enrollment number GGV/17/6096 of M.Sc. Forestry, 4th Semester, Department of Forestry, Wildlife and Environmental Sciences has completed training on "Forest Attachment in Gariyaband Forest Division" under my supervision. I wish him all the success in his academics.

Supervisor: -

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#### Report on

#### "Sericulture Training"

submitted to the Department of Forestry, Wildlife & Environmental Sciences for the partial fulfilment of the requirement of degree of Masters of Science in Forestry & Environmental Sciences



Session - 2023

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Yash Nirmalkar

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This is to that Mr. Yash Nirmalkar S/O Mr. Dayalu Ram Nirmalkar bearing enrollment number GGV/17/6096 of M.Sc. Forestry, 4th Semester, Department of Forestry, Wildlife and Environmental Sciences has completed "Sriculture Training" under my supervision. I wish him all the success in his academics.

Supervisor: -

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#### Report on

#### "ICT Tools and Techniques"

submitted to the Department of Forestry, Wildlife & Environmental Sciences for the partial fulfilment of the requirement of degree of Masters of Science in Forestry & Environmental Sciences



Session - 2023

By

Yash Nirmalkar

MSc Forestry 4th Semester

Under the Supervision of

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Supervisor: -

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