गुरू घासीदास विश्वविद्यालय (केत्रीय विश्वविद्यालय अधिनय 2008 क्र. 25 के अंतर्गत स्वारित केत्रीय 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.)

Depart	ment	:	Forensic Science			
Academic Year: 2023-24						

Sr. No.	Programme Code	Name of the Programme	
01.	329	B.Sc.	

Sl. No.	Name of student	Page No.
1	Sejal Madke	2-5
2	Abhishek Dixit	6-8
3	Vidhushi Mishra	9-11
4	Vikas Das	12-14
5	Ananya Hariharne	15-17
6	Sakshi Chelak	18-20
7	Aastha Yadav	21-23
8	Parul	24-26
9	Yogita Kashyap	27-29
10	Khushboo Tekchandani	30-32
11	Vasu Devangan	33-35
12	Abha Singh	36-38
13	Ashika Agrawal	39-41
14	Geeta Rajwade	42-44
15	Harshita Pandey	45-47
16	Samridhhi Sahu	48-50
17	Amulya Ratnanand	51-53
18	Jims	54-56
19	Kajal Jangde	57-59
20	Kashish Markam	60-62
21	Raja Singh	63-65
22	Samridhhi Jaiswal	66-68
23	Shriya Agrawal	69-71
24	Shubham Patwa	72-74
25	Nandini Kurrey	75-77
26	Tanya Chaudhary	78-80
27	Pranjal Sahu	81-83
28	Hema Rani Sahu	84-86
29	Prashant Patel	87-89
30	Ujjwal Dansena	90-92
31	Tarushi Singh	93-95
32	Gunjan Bareth	96-98
33	Nandini Kurrey	99-101

CarpHolomil

विभागाध्यक्ष HEAD फोर्सेसक साईस विभाग Department of Forensic Science गुरू घासीवास विष्: विद्यालय, Guru Ghasidas Vishwavidyalaya.





Guru Ghasidas Vishwavidyalaya Bilaspur C.G (A Central University established by Central University Act 2009 No. 25 of 2009)

A REVIEW REPORT

ON

Date Rape Drug: An Obscure Crime
Submitted in the partial fulfillment of the requirement for the award of the
Degree of Bachelor of Science (Hons.) Forensic Science 2021-2024

Submitted by

Sejal Madke

Roll No.: 21045126 Enrollment No.: GGV/21/10326 B.Sc. (Hons.) Forensic Science

> Under the supervision of Miss Blessi N. Uikey

Assistant Professor

Department of Forensic Science Guru Ghasidas Vishwavidyalaya Bilaspur C.G.



1 | Page

विभागाध्यस
HEAD
कोर्सरिक साईस विभाग
Department of Forensic Science
गुरू घासीदास विश् दिशालय,
Guru Ghasidas Vishwavidyalaya.
विलग्धन (छ.ग.)
BILASPUR (C.G.)



Guru Ghasidas Vishwavidyalaya

Department of Forensic Science Bilaspur C.G

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

No...../F.Sc/2024 Date: 13/05/2024

Dr Naveen Vishwakarma

Head of Department Department Of Forensic Science Guru Ghasidas Vishwavidyalaya Bilaspur (C.G)

FORWADING CERTIFICATE

This is to certify that Mini project entitled "Date Rape Drug: An Obscure Crime" has been submitted by Sejal Madke, B.Sc. Forensic Science VIth semester, Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G) under the guidance of Miss Blessi N. Uikey towards partial fulfilment of the requirements for the award of Bachelor's Degree in Forensic Science.

> Dr. Naveen Vishwakarma Assistant Professor Head Of Department of Forensic Science Guru Ghasidas Vishwavidyalaya Bilaspur (C.G)

3 | Page

HEAD

फोर्रेसिक साईस विभाग

Department of Forensic Science
गुरू घासीदास विशः विद्यालय,
Guru Ghasidas Vishwavidyalaya.
बिलासपुर (छ.ग.)

BILASPUR (C.G.)

Signed by Head and Supervisor

Date Rape Drug

Abstract:

Crimes related to drugs are increasing day-by-day worldwide. Drug-facilitated sexual assault, also known as rape date drug incidents, is a widespread and disturbing type of sexual violence that has significant physical, psychological, and societal impacts. This study offers a thorough analysis of rape date drugs, covering their various types, prevalence, how they work, how they can be detected, legal aspects, and ways to prevent such incidents. By examining a wide range of literature, statistics, and forensic case studies, this research paper brings together current information to shed light on the complex nature of drug-facilitated sexual assault. The conversation highlights the difficulties in identifying and bringing to justice those responsible for drug-facilitated sexual assaults and the moral dilemmas involved in dealing with this delicate issue. It also emphasizes the significant role of education and awareness initiatives in preventing such crimes and supporting survivors. In the last decade, there has been an increase in the frequency of reports regarding the covert use of drugs to incapacitate individuals for the intent of sexual assault. Studies indicate that as many as 20% of women encounter some type of sexual assault during their adult years, yet the rates of reporting and conviction continue to be minimal. Enhancing the monitoring of drug-facilitated sexual assault (DFSA) will necessitate various modifications, such as enhancing forensic analysis techniques and providing training for law enforcement and hospital emergency personnel

(autophylomil

विभागाध्यक्ष
HEAD
कोर्सरक साईस विभाग
Department of Forensic Science
गुरू घासीदास विशः विद्यालय,
Guru Ghasidas Visnwavidyalaya.
बिलासपुर (छ.ग.)
BILASPUR (C.G.)





Guru Ghasidas Vishwavidyalaya Bilaspur C.G

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

A REVIEW REPORT ON

Role of Artificial Intelligence in Digital Evidence Mining

Submitted in the partial fulfillment of the requirement for the award of the Degree of Bachelor of Science (Hons.) Forensic Science

2021-2024

Submitted by

Abhishek Dixit

Roll No.: 21045103

Enrollment No.: GGV/21/10313

B.Sc. (Hons.) Forensic Science

Under the supervision of

Miss Blessi N. Uikey

Assistant Professor

Department of Forensic Science



Department of Forensic Science Guru Ghasidas Vishwavidyalaya Bilaspur C.G

Carpydoul

विभागाध्यक्ष
MEAD
कौरितक पाईस विभाग
Department of Forensic Science
गुरू घासीचार विश् विद्यालय,
Guru Ghasidas Vishwavidyalaya.
विवासपुर (छ.स.)
BILASPUR (C.G.)





Department of Forensic Science Guru Ghasidas Vishwavidyalaya Bilaspur C.G

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

No...../F.Sc/2024

Date:

Prof. Naveen Kumar Vishvakarma

Head of Department Department of Forensic Science Guru Ghasidas Vishwavidyalaya Bilaspur (C.G)

FORWADING CERTIFIFATE

This is to certify that Mini project entitled "Role of Artificial Intelligence in Digital Evidence Mining" has been submitted by Abhishek Dixit, B.Sc. (Hons.) Forensic Science 6th semester, Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G.) under the guidance of Miss Blessi N. Uikey towards partial fulfilment of the requirements for the award ofBachelor's Degree in Forensic Science.

Prof. Naveen Kumar Vishvakarma Head of Department Department of Forensic Science Guru Ghasidas Vishwavidyalaya Bilaspur (C.G.) - 495009

Carpholomil

विभागाध्यक्ष
HEAD

फोर्सेसिक साईस विभाग

Department of Forensic Science
गुरू घासीदास विश्व विद्यालय,
Guru Ghasidas Vishwavidyalaya.
बिलासपुर (छ.ग.)

BILASPUR (C.G.)

Table of Contents

S.No.	Contents	Page No.
1.	Introduction	2-4
2.	Role of Artificial Intelligence in Digital Evidence Mining	5-12
3.	Advancements in AI Technologies for Digital Evidence Mining	13-17
4.	Challenges and Limitations	18-23
5.	Case Studies and Applications	24-25
6.	Future Directions and Implications	26-29
7.	Conclusion	30-32
8.	References	33-35

विभागाध्यस
HEAD
कोर्सरक साईस विभाग
Department of Forensic Science
गुरु घासीदास विशः विद्यालय,
Guru Gharwardy,
Bilaspur (t.s.ग.)
BILASPUR (C.G.)

1





Guru Ghasidas Vishwavidyalaya Bilaspur C.G

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

A REVIEW REPORT

ON

ROLE OF CYP2E1 POLYMORPHISMS IN BREAST CANCER

Submitted in the partial fulfillment of the requirement for the award of the Degree of Bachelor of Science (Hons.) Forensic Science

2021-2024

Submitted by Vidushi Mishra

Roll No.: 21045133

Enrollment No.: GGV/21/10334 B.Sc. (Hons.) Forensic Science

Under the supervision of
Dr. Chanchal Kumar
Assistant Professor
Department of Forensic Science

Department of Forensic Science Guru Ghasidas Vishwavidyalaya Bilaspur C.G

apploud

प्रभागिक्यल HEAD कोर्रेसिक साईस विभाग Department of Forensic Science गुरू घासीदास विश-विद्यालय, Guru dhasidas Vishwavidyalaya. बिलासपुर (छ.स.) BILASPUR (C.G.)



B.Sc. Forensic Science



Department of Forensic Science Guru Ghasidas Vishwavidyalaya Bilaspur C.G

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

No./F.Sc/2024

Date: 14/05/24

Dr Naveen Kumar Vishvakarma Head of Department Department Of Forensic Science Guru Ghasidas Vishwavidyalaya Bilaspur (C.G)

FORWADING CERTIFIFATE

This is to certify that Mini project entitled "Role of CYP2E1 Polymorphism in Breast Cancer" has been submitted by Vidushi Mishra, B.Sc. Forensic Science 6th semester, Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G) under the guidance of Dr. Chanchal Kumar towards partial fulfilment of the requirements for the award of Bachelor's Degree in Forensic Science.

Dr. Naveen Kumar Vishvakarma Professor Head Of Department

anophdom

विभागाध्यक्ष
HEAD

फोर्रेसिक साईस विभाग

Department of Forensic Science
गुरू घारीदास विश्वहालय,
Guru Ghasidas Vishwavidyalaya.
बिलासपुर (इ.ग.)

_.

ABSTRACT

Genetic polymorphisms affecting cytochrome P450 2E1 (CYP2E1) and their correlation with the emergence of malignancies guided by ecological factors. An essential step in the normal cell's transition into a malignant one is the metabolic activation of procarcinogens, which is carried out by the cytochrome P450 monooxygenase enzyme system. Because CYP2E1 is involved in the biotransformation of several procarcinogens, studies examining the relationship between polymorphisms in the gene and the risk of developing cancer are particularly interesting. We pay particular attention to characterising the known CYP2E1 polymorphisms and analysing how they contribute to the aetiology of different cancer types. The findings show that CYP2E1 genetic variants are associated with a higher and a lower chance of developing malignant tumours. Geographical and ethnic differences were also noted in the distribution frequencies of CYP2E1 variations.

Key words: CYP2E1 Polymorphisms, Brest cancer

विभागाध्यक HEAD कोर्देसिक साईस विभाग Department of Forensic Science गुरू घासीदास विश् विद्यालय, Guru Ghasidas Vishwavidyalaya. विवस्पुर (छ.ग.) BILASPUR (C.G.)

2





Department of Forensic Science

Guru Ghasidas Vishwavidyalaya

(A Central University Established Under the Central Universities Act, 25 of 2009)

Bilaspur, Chhattisgarh, India

No. /F. Sc./2020

Date:

Bilaspur

Dr. Naveen Kumar Vishwakarma

Head (In-charge) Department of Forensic Science Guru Ghasidas Vishwavidyalaya Bilaspur (C.G.)

FORWARDING CERTIFICATE

This is to certify that the Mini project entitled "Comprehensive analysis of injuries caused by lightning" has been submitted by Vikash Das B.Sc. Forensic Science 6th semester, Guru Ghasidas Vishwavidyalaya, Koni, Bilaspur (C.G.) under the guidance of Dr. Sudhir Yadav towards partial fulfillment of the requirements for the Bachelor's Degree in Forensic science award.

Dr. Naveen Kumar Vishwakarma

Assistant Professor and Head (In-charge) Department of Forensic Science Guru Ghasidas Vishwavidyalaya Bilaspur

Cappydoul

MEAD

कोर्रेसिक साईस विभाग

Department of Forensic Science
गुरू घासीदास विश् विद्यालय,
Guru Ghasidas Vishwavidyalaya.
बिलासपुर (छ.स.)

BILASPUR (C.G.)





Guru Ghasidas Vishwavidyalaya Bilaspur C.G

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

A REVIEW REPORT ON COMPREHENSIVE ANALYSIS OF INJURIES CAUSED BY LIGHTNING

Submitted in the partial fulfillment of the requirement for the award of the Degree of Bachelor of Science (Hons.) Forensic Science

2021-2024

Submitted by
VIKASH DAS
Roll No.:21045135
Enrolment No. GGV/21/1033
B.Sc. (Hons.) Forensic Science

Under the supervision of
Dr. SUDHIR YADAV
Assistant Professor
Department of Forensic Science
Guru Ghasidas Vishwavidyalaya Bilaspur C.G

March

विभागाध्यक्ष HEAD फोरॅसिक साईस विभाग Department of Forensic Scienc गुरू घासीदास विश्वालय, Guru Ghasidas Vishwavidyalaya बिलासपुर (छ.ग.)

CONTENTS

- Introduction to Lightning
- Mechanism of Injury
- Types of Lightning Injuries
- Epidemiology
- Risk Factors
- Clinical Presentation: Diagnosis and Assessment
- Treatment Strategies
- Complications and Long-Term Effects
- Lightning Safety Measures
- · Impact on Society
- Case Studies
- · Current Research and Future Directions
- Psychological Impact
- Conclusion

Carpydoul

विभागाध्यक्ष
HEAD
फोरॅसिक साईस विभाग
Department of Forensic Science
गुरू घासीदास विशः विद्यालय,
Guru Ghaisav Vishwavidyalaya.
बिलासपुर (छ.ग..)
BILASPUR (C.G.)



Guru Ghasidas Vishwavidyalaya Bilaspur C.G

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

A REVIEW REPORT ON COUNTERACTING THE EFFECT OF BENZODIAZEPINES WITH PHYTOCHEMICALS TO REHABILITATE ABUSERS

Submitted in the partial fulfillment of the requirement for the award of the Degree of Bachelor of Science (Hons.) Forensic Science

2021-2024

Submitted by

ANANYA HARIHARNO

Roll No.: 21045106

Enrollment No.: GGV/21/10306

B.Sc. (Hons.) Forensic Science

Under the supervision of

Dr. AJAY AMIT Assistant Professor

Department of Forensic Science



DEPARTMENT OF FORENSIC SCIENCE GURU GHASIDAS VISHVAVIDYALAYA BILASPUR C.G.

Carpydoul

विभागाध्यस
HEAD

फोर्रसिक साईस विभाग
Department of Forensic Science
गुरू चासीचास विशः विद्यालय Guru Ghasidas Vishwavidyalaya
विलासपुर (इ.ग.)



Department of Forensic Science Guru Ghasidas Vishwavidyalaya Bilaspur C.G

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

No./F.Sc/2024

Date: 15/05/24

Dr Naveen Kumar Vishvakarma Head

of Department Department Of Forensic Science Guru Ghasidas Vishwavidyalaya Bilaspur (C.G)

FORWADING CERTIFICATE

This is to certify that Mini project entitled "Counteracting the effect of Benzodiazepines with Phytochemicals to rehabilitate abusers" has been submitted by Ananya Hariharno, B.Sc. Forensic Science 6th semester, Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G) under the guidance of **Dr. Ajay Amit** towards partial fulfilment of the requirements for the award of Bachelor's Degree in Forensic Science.

Dr. Naveen Kumar Vishvakarma Professor Head Of Department Department of Forensic Science Guru Ghasidas Vishwavidyalaya Bilaspur (C.G)

Carpholomil

ावभागध्यक्ष HEAD फोरेंसिक साईस विभाग Department of Forensic Science गुरू घासीदास विश्व विद्यालय, Guru Ghasidas Vishwavidyalaya बिलासपुर (छ.ग.)

ACKNOWLEDGEMENT

I would like to take this opportunity to express our profound gratitude and deep regard to Dr. Naveen Kumar Vishvakarma, Head of Department of Forensic Science for his exemplary guidance, valuable feedback and constant encouragement throughout my duration of the review mini project. His valuable suggestions were of immense help throughout my project work. His perceptive criticism kept me working to make me working to make this project in a much better way. Working under him was in extremely knowledgeable experience for me.

Special thanks to Dr. R. K. Mehta, Dean, School of Studies of interdisciplinary education and research for his freedom of thought, suggestion and support.

I am highly indebted to my supervisor Dr. Chanchal Kumar, Department of Forensic Science, Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G) for his guidance as well as intellectual suggestions for completing my review paper which bought my work in the present form successfully.

Furthermore, I would also like to extend my sincere regards to my teachers for their constant support during my work: Dr. Navjot Kaur, Dr. Sudhir Yadav, Dr. Ajay Amit, Miss Blessi N. Uikey, Mr. Ashvani Kumar Prajapati, Mr. T. Ravi Teja, Mr. Shoeb Akhtar and all respected PhD Scholars.

I would also like to give my sincere gratitude to all the friends who helped me in my entire review paper, without which this mini project would be incomplete.

Ananya Hariharno B.Sc. Hons VIth Sem

Department of Forensic Science,

Guru Ghasidas Vishwavidyalaya, Bilaspur C.G

Date: 15/05/24 Place: Bilaspur (C.G)

and Hours

प्रभागस्थल HEAD कोरॅसिक साईस विभाग Department of Forensic Science गुरू घासीदास विश्व विद्यालय, Guru Ghasidas Vishwavidyalaya. बिलासपुर (छ.ग.) BILASPUR (C.G.)



Guru Ghasidas Vishwavidyalaya Bilaspur C.G

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

A REVIEW REEPORT

ON

'UNDERSTANDING POSTMORTEM SUBMERSION INTERVAL'

Submitted in the partial fulfillment of the requirement for the award of the Degree of Bachelor of Science [Hons] Forensic science 2021-2024

> Submitted By-Sakshi Chelak Roll No.-21045123 Enrollment No.-GGV/21/10323 B.Sc.[Hons.] Forensic Science

> > Under the supervision of:

Dr. Ajay Amit Assistant Professor Department of Forensic Science







Department of Forensic Science

Guru Ghasidas Vishwavidyalaya ,Koni ,Bilaspur [C.G.]

applound

विभागध्यक्ष HEAD फोरॅसिक साईस विभाग Department of Forensic Science गुरू घासीदास विशः विद्यालय, Guru Ghasidas Vishwavidyalaya. बिलासपुर (छ.ग.) BILASPUR (C.G.)





DepartmentofForensicScienc GuruGhasidasVishwavidyalayaBilaspurC.G

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

No...../F.Sc/2024

Bilaspur

Date:

Dr Naveen K Vishwakarma

Head of Department Guru Ghasidas Vishwavidyalaya Bilaspur (C.G)

FORWARDING CERTIFICATE

This is to certify that the mini project entitled 'Understanding Post Mortem Submersion Interval' has been submitted by Sakshi chelak , B.Sc. Forensic Science 6th semester to Guru Ghasidas Vishwavidyalaya ,Koni , Bilaspur [C.G.] under the guidance of Dr. Ajay Amit towards partial fulfillment of the requirement for the award of Bachelor's Degree in Forensic Science.

Dr. Naveen K Vishwakarma

Assistant Professor And Head [In charge] Department of Forensic Science Guru Ghasidas Vishwavidyalaya Bilaspur [C.G.]

विभागाच्यस
HEAD
कोर्सरिक साईस विभाग
Department of Forensic Science
गुरू घासीदास विशः विद्यालय,
Guru Ghasidas Vishwavidyalaya.
विवासपुर (इ.ग.)
BILASPUR (C.G.)





Guru Ghasidas Vishwavidyalaya Bilaspur C.G

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

A REVIEW REPORT

ON

INVESTIGATING AND SOLVING WILDLIFE CRIMES

Submitted in the partial fulfillment of the requirement for the award of the Degree of Bachelor of Science (Hons.) Forensic Science

2021-2024

Submitted by

Aastha Yadav

Roll No.: 21045102

Enrollment No.: GGV/21/10302

B.Sc. (Hons.) Forensic Science

Under the supervision of

Miss Blessi N. Uikey

Assistant Professor

Department of Forensic Science

Guru Ghasidas Vishwavidyalaya Bilaspur C.G

Carpholomel

प्रभितिक साईस विभाग Department of Forensic Sciene गुरू घासीदास विश्व विद्यालय, Guru Ghasidas Vishwavidyalay बिलासपुर (छ.ग.) BILASPUR (C.G.)





Guru Ghasidas Vishwavidyalaya

Department of Forensic Science Bilaspur C.G

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

No. /F.Sc/2024

Date: 13/05/24

Dr Naveen Kumar Vishvakarma

Head of Department Department Of Forensic Science Guru Ghasidas Vishwavidyalaya

Bilaspur (C.G)

FORWADING CERTIFIFATE

This is to certify that Mini project entitled "INVESTIGATING AND SOLVING WILDLIFE CRIMES" has been submitted by Aastha Yadav, B.Sc. Forensic Science 6th semester, Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G) under the guidance of Miss Blessi N. Uikey towards partial fulfilment of the requirements for the award of Bachelor's Degree in Forensic Science.

Dr. Naveen Kumar Vishvakarma Professor Head of Department Department of forensic science Guru Ghasidas Vishwavidyalaya Bilaspur (C.G)

Carpydoul

ावभागाध्यस MEAD कोर्रेसिक साईस विभाग Department of Forensic Science गुरू चासीवास विशः विद्यालय, Guru Ghasidas Vishwavidyalaya बिलासपुर (इ.स.) होतासपुर (इ.स.)



ACKNOWLEDGEMENT

I would like to take this opportunity to express our profound gratitude and deep regard to **Dr.**Naveen Kumar Vishvakarma, Head of Department of Forensic Science for his exemplary guidance, valuable feedback and constant encouragement throughout my duration of the review mini project. His valuable suggestions were of immense help throughout my project work. His perceptive criticism kept me working to make me working to make this project in a much better way. Working under him was in extremely knowledgeable experience for me.

Special thanks to Dr. R. K. Mehta, Dean, School of Studies of interdisciplinary education and research for his freedom of thought, suggestion and support.

I am highly indebted to my supervisor Miss Blessi N. Uikey, Department of Forensic Science, Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G) for his guidance as well as intellectual suggestions for completing my review paper which bought my work in the present form successfully.

Furthermore, I would also like to extend my sincere regards to my teachers for their constant support during my work: Dr. Navjot Kaur, Dr. Sudhir Yadav, Dr. Ajay Amit, Dr. Chanchal Kumar, Mr. Ashvani Kumar Prajapati, Mr. T. Ravi Teja, Mr. Shoeb Akhtar and all respected PhD Scholars.

I would also like to give my sincere gratitude to all the friends who helped me in my entire review paper, without which this mini project would be incomplete

Aastha Yadav

B.Sc. Hons VIth Sem.

Department of Forensic Science,

Guru Ghasidas Vishwavidyalaya, Bilaspur C.G

Date: 13/05/24

Place: Bilaspur (C.G)

Carpholomil

विभागाध्यक्ष HEAD
फोरेंसिक साईस विभाग
Department of Forensic Science
गुरू घासीदास विश्ववालय,
Guru Ghasidas Vishwavidyalaya
बिलासपुर (छ.ग.)
BII ASPIJB & G.)





Guru Ghasidas Vishwavidyalaya Bilaspur C.G

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

A REVIEW REPORT

ON

"23Y STR loci on Indian population & it's forensic significance"

Submitted in the partial fulfillment of the requirement for the award of the

Degree of Bachelor of Science (Hons.) Forensic Science

2021-2024

Submitted by

Parul

Roll No.: 21045118

Enrollment No.: GGV/21/10318

B.Sc. (Hons.) Forensic Science

Under the supervision of

Dr. Chanchal Kumar

Assistant Professor

Department of Forensic Science

Guru Ghasidas Vishwavidyalaya Bilaspur (C.G)

Carpydoul

विभागाध्यस HEAD फोर्सेसक साईस विभाग Department of Forensic Science गुरू घासीदास विश्व विद्यालय, Guru Ghasidas Vishwavidyalaya. बिलासपुर (इ.ग.) BILASPUR (C.G.)





Department of Forensic Science

Guru Ghasidas Vishwavidyalaya Bilaspur C.G

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

No. /F.Sc/2024

Bilaspur

Date: 13/05/2024

Dr Naveen Kumar Vishvakarma

Head of Department

Department Of Forensic Science

Guru Ghasidas Vishwavidyalaya

Bilaspur (C.G)

FORWARDING CERTIFICATE

This is to certify that the Mini project entitled "23 Y-STR LOCI ON INDIAN POPULATION AND IT'S FORENSIC SIGNIFICANCE" B.Sc. Forensic Science 6th semester, Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G) under the guidance of Dr. Chanchal Kumar towards partial fulfillment of the requirements for the award of Bachelor's Degree in Forensic Science

Dr. Naveen Kumar Vishvakarma

Professor

Head Of Department

Department of Forensic Science

Guru Ghasidas Vishwavidyalaya Bilaspur (C.G)

विभागाध्यस HEAD फोरेंसिक साईस विभाग Department of Forensic Science

দামে।

फोर्सेसिक साईस विभाग

Department of Forensic Science
गुरू चासीदास विष्टः विद्यालय,
Guru Ghasidas Vishwavidyalaya.
बिलासपुर (छ.ग.)

BILASPUR (C.G.)



ABSTRACT

The Y chromosome, which is virtually intact and passed down to all male children from the father from generation to generation without changing (except changes in Y-chromosome STRs), is the source of Y-STR DNA profiling. The allele amplification of Y-STRs is constant and widespread among both distant and close male relatives, which is a beautiful feature. We tried to illustrate the use of Y-STR profiling in forensic science and the criminal justice system in this chapter, along with some of the consequences.

Keywords:- STRs, Haplotype, DNA typing, Y chromosome, forensic science, and case studies.

Cappydoul

বিশাশাচ্যাম MEAD

কাইবিক লাইন বিশাশ

Department of Forensic Science
বুক ঘানীবান বিহ: বিহালেন,
Guru Ghasidas Vishwavidyalaya.
বিলাব্দু (চ.বা.)
BILASPUR (C.G.)





Guru Ghasidas Vishwavidyalaya Bilaspur C.G

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

A REVIEW REPORT ON CYANOTOXINS- IT'S CLASSIFICATION AND DETECTION TECHNIQUES

Submitted in the partial fulfillment of the requirement for the award of the Degree of Bachelor of Science (Hons.) Forensic Science

2021-2024

Submitted by Yogita Kashyap Roll No.:21045136, Enrollment No. GGV/21/10336, B.Sc. (Hons.) Forensic Science

Under the supervision of **Dr. Chanchal Kumar**Assistant Professor
Department of Forensic
Science

Department of Forensic Science Guru Ghasidas Vishwavidyalaya Bilaspur C.G

> विभागाध्यक्ष HEAD फोर्टेसिक साईस विभाग

> फोर्सेसिक साईस विभाग Department of Forensic Science गुरू घासीदास विश्वविद्यालय, Guru Ghasidas Vishwavidyalaya बिलासपुर (छ.ग.)





Department of Forensic Science Guru Ghasidas Vishwavidyalaya Bilaspur C.G

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

No...../F.Sc/2024 Bilaspur Date:

Dr. NAVEEN KUMAR VISHWAKARMA

Head of Department Of Forensic Science Guru Ghasidas Vishwavidyalaya Bilaspur (C.G)

FORWARDING CERTIFICATE

This is to certify that Mini project entitled "CYANOTOXINS- It's Classification And Detection Techniques" has been submitted by Yogita Kashyap, B.Sc. Forensic Science 6th semester, Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G) under the guidance of Dr. Chanchal Kumar towards partial fulfilment of the requirements for the award of Bachelor's Degree in Forensic Science.

Dr. NAVEEN KUMAR VISHWAKARMA

Professor Head Of Department of Forensic Science Guru Ghasidas Vishwavidyalaya Bilaspur (C.G)

विभागाध्यक्ष HEAD फोर्सेसक साईस विभाग Department of Forensic Science गुरू घासीदास विष्टः विद्यालय, Guru Ghasidas Vishwavidyalaya. बिलासपुर (छ.ग.) BILASPUR (C.G.)



❖ ABSTRACT

Cyanobacterial toxins are potent natural compounds produced by certain species of cyanobacteria, also known as blue-green algae. These toxins pose significant risks to human and animal health as well as ecosystem integrity. Understanding cyanobacterial toxins, their detection methods, management strategies, and potential applications is crucial for safeguarding public health and environmental sustainability.

विभागाध्यस
HEAD
फोर्रेसिक साईश विभाग
Department of Forensic Science
गुरु घारोदिका चित्र विधालय,
Guru Ghasidas Vishwavidyalaya,
विसासपुर (इ.ग.)
BILASPUR (C.G.)



"POSSIBILITY OF IMMUNOMEDIATOR AS A BIOMARKER FOR PREDICTION OF DURATION OF DIAZEPAM ABUSE"

A

B.Sc. Mini project

Submitted to

Guru Ghasidas Vishwavidyalaya, Bilaspur

In partial fulfillment of the requirement for the

Degree of

Bachelor of Science

Tn

Forensic Science

Ву

Ms. Khushboo Tekchandani

(En. No:- GGV/21/10315; Roll No.: 21045115)

Under the Guidance of

Dr. Ajay Amit

Assistant Professor

Department of Forensic Science



GURU GHASIDAS VISHWAVIDYALAYA

A Central University

Bilaspur (C.G.), 2024

Carpholomil

विभागाध्यक्ष
HEAD
फोर्सिक साईस विभाग
Department of Forensic Science
गुरू घासीवास विद्र्यात्वाराल,
Guru Ghasidas Vishwavidyalaya.
बिलासपुर (छ.ग.)
BILASPUR (C.G.)





Department of Forensic Science

Guru Ghasidas Vishwavidyalaya

(A Central University Established Under the Central Universities Act, 25 of 2009) Bilaspur, Chhattisgarh, India

No./F.Sc./2021 Bilaspur

Date:

Dr. Naveen Kumar Vishvakarma

Professor and Head (In-charge) Department of Forensic Science Guru Ghasidas Vishwavidyalaya Bilaspur (C.G.)

FORWARDING CERTIFICATE

This is to certify that the Mini project entitled "Possibility of Immunomediator as a Biomarker for prediction of duration of Diazepam Abuse" has been submitted by Ms. Khushboo Tekchandani, B.Sc. Forensic Science 6th semester, Guru Ghasidas Vishwavidyalaya, Koni, Bilaspur (C.G.) under the guidance of Dr. Ajay Amit towards partial fulfillment of the requirements for the award of Bachelor's Degree in Forensic science.

Dr. Naveen Kumar Vishvakarma

Professor and Head (In-charge) Department of Forensic Science Guru Ghasidas Vishwavidyalaya Bilaspur (C.G.)

विभागाध्यस
HEAD
कोर्रेसिक साईस विभाग
Department of Forensic Science
गुरू घासीदास विश् विचालय,
Guru Ghasidas Vishwavidyalaya
विवासपुर (छ.ग.)
BILASPUR (C.G.)

गुरु घासीदास विश्वविद्यालय (केन्द्रीय विश्वविद्यालय अधिनियम २००९ क्र. २५ के अंतर्गत स्थापित 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.)

Abstract

The impact of diazepam (DZ) on GABAAR regulation, which can also promote T cell proliferation through the mitochondrial-based translocator protein (TSPO). In the central nervous system (CNS), GABA-activated ion channels are the main sites for fast synaptic inhibition. These receptors are referred to as GABAA receptors (GABAAR). According to recent research, GABAAR may have a role in controlling the immune response. The aim of this work was to investigate the effects of GABA and GABAARs on human and mouse T cell activation. Mouse splenocytes or human peripheral blood mononuclear cells (PBMCs) were stimulated with anti-CD3 antibodies, and the proliferation of CD8+ and CD4+ T cells was assessed by flow cytometry. In contrast to the LPS condition, we found that treating macrophages or dendritic cells (DCs) with DZ plus lipo polysaccharide (LPS) resulted in reduced expression of traditional activation indicators such NO generation and CD40 as well as impaired secretion of IL-12, TNFa, and IL-6. More significantly, mice that were given DZ beforehand and subsequently exposed to LPS-induced septic shock died at a lower rate. Peritoneal cells' (PCs') LPS-induced proinflammatory cytokine production was changed by the DZ treatment to an anti-inflammatory profile driven by IL-10. Accordingly, when compared to LPS-matured DC, DZ treatment inhibited the capacity of LPS-induced DC to develop allogeneic Th1 and Th17 responses in vitro. DZ was administered to EAE mice as a preventative measure since these inflammatory reactions are crucial to the development of experimental autoimmune encephalomyelitis (EAE). Numerous research investigations demonstrated that benzodiazepines could influence immunological responses by interacting with immune cells' peripheral benzodiazepine receptors (PBRs); nevertheless, the majority of these studies concentrated on monocytes and macrophages. In this investigation, we found that the mixed-type benzodiazepine diazepam reduced, in a dosedependent manner, the generation of IFN-y by human peripheral blood mononuclear cells (PBMCs) stimulated by anti-CD3. All these studies showed that Diazepam is a potent immunomodulator that activates GABA A and suppress T cell proliferation and also it was done through PBRs. This leads to immunomodulation by Diazepam that can cause a variety of changes in immune system and can lead to commitment of crimes and overdoses may also cause death in severe cases. This may act as a biomarker for immunomediation.

Keywords:-Diazepam, Abuse, Immunomodulation, Immunosuppressant, Peripheral Benzodiazepine receptor, Central Benzodiazepine receptor, Biomarker.

HEAD फोरॅसिक साईस विभाग Department of Forensic Science गुरू घासीवास विश्ववालय, Guru Ghasidas Vishwavidyalaya. बिलाजपुर (१७ ग.)





Guru Ghasidas Vishwavidyalaya Bilaspur C.G

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

A REVIEW REPORT ON DNA BASED BIOSENSORS FOR DRUGS OF ABUSE

Submitted in the partial fulfillment of the requirement for the award of the Degree of Bachelor of Science (Hons.) Forensic Science

2021-2024

Submitted by

Vasu Dewangan

Roll No.: 21045133

Enrollment No.: GGV/21/10333 B.Sc. (Hons.) Forensic Science

Under the supervision of **Dr. Chanchal Kumar**

Assistant Professor

Department of Forensic Science



Department of Forensic Science Guru Ghasidas Vishwavidyalaya Bilaspur C.G

Carpydoul

विभागाध्यक्त MEAD फोर्सेसिक साईस विभाग Department of Forensic Science गुरू घासीदास विश्व विद्यालय, Guru Ghasidas Vishwavidyalaya. बिलासपुर (छ.ग.) BILASPUR (C.G.)





Department of Forensic Science Guru Ghasidas Vishwavidyalaya Bilaspur C.G

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

No./F.Sc./2024

Date: 13/05/24

Dr Naveen Kumar Vishvakarma

Head of Department Department Of Forensic Science Guru Ghasidas Vishwavidyalaya Bilaspur (C.G)

FORWARDING CERTIFICATE

This is to certify that Mini project entitled "DNA based Biosensor for Drugs of Abuse" has been submitted by Vasu Dewangan, B.Sc. Forensic Science 6th semester, Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G) under the guidance of Dr. Chanchal Kumar towards partial fulfilment of the requirements for the award of Bachelor's Degree in Forensic Science.

Dr. Naveen Kumar Vishvakarma

Professor Head Of Department Department of Forensic Science Guru Ghasidas Vishwavidyalaya Bilaspur (C.G)

Carpfdoul

प्रभागकाया प्रभागकायाः प्रभागकायाः Department of Forensic Science गुरू चासीदास विश्व विद्यालय, Guru Ghasidas Vishwavidyalaya. बिलासपुर (छ.ग.) BILASPUR (C.G.)

Index

1. Introduction

- 1.1. Definition of DNA based biosensors
- 1.2. Importance of DNA based biosensors

2. Principal of DNA based biosensors

- 2.1. DNA hybridization
- 2.2. Electrochemical
- 2.3. Optical detection

3. Application of DNA based biosensors in drugs of abuse detection

- 3.1. Detection of cocaine
- 3.2. Detection of methamphetamine
- 3.3. Detection of codeine

4. Advantages and limitation of DNA based biosensors

- 4.1. High sensitivity and selectivity
- 4.2. Challenges in sample preparation, cost and comple

विभागाध्यक्ष
HEAD
फोर्सेसक साईच विभाग
Department of Forensic Science
गुरू घामीचार्य विशः विधानय,
Guru Ghasidas Vishwavidyalaya,
बिलासपुर (छ.ग.)
BILASPUR (C.G.)

"Potential of immunomodulatory mediator as biomarker for predicting the duration of Cannabis abuse in Forensic Investigation"

A

B.Sc. Mini project

submitted to

Guru Ghasidas Vishwavidyalaya, Bilaspur

in partial fulfillment of the requirement for the

degree of

Bachelor of Science

In

Forensic Science

Ву

Ms. Aabha Singh

(En. No. GGV/21/10301; Roll No.: 21045101)

Under the Guidance of

Dr. Ajay Amit

Assistant Professor

Department of Forensic Science

Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G.)



GURU GHASIDAS VISHWAVIDYALAYA

A Central University

Bilaspur (C.G.)

2024

Carpydound

विभागध्यक्ष HEAD फोरॅसिक साईस विभाग Department of Forensic Science गुरू घासीदास विश्वहालय, Guru Ghasidas Vishwavidyalaya. बिलासपुर (छ.ग.) BILASPUR (C.G.)





Department of Forensic Science

Guru Ghasidas Vishwavidyalaya

(A Central University Established Under the Central Universities Act, 25 of 2009)

Bilaspur, Chhattisgarh, India

No. /F. Sc./2021 Date: Bilaspur

Dr. Naveen Kumar Vishvakarma

Professor and Head (In-charge) Department of Forensic Science Guru Ghasidas Vishwavidyalaya Bilaspur (C.G.)

FORWARDING CERTIFICATE

This is to certify that the Mini project entitled "potential of immunomodulatory mediator as biomarker for predicting the duration of cannabis abuse in forensic investigation" has been submitted by Ms. Aabha Singh, B.Sc. Forensic Science 6th semester, Guru Ghasidas Vishwavidyalaya, Koni, Bilaspur (C.G.) under the guidance of Dr. Ajay Amit towards partial fulfilment of the requirements for the award of Bachelor's Degree in Forensic science.

Dr. Naveen Kumar Vishvakarma

Professor

and Head (In-charge)

Department of Forensic Science

Guru Ghasidas Vishwavidyalaya

Bilaspur (C.G.)

anythour

विभागाध्यस HEAD
फोर्सेसक साईस विभाग
Department of Forensic Science
गुरू घासीदास विशः विद्यालय,
Guru Ghasidas Vishwavidyalaya.
बिलासपुर (छ.ग.)
BILASPUR (C.G.)



ABSTRACT

Title: Potential of Immunomodulatory Mediators as Biomarkers for Predicting Duration of Cannabis abuse in forensic investigation.

Cannabis use has become increasingly prevalent globally, with varying degrees of legal acceptance and societal attitudes. Understanding the long-term effects of cannabis use on health remains a crucial area of research. Immunomodulatory mediators, including cytokines and chemokines, have emerged as potential biomarkers for monitoring cannabis use and its associated health implications. This review aims to summarize current knowledge regarding the immunomodulatory effect of cannabis and explore the feasibility of using immunomodulatory markers as predictors of cannabis use duration. Cannabis use include changes in cytokine level and immune cell activity where the chronic use of cannabis can cause dysregulation of immune system resulting in increased inflammation and cytokine profiles. These immunomodulatory changes could serve as biomarkers for assessing the duration and dose of cannabis use over time. However, the relationship between specific immunomodulatory markers and cannabis use duration is still not fully understood. Factors such as individual variability, co-occurring health conditions, and the method of cannabis consumption can influence immune responses and complicate the interpretation of biomarker data. It is important to understand all these phenomena because day by day drug of abuse is in rapid increase so, future research efforts should focus on elucidating the complex interactions between cannabis use and immune function, as well as validating the utility of immunomodulatory markers as predictors of cannabis exposure duration which can lead to distinguish between chronic and

Keyword: Cannabis, immunomodulation, biomarker, immune system, cytokine.

HEAD

फাইমিক মার্ক্তম বিশাদা
Department of Forensic Science
যুক্ত ঘামীরাম বিহু: বিশ্বালয়,
Guru Ghasidas Vishwavidyalaya,
বিলামযুক্ত (ড্ৰ.ম.)
BILASPUR (C.G.)





Guru Ghasidas Vishwavidyalaya Bilaspur C.G

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

A REVIEW REPORT ON EXPOSURE TO RADIATION INJURY

Submitted in the partial fulfillment of the requirement for the award of the Degree of Bachelor of Science (Hons.) Forensic_Science

2021-2024

Submitted by
ASHIKA AGRAWAL
Roll No.:21045107
Enrollment No. GGV/21/10305
B.Sc. (Hons.) Forensic Science

Under the supervision of

Dr. Sudhir Yadav

Assistant Professor

Department of Forensic Science
Guru Ghasidas Vishwavidyalaya Bilaspur C.G

Carpholomil

1 | Page

विभागध्यत्त MEAD mोरेंसिक साईस विभाग Department of Forensic Science युक्त घासीवास विशः विद्यालय, Guru Ghasidas Vishwavidyalaya. विलासपुर (छ.स.) BILASPUR (C.G.)



Bilaspur



Department of Forensic Science Guru Ghasidas Vishwavidyalaya Bilaspur C.G (A Central University established by Central University Act 2009 No. 25 of 2009)

No./F.Sc/2024 Date: 13/05/2024

Dr Naveen kumar Vishwakarma

Head of Department Department Of Forensic Science Guru Ghasidas Vishwavidyalaya Bilaspur (C.G)

FORWARDING CERTIFICATE

This is to certify that Mini project entitled "Exposure to radiation injury", Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G) under the guidance of **Dr. Sudhir Yadav** towards partial fulfilment of the requirements for the award of Bachelor's Degree in Forensic Science.

Dr. Naveen kumar Vishwakarma Head Of Department Department of Forensic Science Guru Ghasidas Vishwavidyalaya Bilaspur (C.G)

3 | Page

Carpydoul

विभागाध्यक्ष
HEAD
फोर्सेसक साईस विभाग
Department of Forensic Science
गुरू चार्सीतास विशः विद्यालय,
Guru Ghasidas Vishwavidyalaya.
बिरासपुर (इ. स.)
BILASPUR (C. G.)

CONTENT

- Introduction
- * Types of radiation
- Measurement
- ❖ Table
- Sources
- Pathophysiology
- Factors affecting/risk factor
- Effects of radiation on human body
- Management
- Conclusion

Carpydoul

HEAD
फोरेसिक साईस विभाग
Department of Forensic Science
गुरू घासीदास विशः विद्यालय,
Guru Ghasidas Vishwavidyalaya.
विस्तासपुर (छ.न.)
BILASPUR (C.G.)

6 | Page

A Review Report on

The Role of Forensic Toxicology in Doping

B.Sc. mini project Submitted to

Guru Ghasidas Vishwavidyalaya,

Bilaspur(C.G)

In Partial fulfillment of requirements for the degree of

Bachelor of Science Honors

In

Forensic Science

By

GEETA RAJWADE

B.Sc. VIth Semester

Enrollment No:- GGV/21/10308 Roll No- 21045108

UNDER THE GUIDANCE OF

Dr. Navjot Kaur Kanwal

Associate Professor



Department of Forensic Science

Guru Ghasidas Vishwavidyalay Bilaspur(C.G)

HEAD फोरेंसिक साईंस विभाग फारासक साइस विभाग Department of Forensic Science गुरू घासीदास विश्वदालय, Guru Ghasidas Vishwavidyalaya बिलासपुर (छ.ग.) BILASPUR (C.G.)

गुरु घासीदास विश्वविद्यालय (केद्रीय विश्वविद्यालय अर्थियम 2009 क्र. 25 के अंतर्गत स्थापित केद्रीय 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.)

2



Department of Forensic Science Guru Ghasidas Vishwavidyalaya, Bilaspur, (C.G.) (A Central University Established by the Central University Act,2009 No. 25 of

No./F.Sc/2024 Bilaspur

Date:

Dr Naveen Vishwakarma

Head of Department
Department Of Forensic Science
Guru Ghasidas Vishwavidyalaya
Bilaspur (C.G)

FORWADING CERTIFIFATE

This is to certify that Mini project entitled "The Role of Forensic Toxicology in Doping" has been submitted by GEETA RAJWADE, B.Sc. Forensic Science 6th semester, Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G) under the guidance of Dr. Navjot kaur kanwal towards partial fulfilment of the requirements for the award of Bachelor's Degree in Forensic Science.

Dr. Naveen Vishwakarma
Assistant Professor
Head Of Department
Department of Forensic Science
Guru Ghasidas Vishwavidyalaya
Bilaspur (C.G)

Carpholomil

विभागाध्यस
HEAD
फोर्सिक माईस विभाग
Department of Forensic Science
गुरू चासीदास विश्व विद्यालय,
Guru Ghasidas Vishwavidyalaya.
बिलासपुर (छ.ग.)
BILASPUR (C.G.)

गुरु घासीदास विश्वविद्यालय (केन्रीय विश्वविद्यालय अर्थिन्य 2008 क्र. 25 के अंतर्गत स्थारित केन्न्रीय 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.)

1

ABSTRACT

Ensuring that athletes compete in a fair setting requires the identification of doping in sports. When it comes to doping, whether intentional or unintentional, athletes may make better decisions if they are educated on the entire process of doping detection. The World Anti-Doping Agency and other anti-doping organizations determine which athletes should be tested and for what, and the process of doping detection results in a positive or negative test result. Until an athlete is suspected of doping and faces a suspension or possibly a lifetime ban from the sport, their knowledge of the doping screening process usually ends when a sample is obtained. Athletes must learn more about the testing methods employed after their samples are obtained. These days, mass spectrometry-mass spectrometry, liquid chromatography-mass spectrometry, and gas chromatography-mass spectrometry are among the most commonly utilized assays. Steroids, opioids, stimulants, masking agents, dietary supplement pollutants, and other drugs on the WADA Prohibited List can all be found using these techniques. Honest athletes should be allowed to defend their innocence in the event that a test method yields a false-positive result. Improvements in the detection of novel drugs and frequently used substances continue to be made. Deterrents should also include warning athletes about potential health hazards and the possibility that certain medications could even hinder their sporting performance. The secret to establishing a drug-free atmosphere in competitive sports is educating the sports community on the dope procedure from beginning to end.

anydour

HEAD फोर्सेसक साईस विभाग Department of Forensic Science गुरू घासीदास विश्विद्यालय, Guru Ghasidas Vishwavidyalaya. बिलासपुर (छ.ग.)

"Forensic Entomology: Application and limitation"

Δ

B.Sc. Mini project

submitted to

Guru Ghasidas Vishwavidyalaya, Bilaspur

in partial fulfillment of the requirement for the

degree of

Bachelor of Science

In

Forensic Science

By

Ms. Harshita Pandey

(Enrollment No.: GGV/21/10310; Roll No.: 21045110)

Under the Guidance of

Dr. Ajay Amit

Assistant Professor

Department of Forensic Science

Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G.)



GURU GHASIDAS VISHWAVIDYALAYA

A Central University

Bilaspur (C.G.)

2024

CarpHolour

विभागाध्यस HEAD फोरेंसिक साईच विभाग Department of Forensic Science गुरू घासीदास विश्व विद्यालय, Guru Ghasidas Vishwavidyalaya बिलासपुर (छ.ग.)







Department of Forensic Science

Guru Ghasidas Vishwavidyalaya

(A Central University Established Under the Central Universities Act, 25 of 2009) Bilaspur, Chhattisgarh, India

No. /F. Sc./2021 Date: Bilaspur

Dr. Naveen Kumar Vishvakarma

Assistant Professor and Head (In-charge) Department of Forensic Science Guru Ghasidas Vishwavidyalaya Bilaspur (C.G.)

FORWARDING CERTIFICATE

This is to certify that the Mini project entitled "Forensic Entomology: Application and limitation" has been submitted by Ms. Harshita Pandey, B.Sc. Forensic Science 6th semester, Guru Ghasidas Vishwavidyalaya, Koni, Bilaspur (C.G.) under the guidance of Dr. Ajay Amit towards partial fulfilment of the requirements for the award of Bachelor's Degree in Forensic science.

Dr. Naveen Kumar Vishvakarma

Professor and Head (In-charge) Department of Forensic Science Guru Ghasidas Vishwavidyalaya Bilaspur (C.G.)

Carpholomil

विभागध्यक्ष HEAD फोर्रेसिक साईस विभाग Department of Forensic Science गुरू घासीदास विशः विद्यालय, Guru Ghasidas Vishwavidyalaya. बिलासपुर (छ.ग.) BILASPUR (C.G.)

गुरु घासीदास विश्वविद्यालय (केन्रीय विश्वविद्यालय अर्थिन्य 2008 क्र. 25 के अंतर्गत स्थारित केन्न्रीय 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.)

Abstract

There has been an increase in deaths related to drugs and toxins worldwide. Entomotoxicology is analysis of toxins in beetles and flies [arthropods] that mainly feed on corpse. Forensic entomology involves use of insects in legal justice system. Insects can be used as an alternative toxicological sample to solve cases involving deaths due to intoxication. However there are several limitations of this new and emerging field. Entomotoxicology involves investigation of effects of drugs and toxins on arthropods that are present on corpse. Arthropods are used as an alternative in order to collect toxicological sample. Major drawback in this field is effect of contaminants on the development of insects feeding on corpse. In forensic investigations, the examination of bug evidence has long been utilized to determine the time of death and other significant details. Toxicology, on the other hand, can add vital information on the existence and consequences of drugs and toxins in the body to this analysis. In forensic investigations, entomotoxicology may prove to be a useful tool, especially when it comes to drug-related deaths or poisonings. By examining the location and presence of poisons or medications in insect tissue Entomotoxicology presents challenges when used to forensic cases. Factors like as post-mortem relocation and contamination of the crime scene could affect how accurate the results are. To ensure the accuracy and reliability of the results, standardized processes and validation studies are also necessary.

Keywords: Entomotoxicology, arthropods, drugs, Toxicology, poison, corpse, toxins.

विभागाध्यस MEAD कोरंसिक साईस विभाग Department of Forensic Science गुरू घासीदास विश्-विद्यालय, Guru Ghasidas Vishwavidyalaya. बिलासपुर (छ.ग.) BILASPUR (C.G.)



Guru Ghasidas Vishwavidyalaya Bilaspur C.G

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

A REVIEW REPORT ON

DNA BASED INVESTIGATION METHODS TO IDENTIFY THE PRESENCE OF GENETICALLY MODIFIED ORGANISMS IN FOOD PRODUCTS

Submitted in the partial fulfillment of the requirement for the award of the Degree of Bachelor of Science (Hons.) Forensic Science 2021-2024

Submitted by
Samriddhi Sahu
Roll No.:21045125
Enrollment No. GGV/21/10325
B.Sc. (Hons.) Forensic Science

Under the supervision of
Dr. Chanchal Kumar
Assistant Professor
Department of Forensic Science
Guru Ghasidas Vishwavidyalaya Bilaspur C.G

विभागाध्यक्ष HEAD

HEAD

फोर्रेसिक साईस विभाग

Department of Forensic Science
गुरू घासीदास विशः विद्यालय,
Guru Ghasidas Vishwavidyalaya.
बिलासपुर (छ.ग.)

BILASPUR (C.G.)





Department of Forensic Science Guru Ghasidas Vishwavidyalaya Bilaspur C.G

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

No./F.Sc/2024 Date: Bilaspur

Dr Naveen Vishwakarma

Head of Department Department Of Forensic Science Guru Ghasidas Vishwavidyalaya Bilaspur (C.G)

FORWARDING CERTIFICATE

This is to certify that Mini project entitled "DNA based Investigation Methods to identify the presence of Genetically Modified Organisms in food products" has been submitted by Samriddhi Sahu, B.Sc. Forensic Science 6th semester, Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G) under the guidance of Dr. Chanchal Kumar towards partial fulfilment of the requirements for the award of Bachelor's Degree in Forensic Science.

Dr. Naveen Vishwakarma Assistant Professor Head Of Department Department of Forensic Science Guru Ghasidas Vishwavidyalaya Bilaspur(C.G)

Carpholomy

विभागाध्यम् HEAD
फोर्रेसिक साईस विभाग
Department of Forensic Science
गुरू चार्मीतास विहः वैद्यालय,
Guru Ghasidas Vishwavidyalaya.
बिलासपुर (छ.ग.)
BILASPUR (C.G.)

DNA based Investigation methods: To identify the presence of Genetically Modified Organism in food products

Abstract

Genetically modified organisms (GMOs) are organisms whose genetic material has been altered by genetic engineering. It involves manipulating an organism's DNA through methods such as gene splicing, where genes from one species are inserted into another species to produce desired characteristics. GMOs can contain plants, animals and microorganisms.

The main goals of genetically modified organisms are to increase yield, improve resistance to pests, diseases and environmental stressors, improve nutritional value and reduce the need for chemical pesticides and fertilizers. GMOs have found applications in forensic science, particularly in the field of forensic DNA:1. Biological Evidence Analysis: GMOs can be used to trace the origin of biological evidence found at a crime scene.2. Species Identification: GMOs can help identify species by acting as markers in DNA analysis.3. Forensic Entomology: In cases involving decomposition, insects play a crucial role in forensic investigations. GMOs engineered to express fluorescent proteins can be used as biomarkers to study insect behavior and their interaction with a crime scene. This can help forensic entomologists more accurately estimate postmortem intervals. 4. Environmental forensics: GMO detection techniques can also be applied in environmental forensics to monitor and investigate environmental pollution or the illegal release of GMOs into the environment. This review report will focus on Dna based detection methods for Genetically Modified Organisms.

Keywords: Biological evidence, environment, crime, pollution, food products, microorganisms, proteins.

Introduction

Genetically Modified Organisms

Genetically modified organisms (GMO) are organisms that have a foreign DNA structure in their genome.

This construct contains one or more coding genes. Under the guidance of biotechnology, new plants and products derived from them have been introduced and sold to the market since 1996. In 2014, biotechnologically produced plants were cultivated on 181.5 million hectares in the world. The main countries that have planted biotechnologically produced plants are the United States, Brazil,

विभागाध्यक्ष HEAD कोर्रेसिक साईस विभाग Department of Forensic Science गुरु घासीदास विश् विद्यालय, Suru Ghasidas Vishwavidyalaya





Department of Forensic Science Guru Ghasidas Vishwavidyalaya Central University Bilaspur, (C.G.)

DECLARATION BY STUDENT

I Amulya Ratna Nand, Enrollment No. GGV/21/10305 of Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G.) hereby declare that the Project Report entitled Road traffic accidents causes and injuries in and around Bilaspur District: A retrospective study is an original work and the same has not been submitted to any other Institute for the award of any other degree.

Date: 15-5-24 Place: Bilaspur Amulya Ratna Nand Guru Ghasidas Vishwavidyalaya Bilaspur (C.G.)

Amelys

Carpydound

विभागाध्यक्ष HEAD कोरेंसिक साईस विभाग Department of Forensic Science गुरू घासीतास विष्: बिद्यालय, Guru Ghasidas Vishwavidyalaya बिलासपुर (छ.स.) BILASPUR (C.G.)



Department of Forensic Science Guru Ghasidas Vishwavidyalaya Central University Bilaspur, (C.G.)

CERTIFICATE BY HEAD OF THE DEPARTMENT

Certified that the Project Report entitled Road traffic accidents causes and injuries in and around Bilaspur District: A retrospective study submitted by Mr. Amulya Ratna Nand is his own work and has been done at the Department of Forensic Science, GGV, Bilaspur (C.G.). It is recommended that this Project be placed before the examiner for evaluation in the partial fulfillment of the bachelor's degree in Forensic Science.

Date:

Place: Bilaspur

Prof. (Dr.) Naveen Kumar Vishwakarma

विभागध्यक्ष HEAD फोरेंसिक साईंस विभाग partment of Forensic Sci

फोर्रेसिक साईस विभाग Department of Forensic Science गुरू घासीदास विश्वदालय, Guru Ghasidas Vishwavidyalaya. बिलासपुर (छ.ग.) BILASPUR (C.G.)



Contents

Chapter-1-		
INTRODUCT	ΓΙΟΝ	7-11
Chapter-2 Li	terature Review	
Chapter-3		12 - 12
Objective		Error! Bookmark not defined
×		e e
Chapter-4		
Result		15-17
Chapter-5		
Discussions	•••••	
Chapter-6		
Conclusion		19
REFERENCE.		19-20

विभागाध्यस
HEAD
फोर्रेसिक साईस विभाग
Department of Forensic Science
गुरू घासीचारा विश्ववालय,
Guru Ghasidas Vishwavidyalaya,
बिलासपुर (७.ग.)





DepartmentofForensicScience GuruGhasidasVishwavidyalayaBilaspurC.G (ACentralUniversityestablishedbyCentralUniversityAct2009No.25of2009)

No...../F.Sc/2024 Date:

Prof.NaveenKumarVishvakarma

Head Department of Forensic Science Guru Ghasidas Vishwavidyalaya Bilaspur(C.G) - 495009

FORWADINGCERTIFIFATE

This is to certify that Mini project entitled "Agriculture posioning in India" has been submitted by Jims B.Sc. (Hons.) Forensic Science 6th semester, Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G.) under the guidance of **Dr. Sudhir Yadav** towards partial fulfillment of the requirements for the award of Bachelor's Degree in Forensic Science.

Prof. Naveen Kumar Vishvakarma Head Department of Forensic Science Guru Ghasidas Vishwavidyalaya Bilaspur(C.G.) - 495009

Cappydoul

3

3

विभागाध्यक्ष HEAD फोर्रेसिक साईस विभाग Department of Forensic Science गुरू घोतीवास विष्: बिद्यालय, Guru Ghasidas Vishwavidyalaya. बिलासपुर (इ.ग.) BILASPUR (C.G.)



ABSTRACT:

The current report here represents a comprehensive review of Agricultural poisoning and its health effects on human health including its theory, research legal history etc. specifically the review focuses on issues and problem of poisoning due to pesticides or agricultural chemicals on human health. The agricultural poisoning once became a leading cause of increase in death rate but in few years the governments of different countries has taken initiatives to ban various harmful pesticides. But in countries like India are still currently using various pesticides which are globally banned. This paper highlights on the aspect and the various diseases an agricultural chemical can cause and which type of pesticide may cause those certain diseases.

Agricultural chemicals or pesticides are used for increasing the crop yield of the farmlands and are as well as used to control pest (unwanted plates or animals). But if it is used in access amount then it can become poison which will cause various types of health issues to the consumer. Agrochemicals can cause acute and chronic poisoning. This paper highlights the pesticide exposure risk, human exposure to pesticides, there classification, uses, which types of pesticides may cause which type of diseases, some of the pesticides such as endrin and OPCS their actions, fatal dose fatal period etc. This paper also gives a brief or some statistical data on state wise pesticide consumption on pesticide as well as some of the statistical data states about the number of death cases registered.

Carpholomil

विभागध्यक्ष HEAD
फोर्सेसक साईस विभाग
Department of Forensic Science
गुरू घासीदास विश्-विद्यालय,
Guru Ghasidas Vishwavidyalaya.
बिलासपुर (छ.ग.)
BILASPUR (C.G.)





DEPARTMENT OF FORENSIC SCIENCE

Guru Ghasidas Vishwavidyalaya, Bilaspur(C.G)

(A Central University)

CERTIFICATE

Certified that the project entitled "A REVIEW ON CATTLE POISONING IN INDIA" submitted by kajal jangde is his own work and has been done at Department of Forensic Science, GGV, Bilaspur (C.G). It is recommended that this project be placed before the examiner for evaluation in the partial fulfilment of the Bachelor's degree in Forensic Science.

Naveen Kumar Vishvakarma

Professor

Head Of Department

Department of Forensic Science

Guru Ghasidas Vishwavidyalaya

Bilaspur (C.G)

Carpydoul

विभागाध्यस HEAD
फोर्सेसक साईस विभाग
Department of Forensic Science
गुरू घासीदास विष्टः विद्यालय,
Guru Ghasidas Vishwavidyalaya.
बिलासपुर (छ.ग.)
BILASPUR (C.G.)



Abstract

There are numerous plants that are toxic to cattle because they either contain toxins or collect pollutants. Poisoning can have a variety of effects, from mild imitations and slightly decreased performance to more serious cases when the animal is in extreme distress and may even die. The introduction to the various methods by which tonic chemicals can poison cattle is provided in this review work. It also refers to plants that can mechanically harm an animal or irritate skin when they come into contact with them. Animal variables also affect a substance's capacity to poison. Different types of poisons can harm various animal species. Another crucial factor is the kitten's age. While this is frequently true, it isn't always the case, younger areas are frequently more vulnerable. By initially being subjected to small doses of a poison, cats may develop a tolerance to it. In the case where a significant amount is taken, they become resistant as a result of their metabolism having been modified to deal with the poison. Contrary to well-fed animals, starving or undernourished cattle are more likely to consume deadly amounts of hazardous plants.

KEYWORDS: Poisonous planta, toxicity uses, forensic significance

apply -

विभागाध्यक्ष HEAD कोर्रेसिक साईस विभाग Department of Forensic Science गुरु घार्मीवास विश्-विधानय, Guru Ghasidas Vishwavidyalaya. विलासपुर (छ.ग.) BILASPUR (C.G.)



Department of Forensic Science Guru Ghasidas Vishwavidyalaya Bilaspur C.G

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

No./F.Sc/2024 Date: 13/05/24

Dr. Naveen Kumar Vishwakarma

Head of Department Department Of Forensic Science Guru Ghasidas Vishwavidyalaya Bilaspur (C.G)

FORWADING CERTIFIFATE

This is to certify that Mini project entitled "A COMPHRENSIVE REVIEW ON DEATH DUE TO DROWNING" has been submitted by Kashish Markam, B.Sc. Forensic Science 6th semester, Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G) under the guidance of Dr. Sudhir yadav towards partial fulfilment of the requirements for the award of Bachelor's Degree in Forensic Science.

Dr. Naveen Vishwakarma Assistant Professor Head of Department Department of Forensic Science Guru Ghasidas Vishwavidyalaya Bilaspur (C.G)

Carpfdoul

विभागाध्यस
HEAD
फोर्सेसक साईस विभाग
Department of Forensic Science
गुरू घासीदास विष्ट विद्यालय,
Guru Ghasidas Vishwavidyalaya.
बिलासपुर (छ.ग.)
BILASPUR (C.G.)



GuruGhasidasVishwavidyalayaBilaspurC.G

(ACentralUniversityestablishedbyCentralUniversityAct2009No.25of2009)

A REVIEW REPORT ON

Marital rape in India

Submitted in the partial fulfillment of the requirement for the award of the Degree of Bachelor of Science (Hons.) For ensic Science

2021-2024

Submitted by
RAJA SINGH
Roll No:2104510321
Enrollment No:GGV/21/10321 B.Sc.(Hons.)
Forensic Science

under the supervision of

Dr. Sudhir Yadav Assistant Professor Department of ForensicScience

Department of Forensic Science Guru Ghasidas Vishwavidyalaya Bilaspur C.G. - 495009

Carpydound

विभागाध्यक्ष
HEAD
फोरॅसिक साईस विभाग
Department of Forensic Science
गुरू घासीदास विशः विद्यालय,
Guru Ghaidas Vishwavidyalaya.
बिलासपुर (छ.ग.)
BILASPUR (C.G.)

Department of Forensic Science Guru Ghasidas Vishwavidyalaya BilaspurC.G (ACentralUniversityestablishedbyCentralUniversityAct2009No.25of2009)

No...../F.Sc/2024 Date:

Prof.NaveenKumarVishvakarma

Head Department of Forensic Science Guru Ghasidas Vishwavidyalaya Bilaspur(C.G) - 495009

FORWADING CERTIFIFATE

This is to certify that Mini project entitled "Marital Rape in India" has been submitted by Raja Singh, B.Sc. (Hons.) Forensic Science 6thsemester, Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G.) under the guidance of Dr. Sudhir Yadav towards partial fulfillment of the requirements for the award of Bachelor's Degree in Forensic Science.

Prof. Naveen Kumar Vishvakarma Head Department of Forensic Science Guru Ghasidas Vishwavidyalaya Bilaspur(C.G.) - 495009

Carpholomil

विभागाध्यस HEAD फोर्रेसिक साईस विभाग Department of Forensic Science गुरू घासीदास विश्व विद्यालय, Guru Ghasidas Vishwavidyalaya. बिलासपुर (छ.ग.) BILASPUR (C.G.)



ABSTRACT

Marriage is a sacred bond that not only ties two people but also two families together. But if this matrimonials without the consent of the people involved in the marriage, then it can turn sour. Looking around the world, law and order play a huge part in defining and limiting norms of human conduct. Under the Indian Penal Code 1860, the laws have been made and suitable punishment for the same has been provided but now most of the people and the government are unable to understand that this laws, this Law has been made by Britain a long time ago. At that time, marital rape was not too much of a problem and hence was not considered a crime which can be one of the reasons why marital rape was exempted under the penal laws.

The current paper represents a comprehensive review of marital rape including its theory, research legal history, etc specifically the review focuses on issues and the problem of marital rape. Marital rape has increased in a few years, but the sad thing for India is that till now marital rape has not been criminalized in all states. This paper highlights the aspect and the existing laws that can be used as a defense by a partner in case of marital rape.

Carpydoul

विभागाध्यक्ष
MEAD
कोरिसक पाईस विभाग
Department of Forensic Science
गुरू घासीचार विशः विधालत्
Guru Ghasi Vishwavidyalaya.
बिस्तासपुर (छ.स.).
BILASPUR (C.G.)





Mini Project on – STIMULANT DRUGS

In partial fulfilment of the requirements of the degree of BACHELOR OF SCIENCE (FORENSICS SCIENCE)

Under The Guidance of-Miss. Blessi Uikey (Assistant Professor) Submitted by-Samriddhi Jaiswal Enrol. No. GGV/21/10324

Department of Forensic Science
GURU GHASIDAS VISHWAVIDYALAYA, BILASPUR
(C.G.)
Year 2023-24

विभागाध्यक्ष
HEAD
फोर्सेसक साईश विभाग
Department of Forensic Science
गुरू घासीदास विशः विद्यालय,
Guru Ghasidas Vishwavidyalaya बिलासपुर (छ.ग.) BILASPUR (C.G.)





Department of Forensic Science Guru Ghasidas Vishwavidyalaya

(A Central University Established Under the Central Universities Act, 25 of 2009)

Bilaspur, Chhattisgarh, India

No. /F. Sc./2020

Bilaspur Date: (3) 05 24.

FORWARDING CERTIFICATE

This is to certify that the Mini project entitled "STIMULANTS DRUGS" has been submitted by Samriddhi Jaiswal B.Sc. Forensic Science 6th semester, Guru Ghasidas Vishwavidyalaya, Koni, Bilaspur (C.G.) under the guidance of Miss Blessi Uikey towards partial fulfillment of the requirements for the Bachelor's Degree in Forensic science award.

Dr. Naveen Kumar Vishvakarma Professor and Head (In-charge)

Department of Forensic Science
Guru Ghasidas Vishwavidyalaya Bilaspur.

विभागाध्यक्ष
HEAD
फोरेंसिक साईस विभाग
Department of Forensic Science
गुरू घासीदास विश्व विद्यालय,
Guru Ghasidas Vishwavidyalaya
बिलासपुर (छ.ग.)

Abstract:

This paper delves into the intricate world of drugs and stimulants, aiming to provide a comprehensive understanding of their effects, associated risks, and broader societal implications. It explores the diverse categories of drugs, ranging from recreational substances like marijuana and cocaine to prescription medications such as opioids and stimulants like amphetamines. The physiological and psychological effects of these substances on the human body and mind are examined, shedding light on the mechanisms that underlie addiction and dependence.

Furthermore, the paper delves into the social, economic, and legal dimensions of drug use, discussing topics such as drug policies, harm reduction strategies, and the stigmatization of drug users. It also addresses the medical uses of certain drugs, highlighting their therapeutic potential alongside the risks involved.

The objective is to provide readers with a nuanced perspective on drugs and stimulants, emphasizing the importance of education, prevention, and harm reduction in addressing the multifaceted challenges posed by substance use in contemporary society.

विभागाध्यक्ष HEAD
फोर्सेलक साईस विभाग
Department of Forensic Science
गुरू घासीदास विशः विद्यालय,
Guru Ghasidas Vishwavidyalaya.
विवासपुर (इ.ग.)
BILASPUR (C.G.)



Guru Ghasidas Vishwavidyalaya Bilaspur C.G

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

A REVIEW REPORT ON ROLE OF TOUCH DNA IN FORENSIC INVESTIGATION

Submitted in the partial fulfillment of the requirement for the award of the Degree of Bachelor of Science (Hons.) Forensic Science

2021-2024

Submitted by

Shriya Agrawal Roll No.: 21045128

Enrollment No.: GGV/21/10328

B.Sc. (Hons.) Forensic Science

Under the supervision of Dr. Chanchal Kumar

Assistant Professor



Department of Forensic Science Guru Ghasidas Vishwavidyalaya Bilaspur C.G

Department of Forensic Science गुरू घासीदास विश्व विद्यालय, Guru Ghasidas Vishwavidyalaya. बिलासपुर (छ.ग.) BILASPUR (C.G.)





Department of Forensic Science Guru Ghasidas Vishwavidyalaya Bilaspur C.G (A Central University established by Central University Act 2009 No. 25 of 2009)

No./F.Sc./2024

Date: 13/05/24

FORWARDING CERTIFICATE

This is to certify that Mini project entitled "Role of touch DNA in forensic investigation" has been submitted by Shriya Agrawal, B.Sc. Forensic Science VIth semester, Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G) under the guidance of Dr. Chanchal Kumar towards partial fulfilment of the requirements for the award of Bachelor's Degree in Forensic Science.

Carpholomil

विभागाध्यक्ष
HEAD
फोर्रेसिक साईस विभाग
Department of Forensic Science
गुरू घासीदास विष्: विद्यालय,
Guru Ghasidas Vishwavidyalaya.
बिलासपुर (छ.ग.)
BILASPUR (C.G.)

Dr. Naveen Kumar Vishvakarma

Head Of Department Department of Forensic Science Guru Ghasidas Vishwavidyalaya Bilaspur (C.G)

Abstract

Touch DNA analysis has emerged as a pivotal technique in modern forensic investigations, enabling the detection and profiling of minute DNA traces left behind by individuals at crime scenes. This review provides a comprehensive overview of touch DNA methodologies, applications, challenges, and future prospects within forensic science. Methodologies for touch DNA collection, extraction and interpretation are discussed, highlighting the sensitivity and utility of this approach in criminal investigations. Real-world applications of touch DNA, including case studies and cold case resolutions, underscore its pivotal role in linking suspects to crime scenes and victim profiles. Despite its advantages, challenges such as contamination, low template DNA, and interpretation complexities necessitate ongoing advancements and standardization efforts. Legal considerations regarding the admissibility and interpretation of touch DNA evidence are also addressed. Looking ahead, emerging technologies and future directions in touch DNA research promise to enhance forensic capabilities and further contribute to the resolution of criminal cases. This review emphasizes the transformative impact of touch DNA analysis on forensic science and advocates for continued interdisciplinary collaboration to advance its reliability, acceptance, and practical application within the legal

विभागाध्यक्ष

MEAD

कोर्रेसिक साईस विभाग

Department of Forensic Science
गुरु घासीदास विशः विद्यालय,
Guru Ghasidas Vishwavidyalaya.
विलासपुर (इ. ग.)

BIASPIR (C. G.)

गुरू घासीदास विश्वविद्यालय (केन्रीय विश्वविद्यात्य अधिनयम 2009 क. 25 के अंतर्गत स्वागित केन्न्रीय 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.)

गुरु घासीदास विश्वविद्यालय (केन्रीय विश्वविद्यालय अर्थियम 2008 क्र. 25 के अंतर्गत स्थारित 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.)

1

ABSTRACT

Ensuring that athletes compete in a fair setting requires the identification of doping in sports. When it comes to doping, whether intentional or unintentional, athletes may make better decisions if they are educated on the entire process of doping detection. The World Anti-Doping Agency and other anti-doping organizations determine which athletes should be tested and for what, and the process of doping detection results in a positive or negative test result. Until an athlete is suspected of doping and faces a suspension or possibly a lifetime ban from the sport, their knowledge of the doping screening process usually ends when a sample is obtained. Athletes must learn more about the testing methods employed after their samples are obtained. These days, mass spectrometry-mass spectrometry, liquid chromatography-mass spectrometry, and gas chromatography-mass spectrometry are among the most commonly utilized assays. Steroids, opioids, stimulants, masking agents, dietary supplement pollutants, and other drugs on the WADA Prohibited List can all be found using these techniques. Honest athletes should be allowed to defend their innocence in the event that a test method yields a false-positive result. Improvements in the detection of novel drugs and frequently used substances continue to be made. Deterrents should also include warning athletes about potential health hazards and the possibility that certain medications could even hinder their sporting performance. The secret to establishing a drug-free atmosphere in competitive sports is educating the sports community on the dope procedure from beginning to end.



ABSTRACT

This review focuses on the convergence of big data and forensic science, illuminating the transformative impact of advanced technologies on contemporary investigative practices. Exploring the challenges and opportunities inherent in big data forensics, the study navigates through intricate legal and ethical considerations shaping the discipline's trajectory. Focusing on the processing of digital evidence, it elucidates the pivotal role of cutting-edge tools such as Hadoop, Apache Spark, and machine learning algorithms in deciphering complex datasets from a forensic perspective. Real-life case studies and applications underscore the practical implications of big data forensics across diverse domains, from cybersecurity and law enforcement to financial fraud detection and corporate investigations. Through interdisciplinary collaboration and ethical integrity, this article advocates for the responsible and effective utilization of big data analytics in advancing justice, safeguarding privacy, and fortifying digital resilience in our increasingly interconnected world.



1

A Review Report on

The Different Case Studies Related With Big Data Forensics

B.Sc. mini project Submitted to

Guru Ghasidas Vishwavidyalaya,

Bilaspur(C.G)

In Partial fulfillment of requirements for the degree of

Bachelor of Science Honors

In

Forensic Science

By

SHUBHAM PATWA

B.Sc. VIth Semester

Enrollment No:- GGV/21/10329 Roll No- 21045129

UNDER THE GUIDANCE OF

Dr. Navjot Kaur Kanwal

Associate Professor



Department of Forensic Science

Guru Ghasidas Vishwavidyalay Bilaspur(C.G)

गुरु घासीदास विश्वविद्यालय (केत्रीय विश्वविद्यालय अधिनयम 2009 क्र. 25 के अंतर्गत स्थारित 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.)

ABSTRACT

In the ever-evolving landscape of the digital era, cybercrime stands as a pervasive and constantly mutating threat, challenging the fabric of modern society. This abstract delves into the intricate ecosystem of cybercrime, offering a nuanced understanding of its diverse manifestations, underlying motivations, and the intricate web of actors involved. Cybercrime encompasses a vast array of illicit activities perpetrated through digital means, including but not limited to hacking, phishing, identity theft, ransomware, and distributed denial-of-service (DDoS) attacks. These nefarious activities are fueled by various motivations, ranging from financial gain and espionage to political activism and sabotage. Moreover, the anonymity and borderless nature of the internet provide fertile ground for cybercriminals to operate with impunity, transcending geographical boundaries and jurisdictional constraints. The advent of advanced technologies has not only expanded the arsenal of cybercriminals but has also heightened the sophistication of their tactics. From sophisticated social engineering techniques to the exploitation of zero-day vulnerabilities, cybercriminals leverage cutting-edge tools to orchestrate attacks with unprecedented precision and scale

गुरू घासीदास विश्वविद्यालय (केत्रीय विश्वविद्यालय अधिन्य 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.)

2



Department of Forensic Science Guru Ghasidas Vishwavidyalaya, Bilaspur, (C.G.) (A Central University Established by the Central University Act,2009 No. 25 of 2009)

No./F.Sc/2024

Bilaspur

Date:

Dr Naveen Kumar Vishwakarma

Head of Department
Department Of Forensic Science
Guru Ghasidas Vishwavidyalaya
Bilaspur (C.G)

FORWADING CERTIFICATE

This is to certify that Mini project entitled "A Review on The different Case Studies related with Big Data Forensics" has been submitted by SHUBHAM PATWA, B.Sc. Forensic Science 6th semester, Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G) under the guidance of Dr. **Navjot Kaur Kanwal** towards partial fulfilment of the requirements for the award of Bachelor's Degree in Forensic Science.

Dr. Naveen Kumar Vishwakarma
Professor
Head Of Department(incharge)
Department of Forensic Science
Guru Ghasidas Vishwavidyalaya
Bilaspur (C.G)

blood

Department of Ferensic Science Guru Ghasidas Visfiwavidyalaya Bilaspur (C.G.) 1

A Review Report on

The Role of Forensic Toxicology in Doping

B.Sc. mini project Submitted to

Guru Ghasidas Vishwavidyalaya,

Bilaspur(C.G)

In Partial fulfillment of requirements for the degree of

Bachelor of Science Honors

In

Forensic Science

By

GEETA RAJWADE

B.Sc. VIth Semester

Enrollment No:- GGV/21/10308 Roll No- 21045108

UNDER THE GUIDANCE OF

Dr. Navjot Kaur Kanwal

Associate Professor



Department of Forensic Science

Guru GhasidasVishwavidyalay Bilaspur(C.G)



A REVIEW ON THE

SIGNIFICANCE AND EVALUATION : OF HANDWRITTING ANALYSIS IN FORENSIC SCIENCE

B.Sc Mini project Submitted to Guru Ghasidas Vishwavidyalaya, Bilaspur

In

Partial fulfillment of requirements for the degree of

Bachelor of Science Honors

In

Forensic Science

By

TANYA CHAUDHARY

B.Sc VIth Semester

Enrollment No:- GGV/21/10330 Roll No- 21045130

Under The Guidance of

DR. NAVJOT KAUR KANWAL

Department of Forensic Science



Guru Ghasi Das Vishwavidyalaya



Department of Forensic Science Guru Ghasidas Vishwavidyalaya Bilaspur C.G (A Central University established by Central University Act 2009 No. 25 of 2009)

No./F.Sc/2024

Bilaspur

Date:

Dr Naveen Vishwakarma

Head of Department Department Of Forensic Science Guru Ghasidas Vishwavidyalaya Bilaspur (C.G)

FORWADING CERTIFICATE

This is to certify that Mini project entitled "Significance and EVALUATION of handwriting analysis in forensic science" has been submitted by Tanya chaudhary, B.Sc. Forensic Science 6th semester, Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G) under the guidance of Dr. Navjot kaur kanwal towards partial fulfilment of the requirements for the award of Bachelor's Degree in Forensic Science.

> Dr. Naveen Vishwakarma Professor Head Of Department Department of Forensic Science Guru Ghasidas Vishwavidyalaya Bilaspur (C.G)

Head,

Department of Ferensie Science Guru Chasidas Visfiwavidyalaya Bilaspur (C.G.)

गुरु घासीदास विश्वविद्यालय (केत्रीय विश्वविद्यालय अर्थियम 2009 क्र. 25 के अंतर्गत स्थारित 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.)

2

ABSTRACT

Handwriting analysis is an important instrument in forensic science that is used to identify and authenticate documents, examine criminal cases, and determine the trustworthiness of written evidence. It is a key subfield of forensic science that plays a distinctive and long – lasting role in document investigation and authentication. For decades, handwriting analysis has been critical in resolving criminal cases and providing light on historical riddles. Although forensic analysis of digital data has gained popularity as technology has advanced, the examination of handwritten papers remains indispensable, providing its value in current forensic investigation. This review paper examines the ideas, methodologies, and applications of handwriting analysis in the field of forensic science in depth. It investigates the historical development of handwriting analysis. The scientific foundation of the discipline, handwriting comparison procedures, and the obstacles that modern forensic document inspection faces. This study also covers the legal elements of handwriting analysis, its limitations, and the future possibilities of this important forensic profession.

Keywords: Handwriting analysing, Quantitative analysis, Class Characteristics, Question document, Legal proceedings, Quality Assurance

660

0

0

3

3

3

3

9

9

3

0

)

1

A Review Report on

Poisonous Plants in The Indian Subcontinent

B.Sc. mini project Submitted to

Guru Ghasidas Vishwavidyalaya,

Bilaspur(C.G)

In Partial fulfillment of requirements for the degree of

Bachelor of Science Honors

In

Forensic Science

By

PRANJAL SAHU

B.Sc. VIth Semester

Enrollment No:- GGV/21/10319 Roll No- 21045119

UNDER THE GUIDANCE OF

Dr. Navjot Kaur Kanwal

Associate Professor



Department of Forensic Science

Guru Ghasidas Vishwavidyalay Bilaspur(C.G)

660

0

0

3

3

3

3

9

9

3

0

)

1

A Review Report on

Poisonous Plants in The Indian Subcontinent

B.Sc. mini project Submitted to

Guru Ghasidas Vishwavidyalaya,

Bilaspur(C.G)

In Partial fulfillment of requirements for the degree of

Bachelor of Science Honors

In

Forensic Science

By

PRANJAL SAHU

B.Sc. VIth Semester

Enrollment No:- GGV/21/10319 Roll No- 21045119

UNDER THE GUIDANCE OF

Dr. Navjot Kaur Kanwal

Associate Professor



Department of Forensic Science

Guru Ghasidas Vishwavidyalay Bilaspur(C.G)

गुरु घासीदास विश्वविद्यालय (केत्रीय विश्वविद्यालय अर्थियम 2009 क्र. 25 के अंतर्गत स्थारित 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.)

2



Department of Forensic Science Guru Ghasidas Vishwavidyalaya, Bilaspur, (C.G.) (A Central University Established by the Central University Act,2009 No. 25 of 2009)

No./F.Sc/2024

Bilaspur

Date:

Dr Naveen Kumar Vishwakarma

Head of Department
Department Of Forensic Science
Guru Ghasidas Vishwavidyalaya
Bilaspur (C.G)

FORWADING CERTIFICATE

This is to certify that Mini project entitled "Poisonous Plant In The Indian Subcontinent" has been submitted by PRANJAL SAHU, B.Sc. Forensic Science 6th semester, Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G) under the guidance of Dr. Navjot kaur kanwal towards partial fulfilment of the requirements for the award of Bachelor's Degree in Forensic Science.

Dr. Naveen Kumar Vishwakarma
Professor
Head Of Department
Department of Forensic Science
Guru Ghasidas Vishwavidyalaya
Bilaspur

Head,
Department of Ferensic Science
Guru Charidas Vishwevidyalaya
Bilaspur (C.G.)

गुरु घासीदास विश्वविद्यालय (केत्रीय विश्वविद्यालय अर्थियम 2009 क्र. 25 के अंतर्गत स्थारित 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.)

2



Department of Forensic Science Guru Ghasidas Vishwavidyalaya, Bilaspur, (C.G.) (A Central University Established by the Central University Act,2009 No. 25 of 2009)

No./F.Sc/2024

Bilaspur

Date:

Dr Naveen Kumar Vishwakarma

Head of Department
Department Of Forensic Science
Guru Ghasidas Vishwavidyalaya
Bilaspur (C.G)

FORWADING CERTIFICATE

This is to certify that Mini project entitled "Poisonous Plant In The Indian Subcontinent" has been submitted by PRANJAL SAHU, B.Sc. Forensic Science 6th semester, Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G) under the guidance of Dr. Navjot kaur kanwal towards partial fulfilment of the requirements for the award of Bachelor's Degree in Forensic Science.

Dr. Naveen Kumar Vishwakarma
Professor
Head Of Department
Department of Forensic Science
Guru Ghasidas Vishwavidyalaya
Bilaspur

Head,
Department of Ferensic Science
Guru Charidas Vishwevidyalaya
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.)

ABSTRACT

This review provides a comprehensive overview of poisonous plants found in the Indian subcontinent, highlighting their mechanisms of action, fatal and lethal doses, distribution across regions in India, and forensic significance. Drawing upon a review of relevant literature, common poisonous plants are identified, and their toxicological properties are explored in detail. Mechanisms of toxicity, including those involving alkaloids, toxic proteins, glycosides, and resins, are elucidated, shedding light on the diverse pathways through which these plants exert harmful effects on human health. The geographical distribution of poisonous plants in various regions of India is discussed, with emphasis on key hotspots of plant toxicity. Furthermore, the reveiw examines forensic implications, emphasizing the importance of toxicological testing methods such as alkaloid tests, protein assays, and glycoside analyses in identifying plant poisons and establishing cause of death in forensic investigations. Overall, this article serves as a valuable resource for healthcare professionals, forensic scientists, and researchers involved in the study and management of plant poisonings in the Indian subcontinent.



Guru Ghasidas Vishwavidyalaya Bilaspur C.G

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

A REVIEW REPORT ON

Prevention Techniques From Cyber Crime.

Submitted in the partial fulfillment of the requirement for the award of the Degree of Bachelor of Science (Hons.) Forensic Science

2021-2024

Submitted by

HEMA RANI SAHU

ROLL NO:-21045111

Enrollment No.: GGV/21/10333

B.Sc. (Hons.) Forensic Science
UNDER THE SUPERVISION OF

DR.NAVJOT KAUR KANWAL



Department of Forensic Science

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.)

3



Department of Forensic Science Guru Ghasidas Vishwavidyalaya, Bilaspur, (C.G.)

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

No. /F.Sc/2024

Bilaspur

Date:15/05/2024

Dr Naveen Vishwakarma

Head of Department

Department Of Forensic

Science

Guru Ghasidas Vishwavidyalaya

Bilaspur (C.G)

FORWADING CERTIFICATE

This is to certify that Mini project entitled "Prevention Techniques From Cyber Crime." has been submitted by HEMA RANI SAHU, B.Sc. Forensic Science 6th semester, Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G) under the guidance of Dr. Navjot kaur kanwal towards partial fulfilment of the requirements for the award of Bachelor's Degree in Forensic Scie

Dr. Naveen Vishwakarma

Professor Head Of Department

Department of Forensic science

Bilaspur (C.G)

House,

Department of Ferentic Science Guru Grasidas Visliwavidyalaya Bilaspur (C.G.)

गुरु घासीदास विश्वविद्यालय (केत्रीय विश्वविद्यालय अर्थियम 2009 क्र. 25 के अंतर्गत स्थारित 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.)

2



Department of Forensic Science
Guru Ghasidas Vishwavidyalaya, Bilaspur, (C.G.)
(A Central University Established by the Central University Act,2009 No. 25 of 2009)

No./F.Sc/2024

Bilaspur

Date:

Dr Naveen Vishwakarma

Head of Department
Department Of Forensic Science
Guru Ghasidas Vishwavidyalaya
Bilaspur (C.G)

FORWADING CERTIFICATE

This is to certify that Mini project entitled "The Role of Forensic Toxicology in Doping" has been submitted by GEETA RAJWADE, B.Sc. Forensic Science 6th semester, Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G) under the guidance of Dr. Navjot kaur kanwal towards partial fulfilment of the requirements for the award of Bachelor's Degree in Forensic Science.

Dr. Naveen Vishwakarma
Professor
Head Of Department
Department of Forensic Science
Guru Ghasidas Vishwavid

Bilaspur (C.G)

Head,
Department of Ferensis Science
Guru Chasidas Visfiwavidyalaya
Bilaspur (C.G.)

A Review Report on

"A Study on Social Engineering as A Challenge in A Digital Forensic"

Base. Wini project

submitted to

Guni Ghasidas Vishiyavidyulayat

Bilaspur (C.G)

In partial fulfillment of the requirement for the

degree of

Bachelor of Science

in

Forensic Science

By

Mr. UJJAWAL DANSENA

(En. No.: GGV/21/10332; Roll No.: 21045132)

Under the Guidance of

Dr. Navjot Kaur Kanwal

Assistant Professor

Guru Ghasidas Vishwayidyalaya, Bilaspur (C.G.)



Department of Forensic Science

GURU GHASIDAS VISHWAVIDYALAYA

A Central University

Bilaspur (C.G.)

2024



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



Department of Forensic Science

Guru Ghasidas Vishwavidyalaya

(A Central University Established Under the Central Universities Act, 25 of 2009)

Bilaspur, Chhattisgarh, India

No. /F. Sc./2020

Date:

Bilaspur

Dr. Naveen Vishwakarma

Head (In-charge)
Department of Forensic Science
Guru Ghasidas Vishwavidyalaya
Bilaspur (C.G.)

FORWARDING CERTIFICATE

This is to certify that the Mini project entitled "A Study on Social Engineering as A Challenge in A Digital Forensic" has been submitted by Mr Ujjawal Dansena, B.Sc. Forensic Science 6th semester, Guru Ghasidas Vishwavidyalaya, Koni, Bilaspur (C.G.) under the guidance of Dr. Navjot Kaur Kanwal towards partial fulfillment of the requirements for the Bachelor's Degree in Forensic Science award.

Dr. Naveen Kumar Vishwakarma

Professor

Head (In-charge)

Department of Forensic Science Guru Ghasidas Vishwavidyalaya

Bilaspur (C.G.)

Head,
Department of Forensic Science
Guru Ghasidas Visfiwavidyalaya
Bilaspur (C.G.)



ABSTRACT

Title: A Study on Social Engineering as A Challenge in A Digital Forensic

Social engineering attacks represent a persistent and evolving threat to individuals, organizations, and society as a whole. This review paper provides an in-depth exploration of various aspects of social engineering attacks, including their tactics, impacts, and mitigation strategies. Drawing upon a comprehensive analysis of existing literature and case studies, this paper aims to enhance understanding of the multifaceted nature of social engineering attacks and equip readers with insights to better defend against them. By examining real-world examples and discussing effective countermeasures, this paper offers valuable insights for cybersecurity professionals, policymakers, and individuals seeking to bolster their defences against social engineering threats.

Keywords: cybersecurity, social, engineering, Phishing, Data Protection, Financial Losses.



Guru Ghasidas Vishwavidyalaya Bilaspur C.G

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

A REVIEW REPORT

ON

INCREASMENT OF CYBERCRIME SINCE PANDEMIC: Analysis of Social, Legal, and Criminal Aspect

Submitted in the partial fulfillment of the requirement for the award of the 2021-2024

Submitted by

NANDANI KURREY

Roll No.:21045117

Enrollment No. GGV/21/103317

B.Sc. (Hons.) Forensic Science

Under the supervision of

MISS BLESSI N. UIKEY

Assistant Professor

Department of Forensic Science

Guru Ghasidas Vishwavidyalaya Bilaspur C.G





Department of Forensic Science

Guru Ghasidas Vishwavidyalaya Bilaspur C.G

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

No./F. Sc/2024 Date 13/05/2024

Dr Naveen Vishwakarma

Head of Department Department Of Forensic Science Guru Ghasidas Vishwavidyalaya Bilaspur (C.G)

FORWADING CERTIFIFATE

This is to certify that Mini project entitled "INCREASMENT OF CYBERCRIME AFTER PANDEMIC: Analysis of Social, Legal, And Criminal Aspect" has been submitted by Nandani kurrey, B.Sc. Forensic Science 6th semester, Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G) under the guidance of MISS BLESSI N. UIKEY, towards partial fulfilment of the requirements for the award of Bachelor's Degree in Forensic Science.

Dr. Naveen Vishwakarma Assistant Professor Head Of Department Department of Forensic Science Guru Ghasidas Vishwavidyalaya Bilaspur (C.G)



Guru Ghasidas Vishwavidyalaya Bilaspur C.G

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

A REVIEW REPORT

ON

GENETIC BLOOD DISORDERS

Submitted in the partial fulfillment of the requirement for the award of the Degree of Bachelor of Science (Hons.) Forensic Science

2021-2024

Submitted by

Tarushi Singh

Roll No.: 21045131

Enrollment No.: GGV/21/10331

B.Sc. (Hons.) Forensic Science

Under the supervision of

Dr. Chanchal Kumar

Assistant Professor

Department of Forensic Science

Guru Ghasidas Vishwavidyalaya Bilaspur C.G



Department of Forensic Science Guru Ghasidas Vishwavidyalaya Bilaspur C.G

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

No/F.Sc/2024
Date:

CERTIFICATE

This is to certify that the mini project entitled "GENETIC BLOOD DISORDER" submitted by Tarushi Singh to Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G) for the award of B.Sc. Degree in Forensic Science review study by his under my guidance. I further certify that review study or part of there has not formed the basis for the award of any other degree or diploma.

Date: 13/05/24 Dr. Chanchal Kumar

Place: Bilaspur Assistant professor

Guru Ghasidas Vishwavidyalaya

Bilaspur (C.G)

Forwarding certificate

Certificate

Declaration

Acknowledgement

Contents

Abstract

- Introduction
- Genetic disorders
- Genetic blood disorders
- Sickle cell anaemia
- Thalassemia
- Haemophilia
- Forensic significance
- Conclusion

Refrences



Guru Ghasidas Vishwavidyalaya Bilaspur C.G

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

A REVIEW REPORT ON

Psychology in Criminal Behaviour

Submitted in the partial fulfilment of the requirement for the award of the Degree of Bachelor of Science (Hons.) Forensic Science

2021-2024

Submitted by

GUNJAN BARETH

Roll No.: 21045109

Enrolment No.: GGV/21/10309

B.Sc. (Hons.) Forensic Science

Under the supervision of Miss. Blessi Uikey Assistant Professor

Department of Forensic Science Guru Ghasidas Vishwavidyalaya Bilaspur C.G



Department of Forensic Science

Guru Ghasidas Vishwavidyalaya Bilaspur C.G

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

No./F.Sc/2024

Date: 13/05/24

Dr Naveen Kumar Vishvakarma Head of Department Department Of Forensic Science Guru Ghasidas Vishwavidyalaya Bilaspur (C.G)

FORWADING CERTIFIFATE

This is to certify that Mini project entitled "Psychology in Criminal Behaviour" has been submitted by Gunjan Bareth, B.Sc. Forensic Science 6th semester, Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G) under the guidance of Miss. Blessi N. Uikey towards partial fulfilment of the requirements for the award of Bachelor's Degree in Forensic Science.

Dr. Naveen Kumar Vishvakarma
Professor
Head Of Department
Department of Forensic Science
Guru Ghasidas Vishwavidyalaya, Bilaspur (C.G)