


1.3.3 Number of students undertaking project work/field work/internships

1.3.3.1. number of student undertaking project work/field work/internships

Year	2022-2023
Number	351


  
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**1.3.3 Percentage of Student undertaking project work/field work/internship  
(Data for the latest completed academic year)**

Programme Name	Programme Code	Name of the student studied experimental learning through field work/project work/internship	Link to the Relevant Document
B.Pharm.	BP813 PW	Abhay, Abhay Kumar, Abhay Puri, Abhishek Chauhan, Abhishek Guleria, Ajay kumar, Akanksha, Akrit Verma, Amit kashyap, Amita Devi, Anchal Devi, Anjali, Anmol Sharma, Anshul Choudhary, Anshul Katoch, Anshul koundal, Anshul Saini, Arush Sharma, Arvind kumar, Aryan, Ashish Sharma, Ayush Bhardwaj, Ayush Gautam Badal Singh, Deepak Sharma, Devi Singh, Dhceeraj, Divyanshi, Ekansh Sharma, Gopal Kumar, Gourav, Gourav Banyal, Gourav Singh, Harshita, Himani Sharma, Jahvi Sharma, Kajal, Kamakshi, Kamini Thakur, Kanak Guleria, Kanika, Kashish, Khushboo, Kritika Rana, Manjeet Singh, Mehak Sharma, Minakshi, Mohit Kumar, Nancy Bhardwaj, Neeraj Kumari, Neha Bharti, Nikhil, Nikhil Rana, Nishad Malik, Pardeep Kaushal, Parvez Khan, Prajwal Metha, Pranshu Awasthi, Pradham Sharma, Priya Rana, Rahul Randhawa, Rahul Bhardwaj, Rahul Thakur, Ramesh Kumar, Richa Sharma, Riya Parmar, Rohan Thakur, Rohit Dhillon, Ruchika, Sagar Kumar, Sahil Chopra, Sahil choudhary, Sahil randhawa, Sahil Sharma, Saksham kalitha, Sakshi, Sanket Sharma, Saurav Choudhary, Sehdev Chandel, Shagan Choudhary, Shalini Sharma, Shipali Sharma,, Shubhdeep Singh, Simran, Simran, Sourabh Kumar, Sushant Thakur, Sweety Rajwal, Tamanna Kumari, Tanish kumar, Dhiman, Tarun, Tejaswani Bhardwaj, Uday Partap Singh Jaswal, Vanshika, Varun Bhardwaj, Vishal, Vishal Jazwal, Satyam, Varun	
M.Pharm.	MPH MPAQA MPL	Abhay Koundal, Akshay Kumar, Akshay Saxena, Anjali, Anjali Kumari, Ankush Dogra, Parag Sharma, Prashant Sharma, Priya Kumari, Rahul Kumar, Ritik Choudhary, Ritika Saini, Shamil, Vivek Sharma, Yukti Mahajan, Abhishek saini, Akshay, Aman sharma, Anchal Gangotia, Ashish Dhiman, Atish Bhardwaj, Himanshu Sharma, Prisce Thakur, Ritik sharma, Sidharath, Pathania, Sonia, Anshul Thakur, Ayush Sharma, Balwinder Singh, Jyoti Pathania, Kiran Bala, Manisha, Palak Sharma, Shad Ahmad, Simran Choudhary, Vikas	
B.Pharm.		Abhay, Abhay Kumar, Abhay Puri, Abhishek Chauhan, Abhishek Guleria, Ajay kumar, Akanksha, Akrit Verma, Amit kashyap, Amita Devi, Anchal Devi, Anjali, Anmol Sharma, Anshul Choudhary, Anshul Katoch, Anshul koundal, Anshul Saini, Arush Sharma, Arvind kumar, Aryan, Ashish Sharma, Ayush Bhardwaj, Ayush Gautam Badal Singh, Deepak Sharma, Devi Singh, Dhceeraj, Divyanshi, Ekansh Sharma, Gopal Kumar, Gopav, Gourav Banyal, Gourav Singh, Harshita, Himani Sharma, Jahvi Sharma, Kajal, Kamakshi, Kamini Thakur, Kanak Guleria, Kanika, Kashish, Khushboo, Kritika Rana, Manjeet Singh, Mehak Sharma, Minakshi, Mohit Kumar, Nancy Bhardwaj, Neeraj Kumari, Neha Bharti, Nikhil, Nikhil Rana, Nishad Malik, Pardeep Kaushal, Parvez Khan, Prajwal Metha, Pranshu Awasthi, Pradham Sharma, Priya Rana, Rahul Randhawa, Rahul Bhardwaj, Rahul Thakur, Ramesh Kumar, Richa Sharma, Riya Parmar, Rohan Thakur, Rohit Dhillon, Ruchika, Sagar Kumar, Sahil Chopra, Sahil choudhary, Sahil randhawa, Sahil Sharma, Saksham kalitha, Sakshi, Sanket Sharma, Saurav Choudhary, Sehdev Chandel, Shagan Choudhary, Shalini Sharma, Shipali Sharma,, Shubhdeep Singh, Simran, Simran, Sourabh Kumar, Sushant Thakur, Sweety Rajwal, Tamanna Kumari, Tanish kumar, Dhiman, Tarun, Tejaswani Bhardwaj, Uday Partap Singh Jaswal, Vanshika, Varun Bhardwaj, Vishal, Vishal Jazwal, Satyam, Varun	


*[Signature]*  
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 TEH. JAWALAMUKHI  
 DISTRICT HANGRA (H.P.)**

B.Pharm.		<p>Aayush, Abhay Koundal, Abhay Sharma, Abhay Thakur, Abhinandan, Abhinav Kaushal, Abhishek Bhardwaj, Abhishek Dhiman, Abhishek Dogra, Abhishek Kumar, Adit Choudhary, Aditya Guleria, Aditya Sharma, Akhil Choudhary, Akhil Guleria, Akshay Koundal, Aman Labra, Aman Sood, Ancht Bahri, Anket Sharma, Anmol Koundal, Anshul Sharma, Anuket, Anvi Sharma, Arju, Aryan Janwal, Ashima Sharma, Asha Samkaria, Bhart Bhardwaj, Bhupesh Goswami, Darpan Sood, Deepak Sharma, Deepanshi, Diksha, Divya, Divyanshi Sharma, Gourav Rana, Gourav Thakur, Ishan Sharma, Jaldeep Chawla, Kajal, Kajal, Kajal Thakur, Kanish Rana, Karan Pathania, Kartik Sharma, Kashish, Kashish Rana, Kavita Pathania, Anjali, Ankush Rana, Diksha, Sachin, Keshav Kumar Sharma, Komal, Monika, Navneet Kaur, Navneet Thakur, Neha Rana, Nikhil Thakur, Nishant Chauhan, Nitish Sharma, Parth Choudhary, Prikshit Bhardwaj, Priti Sharma, Priyanshu Parihar, Rahul Kumar, Rahul Thakur, Rajan Sharma, Rajat, Rakshit Verma, Ridham, Rishant Dogra, Ritika Devi, Ritish Attri, Riya Rana, Robin Sharma, Sagar Mehta, Sahil, Sakshi, Sakshi Jaryal, Sakshi, Sakshi Sharma, Sameer Saini, Sanchit Thakur, Sanket Thakur, Saayam, Saurabh Sharma, Shalshi Rana, Shalini, Shivam, Shivansh Thakur, Simran Rana, Sneha Sharma, Sumit Sharma, Tanik Daddwal, Tanika, Tamu Bala, Tanuja Dhiman, Tushar Vaid, Urvashi Garg, Varun Sharma, Yamini Walla, Yatin Sharma, Divyansh, Nihal Sen</p>	
B.Pharm.		<p>Aakanksha, Ashish Bhardwaj, Abhay sharma, Abhinav dhadwal, Abhishek, Abhishek, Aditya chouhan, Aditya rattan, Aditya sharma , Akanksha verma, Akriti thakur, Akshat, Akshat sharma, Akshit sharma, Akshita thakur, Aman aneja, Amit Chauhan, Anchal , Aneesh chawla, Anjali kumari, Ankit patiyal, Ankita, Anmol, Anmol sharma , Ansh Malhotra, Anshul dhiman, Anuj sharma, Aprajita sharma, Arpit Kaushal, Ashish, Ashutosh sharma, Ayush, Ayush pathania , Deepesh dhanotia, Divyansh dhiman, Divyansh sharmaDushyant sharma, Gaurav bhardwaj , Harshit jamnial, Isha, Ishan sharma , Jatin thakur , Kanika, Kanika thakur, Kashish prashar, Kinshuk rana, Komal, Komal singh, Lakshay, Manish, Shalini sharma, Shreya , Suchika khatta, Saksham sharma, Ankita . Manish kumar, Megha rana, Mitakh, Mridula thakur, Muskan rana, Naman katnouria, Nikhil hariyan, Nikhil kumar, Paras dogra, Parul thakur, Pranav dhiman ,m, Prince samyal, Priti , Priyanka devi, Rahul sharma, Ranjan dhiman, Rejal pathaniaRijul, Rinki guleria, Rishabh modgil, Rudransh, Rukshant sharma, Sagar dhiman, Sahil, Sajal sharma , Sanraph soodan, Sapan thakur, Sayam, Shagun thakur, Shipra, Shivakshi jaswal, Shivam katia, Shruti, Shubham naysk, Shweta bhatia, Simran sambyal, Sourabh, Sourav bharti, Tanvi sharma, Uday kumar, Vansh, Vanshika bhardwaj, Varun sharma, Vineet singh, Vishal choudhary, Vishal parmar, Vishav sharma, Vivek, Abhinav bhatia . Akanksha ,Akshika chouhan, Arvind kumar, Chetna, Sakshi</p>	

  
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**Kathog, Teh. Jawalamukhi, Distt. Kangra (H.P)**  
**Project record of B. Pharmacy Batch 2019-2023**

S.No.	Roll.No.	Name of Student	Title Of Project
01	1931141001	Abhay	Evaluation of antioxidant activity of citrus fruit peels.
02	1931141002	Abhay Kumar	Quality of life of patients undergoing haemodialysis in HP
03	1931141003	Abhay Puri	Review of vaginal drug delivery system
04	1931141004	Abhishek Chauhan	A review on tap water assessing quality and safety
05	1931141005	Abhishek Guleria	A review article on malaria : Pathophysiology and treatment
06	1931141006	Ajay kumar	A review article on diabetes mellitus.
07	1931141007	Akanksha	The review on COVID-19 pandemic
08	1931141008	Akrit Verma	Standardization and phytochemical screening of cinchona.
09	1931141009	Amit kashyap	A review article on malaria : Pathophysiology and treatment
10	1931141010	Amita Devi	Exploring the therapeutic potential of vitex negundo and its compound viridiflorol in neurodegenerative disorder.
11	1931141011	Anchal Devi	Toxicological studies.
12	1931141012	Anjali	Exploring the therapeutic potential of vitex negundo and its compound viridiflorol in neurodegenerative disorder.
13	1931141013	Anmol Sharma	An overview on antiproliferative herbal plants.
14	1931141014	Anshul Choudhary	Ethosome as a novel vascular carrier.
15	1931141015	Anshul Katoch	Review of vaginal drug delivery system
16	1931141016	Anshul koundal	
17	1931141017	Anshul Saini	Survey of diabetes patient in different govt. hospitals of distt. Kangra
18	1931141018	Arush Sharma	Recent advances in novel drug delivery system
19	1931141019	Arvind kumar	A review article on malaria : Pathophysiology and treatment
20	1931141020	Aryan	Survey of diabetes patient in different govt. hospitals of distt. Kangra
21	1931141021	Ashish Sharma	A review article on malaria : Pathophysiology and treatment
22	1931141022	Ayush Bhardwaj	A review on tap water assessing quality and safety
23	1931141023	Ayush Gautam	A review article on malaria : Pathophysiology and treatment

  
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**Project record of B. Pharmacy Batch 2019-2023**

24	1931141024	Badal Singh	Pathological mechanism involved in Alzheimer's disease
25	1931141025	Deepak Sharma	Overview on diabetes mellitus and its management
26	1931141026	Devi Singh	Recent advancement in nanoscience for the management metastasis stage of cancer
27	1931141027	Dheeraj	Literature on diabetes mellitus
28	1931141028	Divyanshi	Evaluation of antioxidant activity of citrus fruit peels.
29	1931141029	Ekansh Sharma	Review on breast cancer
30	1931141030	Gopal Kumar	Review on diabetes mellitus
31	1931141031	Gourav	A review article on diabetes mellitus
32	1931141033	Gourav Banyal	A potential application of antioxidants A review
33	1931141034	Gourav Singh	Diabetes mellitus and its management
34	1931141035	Harshita	A review on artificial intelligence in the field of pharmacy
35	1931141036	Himani Sharma	Study on medical plant in all distt. of HP
36	1931141037	Jahnvi Sharma	A prospective study on the prevalence of hypertension, diabetes mellitus and dyslipidaemia in health awareness camp in rural areas of HP
37	1931141038	Kajal	Literature review on diabetes mellitus
38	1931141039	Kamakshi	A review on current advances in 3d bioprinting of human organ and tissue engineering
39	1931141040	Kamini Thakur	A review on potential application of anti oxidants
40	1931141041	Kanak Guleria	Pharmacotherapy of diabetic ketoacidosis
41	1931141042	Kanika	Formulate and evaluate aloe-vera cold cream
42	1931141043	Kashish	Alopecia
43	1931141044	Khushboo	A prospective study on the prevalence of hypertension, diabetes mellitus and dyslipidaemia in health awareness camp in rural areas of HP
44	1931141045	Kritika Rana	Liposome as a novel vascular carrier
45	1931141046	Manjeet Singh	Simultaneous estimation of diclofenac and paracetamol on UV spectroscopy
46	1931141047	Mehak Sharma	A review literature on ginger
47	1931141048	Minakshi	Evaluation of glimepiride formulation as gastro retentive dosage form
48	1931141049	Mohit Kumar	Meta-analysis of the therapeutic potential of edible mushrooms: A comprehensive evaluation of anti-diabetic and anti inflammatory effect
49	1931141050	Nancy Bhardwaj	An overview on Alzheimer disease

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50	1931141051	Neeraj Kumari	Study on medical plant in all distt.of HP
51	1931141052	Neha Bharti	Review on hair fall
52	1931141053	Nikhil	Crohn's disease
53	1931141054	Nikhil Rana	Ethosome as a novel vascular carrier.
54	1931141055	Nishad Malik	A review on diarrhea in pediatrics
55	1931141056	Pardyum Kaushal	Review on diabetes mellitus
56	1931141057	Parvez Khan	Rhododendron arboretum and its potential health benefits
57	1931141058	Prajwal Metha	Review on article diabetes mellitus
58	1931141059	Pranshu Awasthi	Diabetes mellitus and its management
59	1931141060	Pradham Sharma	Alzheimer disease:A review on pathological mechanism
60	1931141061	Priya Rana	Formulate and evaluate aloe vera cold cream
61	1931141062	Rahil Randhawa	Review on alopecia
62	1931141063	Rahul Bhardwaj	A review on tap water assessing quality and safety
63	1931141064	Rahul Thakur	A review on ocular drug delivery system (OCUSERT)
64	1931141065	Ramesh Kumar	A potential application of antioxidants A review
65	1931141066	Richa Sharma	A review on cardiac arrest
66	1931141067	Riya Parmar	A review on artificial intelligence in the field of pharmacy
67	1931141068	Rohan Thakur	Evaluation of anti oxidants activity of vasaka
68	1931141069	Rohit Dhillon	Murraya koenigii and its potential health benefits
69	1931141070	Ruchika	Rhododendron arboretum and its potential health benefits
70	1931141071	Sagar Kumar	Standardization and phytochemical screening of cinchona.
71	1931141072	Sahil Chopra	A review on traditional medicinal uses , pharmacological activities and health benefits of terminilia chebula
72	1931141073	Sahil choudhary	A review on leiomyoma:Uterine fibroids
73	1931141074	Sahil randhawa	A review on alopecia
74	1931141075	Sahil Sharma	A review on mini tablets
75	1931141076	Saksham kaistha	A potential application of antioxidants A review
76	1931141077	Sakshi	A review on standardization and phytochemical screening of cinchona.
77	1931141078	Sanket Sharma	Evaluation of anti-oxidant activity of ageratum conyzoides
78	1931141079	Saurav Chaudhary	Review on crohn's disease
79	1931141080	Sehdev Chandel	Diabetes mellitus

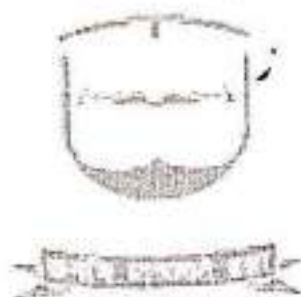
  
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**Project record of B. Pharmacy Batch 2019-2023**

80	1931141081	Shagun Choudhary	A review on current advances in 3d bioprinting of human organ and tissue engineering
81	1931141082	Shalini Sharma	Review on mini tablet
82	1931141083	Shipali Sharma	Standardization and phytochemical screening of cinchona.
83	1931141085	Shubhdeep Singh	The review on COVID-19 pandemic
84	1931141086	Simran	Plant in aquatic ecosystem: Current trends and future directions
85	1931141087	Simran	A review on alopecia
86	1931141088	Sourabh Kumar	A review article on malaria : Pathophysiology and treatment
87	1931141089	Sushant Thakur	A review on quality control tests for pharmaceutical formulation
89	1931141090	Sweety Rajwal	Liposome as a novel vascular carrier.
90	1931141091	Tamanna Kumari	Standardization and phytochemical screening of cinchona.
91	1931141092	Tanish kumar Dhiman	A review on molecular docking
92	1931141093	Tarun	Murraya koenigii and its potential health benefits
93	1931141094	Tejaswani Bhardwaj	Review on treatment of vitiligo
94	1931141095	Uday Partap Singh Jaswal	Plant in aquatic ecosystem: Current trends and future directions
95	1931141096	Vanshika	Plant in aquatic ecosystem: Current trends and future directions
96	1931141097	Varun Bhardwaj	A review article on diabetes mellitus
97	1931141099	Vishal	Plant in aquatic ecosystem: Current trends and future directions
98	1931141100	Vishal Jamwal	Meta-analysis of the therapeutic potential of edible mushrooms: A comprehensive evaluation of anti-diabetic and anti inflammatory effect
99	20023114001	Satyam	Ethosomes as a novel vascular carrier.
100	20023114002	Varun	A review on diarrhea in pediatrics

  
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 TEH. JAWALAMUKHI  
 DISTT. KANGRA (H.P.)

A Project Submitted to  
Himachal Pradesh Technical University, Hamirpur



In the partial fulfillment of the requirement for the degree of

**BACHELOR OF PHARMACY**

**BY**

Abhay

Roll No. 1931141001

*Under the guidance of*

Mrs. Rina Rana

Asst. Professor

Department Of Pharmacognosy



Laureate Institute of Pharmacy  
Kathog, Teh. Jawalamukhi Distt. Kangra, (H.P.) Pin code 176031

## CERTIFICATE BY PRINCIPAL



It is certify that the project entitled "Evaluation of Antioxidant activity of citrus fruit peels" is a bonafide and genuine work carried out by Mr. Abhay (Roll No.1931141001) under the guidance of Mrs. Rinu Rana (Asst. Professor, Department of Pharmacognosy).

The work is original and has not been submitted for any degree/diploma of this or any university.

Date: 16/06/23

Place: Kathog

Signature of Principal

Dr. M. S. Ashawat

Principal

Laureate Institute of Pharmacy

DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
T.P.O. JAWALAMUKHI  
DISTT. KANGRA H.P.

## CERTIFICATE BY GUIDE



It is certify that the project entitled "Evaluation of Antioxidant activity of citrus fruit peels" submitted by Mr. Abhay (Roll No. 1931141001) Laureate Institute of Pharmacy, Kathog under my supervision and guidance.

The work is original and has not been submitted for any degree/diploma of this or any university.

Date: 16/06/23

Place: Kathog

A handwritten signature in black ink, appearing to read 'Rinu', with a long horizontal stroke extending to the right.

Signature of the Guide

Mrs. Rinu Rana

Asst. Professor Department of

Pharmacognosy

**RESEARCH ON**  
**QUALITY OF LIFE OF PATIENTS UNDERGOING HAEMODIALYSIS IN**  
**HIMACHAL PRADESH**

A DISSERTATION SUBMITTED TO  
HIMACHAL PRADESH TECHNICAL UNIVERSITY,

HAMIRPUR



IN THE PARTIAL FULFILMENT FOR AWARD OF THE DEGREE OF

**BACHELOR OF PHARMACY**

2023

**SUBMITTED BY**

**MR. ABHAY KUMAR**

ROLL NO. 1931141002

UNDER THE GUIDENCE OF

**MR. AKSHAY THAKUR**



LAUREATE INSTITUTE OF PHARMACY, KATHOG,  
TEHSIL - JAWALA MUKHI, DISTT. - KANGRA (HP)-176031


CERTIFICATE BY PRINCIPAL



This is to certify that the work presented in the project entitled "QUALITY OF LIFE OF PATIENTS UNDERGOING HAEMODIALYSIS IN HIMACHAL PRADESH" for the Degree of Bachelor of pharmacy has been carried out by **ABHAY KUMAR (1921141005)** himself under the supervision of **MR. AKSHAY THAKUR**, Assistant Professor of Pharmaceutics in Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 12/June/2023

Place: Laureate Institute of Pharmacy

  
DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
JAWALAMUKHI  
DISTT. KANGRA (H.P.)

Director cum Principal  
Laureate Institute of Pharmacy,  
Kathog, Teh. Jawalamukhi,  
Distt. Kangra, HP- 176031

## CERTIFICATE BY GUIDE

This is to certify that the work presented in the project entitled "**QUALITY OF LIFE OF PATIENTS UNDERGOING HAEMODIALYSIS IN HIMACHAL PRADESH**" for the Degree of Bachelor of pharmacy has been carried out by **ABHAY KUMAR (1981141002)** himself under my supervision and guidance in the Department of Pharmaceutical chemistry, Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 12/June/2023

Place: Laureate Institute of  
Pharmacy

Mr. Akshay Thakur

Assistant Professor of  
Pharmaceutics

Laureate Institute of Pharmacy,

Kathog, Teh. Jawalamukhi,

Distt. Kangra, HP - 176031

*Akshay Thakur*  
12/06/2023

**REVIEW ON**  
**VAGINAL DRUG DELIVERY SYSTEM**  
A DISSERTATION SUBMITTED TO,  
HIMACHAL PRADESH TECHNICAL UNIVERSITY,  
HAMIRPUR



IN THE PARTIAL FULFILMENT FOR AWARD OF THE DEGREE OF  
**BACHELOR OF PHARMACY**

2023

**SUBMITTED BY**

**MR. ABHAY PURI**

ROLL NO.1931141003

UNDER THE GUIDENCE OF

**DR. SHAMMY JINDAL (DEPARTMENT OF PHARMACEUTICS)**



LAUREATE INSTITUTE OF PHARMACY, KATHOG,  
TEHSIL - JAWALAMUKHI, DISTT. - KANGRA (HP)-177101

## CERTIFICATE BY PRINCIPAL



This is to certify that the work presented in the project entitled "REVIEW ON VAGINAL DRUG DELIVERY SYSTEM" for the Degree of Bachelor of pharmacy has been carried out by ABHAY PURI himself under the supervision of DR. SHAMMY JINDAL, Associate Professor of Pharmaceutics in Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 16/06/23

Place: Laureate Institute of Pharmacy  
Jawalamukhi, Kathog

DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
Prof. (Dr.) M. S. Ashawat  
Director cum Principal  
Laureate Institute of Pharmacy,  
Kathog, Teh. Jawalamukhi,  
Distt. Kangra, HP- 177101.

## CERTIFICATE BY GUIDE

This is to certify that the work presented in the project entitled "REVIEW ON VAGINAL DRUG DELIVERY SYSTEM" for the Degree of Bachelor of pharmacy has been carried out by ABHAY PURI (1931141003) himself under my supervision and guidance in the Department of Pharmaceutical chemistry, Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.



Dr. Shammy Jindal

Associate Professor of  
Pharmaceutics

Laureate Institute of Pharmacy,  
Kathog, Teh. Jawalamukhi,  
Distt. Kangra, HP - 177101

Date: 16/06/2022

Place: Laureate Institute of  
Pharmacy, Kathog,  
Jawalamukhi

A REVIEW  
ON  
TAP WATER:  
ASSESSING QUALITY AND SAFETY

A Project Submitted to Himachal Pradesh Technical University, Hamirpur



In the partial fulfillment of the requirement for the degree of

**BACHELOR OF PHARMACY**

BY

Mr. Abhishek Chauhan

ROLL NO. 1931141004

Under the guidance of

Mrs Dimple Rana

Asst. Professor of Pharmaceutics



LAUREATE INSTITUTION OF PHARMACY KATHOG

TESHIL-JAWALAMUKHI, DISTT-KANGRA (H.P.) PINCODE-177101



# Laureate Institute of Pharmacy

Recognized under section 2 (f) of the UGC Act 1956

Approved by H.P. Govt, AICTE, PCI & Affiliated to HP Technical University

This is to certify that the work contained in this dissertation entitled "A REVIEW ON TAP WATER: ASSESSING QUALITY AND SAFETY" submitted to partial fulfillment of the requirement for the degree of bachelor of pharmacy to Himachal Pradesh Technical University, Hamirpur, embodies the research work carried out by Mr. Abhishek Chauhan (ROLL NO. 1931141004) himself under my supervision and guidance in the department of Pharmaceutics, Laureate Institute of Pharmacy, Kathog, Jawalamukhi (H.P.). The work has not been submitted in part or full for the award of any other degree in any other university in my knowledge.

Date: 11/06/23.

Place: Laureate Institute of  
Pharmacy Kathog  
Jawalamukhi

Signature of the Guide Mrs Dimple Rana

Assistant Professor,

Department of Pharmaceutics.

Laureate Institute of Pharmacy

Kathog, Jawalamukhi



# Laureate Institute of Pharmacy

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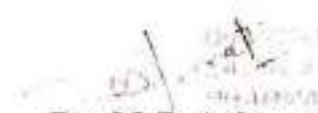
Approved by H.P. Govt, AICTE, PCI & Affiliated to HP Technical University

LAUREATE INSTITUTE OF PHARMACY

This is to certify that the work contained in the Project entitled "A REVIEW ON TAP WATER: ASSESSING QUALITY AND SAFETY" submitted to partial fulfillment of the requirement for the degree of bachelor of pharmacy to Himachal Pradesh Technical University, Hamirpur, embodies the research work carried out by Mr. Abhishek Chauhan (ROLL NO. 1931141004) himself under the supervision and guidance of in the department of Pharmaceutics, Mrs Dimple Rana, Laureate Institute of Pharmacy, Kathog Jawalamukhi (H.P). The work has not been submitted in part or full for the award of any other degree in any other university in my knowledge.

Date: 14/06/23

Place: Laureate Institute of  
Pharmacy Kathog  
Jawalamukhi

  
Dr. M.S. Ashawat  
Principal

Laureate Institute of Pharmacy  
Kathog, Jawalamukhi

**A REVIEW  
ARTICLE ON  
MALARIA:  
PATHOPHYSIOLOGY  
AND TREATMENT**

A Project Submitted to  
Himachal Pradesh Technical University, Hamirpur



In the partial fulfillment of the requirement for the degree of

**BACHELOR OF PHARMACY**  
By

ABHISHEK GULERIA  
Roll No.1931141005  
Under the guidance of

Mrs. SHANU PRIYA  
Asst. Professor of Pharmaceutics



**LAUREATE INSTITUTE OF PHARMACY KATHOG,  
TEHSIL- JAWALAMUKHI DISTT-KANGRA, (HP) PIN -177101**



# Laureate Institute of Pharmacy

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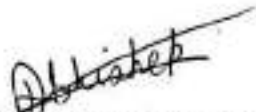
Approved by H.P. Govt, AICTE, PCI & Affiliated to HP Technical University

## CERTIFICATE BY CANDIDATE

I hereby declare that work described in this project entitled "A REVIEW ARTICLE ON MALARIA : PATHOPHYSIOLOGY AND TREATMENT" which is being submitted by me in partial fulfillment for the award of Bachelor in Pharmacy to Himachal Pradesh Technical University, Hamirpur, is the result of reviews carried out by me under the guidance of Mrs. SHANU PRIYA Assistant Professor, Department of Pharmaceutics. The work is original and has not been submitted for any degree/diploma of this or any university.

Date: 17-06-2023

Place: Laureate Institute  
of Pharmacy

  
Signature of the Candidate

Mr. Abhishek Guleria

Roll no. 1931141005



# Laureate Institute of Pharmacy

Reconized under section 2 (f) of the UGC Act 1956

Approved by H.P. Govt, AICTE, PCI & Affiliated to HP Technical University

## CERTIFICATE BY PRINCIPAL

This is to certify that the work contained in the Project entitled "A REVIEW ARTICLE ON MALARIA : PATHOPHYSIOLOGY AND TREATMENT" submitted to partial fulfillment of the requirement for the degree of bachelor of pharmacy to Himachal Pradesh Technical University, Hamirpur, embodies the research work carried out by Mr. Abhishek Guleria (Roll no. 1931141005) himself under the supervision and guidance of Mrs. SHANU PRIYA in the department of Pharmaceutics, Laureate Institute of Pharmacy, Kathog Jawalamukhi (H.P).The work has not been submitted in part or full for the award of any other degree in any other university in my knowledge.

Date: 17-06-2023

Place: Laureate institute of  
Pharmacy

DIRECTOR CUM PRINC  
LAUREATE INSTITUTE  
Dr. M.S. A  
PHARMACY KATHOG  
Principa  
JAWALAMUKHI  
KANGRA H.

Laureate Institute of Pharmacy  
Kathog Jawalamukhi



# Laureate Institute of Pharmacy

Reconized under section 2 (f) of the UGC Act 1956


Approved by H.P. Govt, AICTE, PCI & Affiliated to HP Technical University

## CERTIFICATE BY GUIDE

This is to certify that the work contained in this dissertation entitled "A REVIEW ARTICLE ON MALARIA : PATHOPHYSIOLOGY AND TREATMENT" submitted to partial fulfillment of the requirement for the degree of bachelor of pharmacy to Himachal Pradesh Technical University, Hamirpur, embodies the research work carried out by Mr. Abhishek Guleria (Roll no. 1931141005) himself under my supervision and guidance in the department of Pharmaceutics, Laureate Institute of Pharmacy, Kathog, Jwalamukhi (H.P). The work has not been submitted in part or full for the award of any other degree in any other university in my knowledge.

Date: 17-06-2023

Place: Laureate institute of  
Pharmacy

  
Signature of the Guide  
Mrs. SHANU PRIYA

Asst. Professor

Laureate Institute of Pharmacy

Kathog Jawalamukhi

**A Review Article on Diabetes Mellitus**  
**A Dissertation Submitted to**  
**Himachal Pradesh Technical University,**  
**Hamirpur**



**In the partial fulfilment for award of the Degree of**

**BACHELOR OF PHARMACY**

**2023**

**Submitted by**

**MR. AJAY KUMAR**

**ROLL NO. 1931141006**

**UNDER THE GUIDENCE OF**

**Ms. PRATIBHA CHAUDHARY**



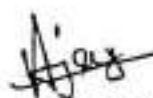
**LAUREATE INSTITUTE OF PHARMACY, KATHOG,**  
**TEHSIL - JAWALAMUKHI, DISTT. - KANGRA (HP)-177101**

## DECLARATION

is to certify that the project work entitled "A Review Article on Diabetes Mellitus" has been submitted in parts or full to any other university by me. This is the original work taken by me under the supervision of Ms. PRATIBHA CHAUDHARY in the Department of Pharmaceutics, Laureate Institute of Pharmacy, Kathog. Such materials that have been obtained for the research work have been duly acknowledged in the project.

date: 16-6-2023

place: Kathog



Mr. AJAY KUMAR

(1931141006)

Laureate Institute of  
Pharmacy,

Kathog, Teh. Jawalamukhi,

Distt- Kangra, HP-177101


## CERTIFICATE BY PRINCIPAL



This is to certify that the work presented in the project entitled "A Review Article on Diabetes Mellitus" for the Degree of Bachelor of pharmacy has been carried out by AJAY KUMAR (1931141006) himself under the supervision of Ms. PRATIBHA CHAUDHARY Assistant Professor of Pharmaceutics in Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 14-6-2023

Place: Kathog

  
DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
Prof. (Dr.) M. S. Ashay  
WALAMUKHI  
JAWALAMUKHI (H.P.)  
Director cum Principal  
Laureate Institute of  
Pharmacy,  
Kathog, Teh. Jawalamukhi,  
Distt. Kangra, HP- 177101.

## CERTIFICATE BY GUIDE

This is to certify that the work presented in the project entitled "A Review Article on Diabetes Mellitus" for the Degree of Bachelor of pharmacy has been carried out by AJAY UMAR (1931141006) himself under my supervision and guidance in the Department of Pharmaceutics, Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 14/06/2023

Place: LIPH, Kathog



**MS. PRATIBHA  
CHAUDHARY**

**Assistant Professor of  
Pharmaceutics**

**Laureate Institute of  
Pharmacy,**

**Kathog,**

**Teh. Jawalamukhi**

**Distt. Kangra, HP - 177101**

**THE REVIEW ON COVID-19 PANDAMIC:  
ITS CURRENT STATUS AND OUTBREAK IN HIMACHAL PRADESH**

A Dissertation Submitted to  
**Himachal Pradesh Technical University,**  
**Hamirpur**



In the partial fulfilment for award of the Degree of  
**BACHELOR OF PHARMACY**

**2023**

Submitted by

**Ms. AKANKSHA KATOCH**

**ROLL NO. 1931141007**

UNDER THE GUIDENCE OF

**Mrs. VANDANA BHATIA**



**LAUREATE INSTITUTE OF PHARMACY, KATHOG,  
TEHSIL - JAWALAMUKHI, DISTT. - KANGRA (HP)-177101**

## CERTIFICATE BY GUIDE

This is to certify that the work presented in the project entitled "THE REVIEW ON COVID -19 PANDAMIC" for the Degree of Bachelor of pharmacy has been carried out by AKANKSHA KATOCH (1931141007) herself under my supervision and guidance in the Department of Pharmacology, Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 19/06/2023

Place: LIPh/Kathog



**Mrs. VANDANA BHATIA**

Assistant Professor of  
Pharmacology

Laureate Institute of Pharmacy,

Kathog, Teh. Jawalamukhi,

Distt. Kangra, HP - 177101


## CERTIFICATE BY PRINCIPAL



This is to certify that the work presented in the project entitled "THE REVIEW ON COVID-19 PANDAMIC" for the Degree of Bachelor of pharmacy has been carried out by Akanksha Katoch (1931141007) herself under the supervision of Mrs. VANDANA BHATIA Assistant Professor of Pharmacology in Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 19/06/2023

Place: LIPh/Kathog

  
DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
TEH. JAWALAMUKHI  
DISTT. KANGRA (H.P.)  
Director cum principal  
Laureate Institute of pharmacy,  
Kathog, Teh. Jawalamukhi,  
Distt. Kangra, HP- 177101.

**STANDARDIZATION AND PHYTOCHEMICAL SCREENING OF CINCHONA**

**A Dissertation Submitted to  
Himachal Pradesh Technical University,  
Hamirpur**



**In the partial fulfilment for award of the Degree of  
BACHELOR-OF PHARMACY**

**2023**

**Submitted by**

**MR. AKRIT VERMA**

**ROLL NO. 1931141008**

**UNDER THE GUIDENCE OF**

**Dr. SANJAY KUMAR**



**LAUREATE INSTITUTE OF PHARMACY, KATHOG,  
TEHSIL - JAWALAMUKHI, DISTT. - KANGRA (HP)-177101**

## DECLARATION

This is to certify that the project work entitled "STANDARDIZATION AND PHYTOCHEMICAL SCREENING OF CINCHONA" has not been submitted in parts or full to any other university by me. This is the original work undertaken by me under the supervision of Dr. SANJAY KUMAR in the Department of Pharmacognosy, Laureate Institute of Pharmacy, Kathog. Such materials that had been obtained for the research work have been duly acknowledged in the project.

Date: 10/06/2023

Place: Kathog.



Akshay Verma

(1931141008)

Laureate institute of Pharmacy,

Kathog, Teh. Jawalamukhi,

Distt- Kangra, HP-177101

## DECLARATION

This is to certify that the project work entitled "STANDARDIZATION AND PHYTOCHEMICAL SCREENING OF CINCHONA" has not been submitted in parts or full to any other university by me. This is the original work undertaken by me under the supervision of Dr. SANJAY KUMAR in the Department of Pharmacognosy, Laureate Institute of Pharmacy, Kathog. Such materials that had been obtained for the research work have been duly acknowledged in the project.

Date: 10/06/2023

Place: KATHOG,



Akshay Verma

(1931141008)

Laureate institute of Pharmacy,

Kathog, Teh. Jawalamukhi,

Distt- Kangra, HP-177101

## CERTIFICATE BY GUIDE

This is to certify that the work presented in the project entitled "STANDARDIZATION AND PHYTOCHEMICAL SCREENING OF CINCHONA" for the Degree of Bachelor of pharmacy has been carried out by AKRIT VERMA (1931141008) himself under my supervision and guidance in the Department of Pharmacognosy, Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 10/06/23

Place: KATHOG



Dr. SANJAY KUMAR

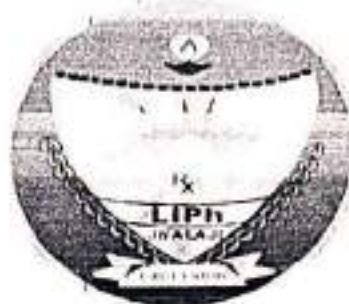
Associate Professor of  
Pharmacognosy

Laureate Institute of Pharmacy,

Kathog, Teh. Jawalamukhi,

Distt. Kangra, HP - 177101


## CERTIFICATE BY PRINCIPAL



This is to certify that the work presented in the project entitled "STANDARDIZATION AND PHYTOCHEMICAL SCREENING OF CINCHONA" for the Degree of Bachelor of pharmacy has been carried out by AKRIT VERMA (1931141008) himself under the supervision of Dr SANJAY KUMAR Associate Professor of Pharmacognosy in Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 12-June-2023

Place: KAFIMDC

  
DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
TEH. JAWALAMUKHI  
DISTT. KANGRA HP  
Prof. (Dr.) M. S. Ashawat  
Director cum Principal  
Laureate Institute of Pharmacy,  
Kathog, Teh. Jawalamukhi,  
Distt. Kangra, HP- 177101.

**A REVIEW  
ARTICLE ON  
MALARIA:  
PATHOPHYSIOLOGY  
AND TREATMENT**

A Project Submitted to  
Himachal Pradesh Technical University, Hamirpur



In the partial fulfillment of the requirement for the degree of

**BACHELOR OF PHARMACY**

By

Amit kashyap

Roll No.1931141009

Under the guidance of

Mrs. Ankita

Asst.Professor of Pharmaceutical analysis and quality assurance



**LAUREATE INSTITUTE OF PHARMACY KATHOG,  
TEHSIL- JAWALAMUKHI DISTT-KANGRA, (HP) PIN -177101**



# Laureate Institute of Pharmacy

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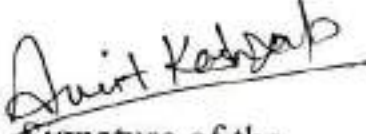
Approved by H.P. Govt, AICTE, PCI & Affiliated to HP Technical University

## CERTIFICATE BY CANDIDATE

I hereby declare that work described in this project entitled "A REVIEW ARTICLE ON MALARIA : PATHOPHYSIOLOGY AND TREATMENT" which is being submitted by me in partial fulfillment for the award of Bachelor in Pharmacy to Himachal Pradesh Technical University, Hamirpur, is the result of reviews carried out by me under the guidance of Mrs. Ankita Assistant Professor, Department of Pharmaceutical analysis and quality assurance. The work is original and has not been submitted for any degree/diploma of this or any university.

Date: 14/06/2023

Place: Laureate institute  
of pharmacy

  
Signature of the  
Candidate

Mr. Amit

kashyap

Roll no.

1931141009



# Laureate Institute of Pharmacy

Recognized under section 2 (f) of the UGC Act 1956

Approved by H.P. Govt, AICTE, PCI & Affiliated to HP Technical University

## CERTIFICATE BY PRINCIPAL

This is to certify that the work contained in the Project entitled "A REVIEW ARTICLE ON MALARIA : PATHOPHYSIOLOGY AND TREATMENT" submitted to partial fulfillment of the requirement for the degree of bachelor of pharmacy to Himachal Pradesh Technical University, Hamirpur, embodies the research work carried out by Mr. Amit kashyap (Roll no. 1931141009) himself under the supervision and guidance of Mrs. Ankita in the department of Pharmaceutical analysis and quality assurance, Laureate Institute of Pharmacy, Kathog Jawalamukhi (H.P). The work has not been submitted in part or full for the award of any other degree in any other university in my knowledge.

Date: 14/06/2023

Place: Laureate Institute  
of Pharmacy.

  
Dr. M.S. Ashawat

Principal Laureate  
Institute of Pharmacy  
Kathog Jawalamukhi



# Laureate Institute of Pharmacy

Recognized under section 2(D) of the UGC Act 1956

Approved by H.P. Govt, AICTE, PCI & Affiliated to HP Technical University

## CERTIFICATE BY GUIDE

This is to certify that the work contained in this dissertation entitled "A REVIEW ARTICLE ON MALARIA : PATHOPHYSIOLOGY AND TREATMENT" submitted to partial fulfillment of the requirement for the degree of bachelor of pharmacy to Himachal Pradesh Technical University, Hamirpur, embodies the research work carried out by Mr. Amit kashyap (Roll no. 1931141009) himself under my supervision and guidance in the department of Pharmaceutical analysis and quality assurance, Laureate Institute of Pharmacy, Kathog, Jwalamukhi (H.P). The work has not been submitted in part or full for the award of any other degree in any other university in my knowledge.

Date: 14/06/2023

Place: Laureate Institute  
of Pharmacy.

Signature of the Guide

Mrs. Ankita

Asst. Professor of Pharmaceutical analysis and quality assurance

Laureate Institute of Pharmacy

Kathog Jawalamukhi

**Exploring the Therapeutic Potential of Vitex negundo and its Compound Viridiflorol in  
Neurodegenerative Disorders: A Narrative Review**

**Submitted to**

**Himachal Pradesh Technical University, ,**

**Hamirpur**



**In the partial fulfilment for award of the Degree of**

**BACHELOR OF PHARMACY**

**2023**

**Submitted by**

**MISS. AMITA DEVI**

**ROLL NO. 1931141010**

**UNDER THE GUIDENCE OF**

**MR. SHIV KUMAR KUSHAWAHA**



**LAUREATE INSTITUTE OF PHARMACY, KATHOG,  
TEHSIL - JAWALAMUKHI, DISTT. - KANGRA (HP)-177101**

## CERTIFICATE BY GUIDE

This is to certify that the work presented in the project entitled "Exploring the Therapeutic Potential of Vitex negundo and its Compound Viridiflorol in Neurodegenerative Disorders" for the Degree of Bachelor of pharmacy has been carried out by **Amita Devi** herself under my supervision and guidance in the Department of Pharmacology, Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 19/06/23

Place: LIPH, Kathog



**Mr. Shiv Kumar Kushawaha**

Associate Professor and H.O.D  
Of Pharmacology

Laureate Institute of Pharmacy,

Kathog, Teh. Jawalamukhi,

Distt. Kangra, HP - 177101


## CERTIFICATE BY PRINCIPAL



This is to certify that the work presented in the project entitled "Exploring the Therapeutic Potential of Vitex negundo and its Compound Viridiflorol in Neurodegenerative Disorders" for the Degree of Bachelor of pharmacy has been carried out by Amita Devi herself under the supervision of Mr. Shiv Kumar Kushawaha Associate Professor and H.O.D Of Pharmacology in Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 19/06/23

Place: LIPh, Kathog

  
Prof. (Dr.) M. S. Ashawat  
Director cum Principal  
Laureate Institute of Pharmacy  
Kathog, Teh. Jawalamukhi,  
Distt. Kangra, HP- 177101.

**PROJECT WORK**  
**ON**  
**TOXICOLOGICAL STUDIES**

**A PROJECT SUBMITTED TO**  
**HIMACHAL PRADESH TECHNICAL UNIVERSITY,**  
**HAMIRPUR**



**IN THE PARTIAL FULFILMENT FOR AWARD OF THE DEGREE OF**  
**BACHELOR OF PHARMACY**

**2023**

**SUBMITTED BY**

**MISS. ANCHAL**

**ROLL NO. 1931141011**

**UNDER THE GUIDENCE OF**

**MRS. SHANU PRIYA**

**LAUREATE INSTITUTE OF PHARMACY, KATHOG,**  
**TEHSIL - JAWALAMUKHI, DISTT. - KANGRA (HP)-177101**


## CERTIFICATE BY PRINCIPAL



This is to certify that the work presented in the project entitled "TOXICOLOGICAL STUDIES" for the Degree of Bachelor of pharmacy has been carried out by ANCHAL (1931141011) under the supervision of MRS. SHANU PRIYA, Asst. Prof. of Pharmaceutical chemistry, Laureate Institute of Pharmacy. The work is original and has not been submitted for any degree/diploma in this or any other university.

Date: 14/06/2023

Place: LIPh, Kathog

  
DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY, KATHOG  
TEH. JAWALAMUKHI  
DIST. KANGRA (H.P.)  
Prof. (Dr.) M. S. Ashawat  
Director cum Principal  
Laureate Institute of Pharmacy,  
Kathog, Teh. Jawalamukhi,  
Distt. Kangra, HP- 176031.

### **CERTIFICATE BY GUIDE**

This is to certify that the work presented in the project entitled "TOXICOLOGICAL STUDIES" for the Degree of Bachelor of pharmacy has been carried out by ANCHAL (1931141011) herself under my supervision and guidance in the Department of Professor, Pharmaceutical Chemistry Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 14/06/2023

Place: LIPIH, Kathog

  
MR. SHANU PRIYA

Asst. Professor,  
PHARMACEUTICAL  
CHEMISTRY

Laureate Institute of Pharmacy,  
Kathog, The. Jawalamukhi,  
Distt. Kangra, HP - 177101

**Exploring the Therapeutic Potential of Vitex negundo and its Compound Viridiflorol in  
Neurodegenerative Disorders: A Narrative Review**

**Submitted to  
Himachal Pradesh Technical University,  
Hamirpur**



**In the partial fulfilment for award of the Degree of  
BACHELOR OF PHARMACY  
2023**

**Submitted by  
MISS. ANJALI  
ROLL NO. 1931141012  
UNDER THE GUIDENCE OF  
MR. SHIV KUMAR KUSHAWAHA**



**LAUREATE INSTITUTE OF PHARMACY, KATHOG,  
TEHSIL - JAWALAMUKHI, DISTT. - KANGRA (HP)-177101**


## CERTIFICATE BY PRINCIPAL



This is to certify that the work presented in the project entitled "Exploring the Therapeutic Potential of Vitex negundo and its Compound Viridiflorol in Neurodegenerative Disorders" for the Degree of Bachelor of pharmacy has been carried out by Anjali herself under the supervision of Mr. Shiv Kumar Kushawaha Associate Professor and H.O.D Of Pharmacology in Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 19/06/2023

Place: LIPh, Kathog

  
DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
TEH. JAWALAMUKHI  
DISTT. KANGRA (H.P.)  
Laureate Institute of Pharmacy,  
Kathog , Teh. Jawalamukhi,  
Distt. Kangra, HP- 177101.

## CERTIFICATE BY GUIDE

This is to certify that the work presented in the project entitled "Exploring the Therapeutic Potential of Vitex negundo and its Compound Viridiflorol in Neurodegenerative Disorders" for the Degree of Bachelor of pharmacy has been carried out by Anjali herself under my supervision and guidance in the Department of Pharmacology, Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 19/06/2023

Place: LI PH, Kathog



**Mr. Shiv Kumar Kushawaha**  
Associate Professor and H.O.D  
Of Pharmacology  
Laureate Institute of Pharmacy,  
Kathog, Teh. Jawalamukhi,  
Distt. Kangra, HP - 177101

**An Overview on Antiproliferative Herbal Plants**

**A Dissertation Submitted to  
Himachal Pradesh Technical University,  
Hamirpur**



**In the partial fulfilment for award of the Degree of  
BACHELOR OF PHARMACY**

**2023**

**Submitted by**

**MR. ANMOL SHARMA**

**ROLL NO. 1931141013**

**UNDER THE GUIDENCE OF**

**Miss. Astha Sharma**

**(Assistant Professor of Pharmaceutical Chemistry)**



**LAUREATE INSTITUTE OF PHARMACY, KATHOG,  
TEHSIL - JAWALAMUKHI, DISTT. - KANGRA (HP)-177101**


## DECLARATION



This is to certify that the project work entitled "**An Overview on Antiproliferative Herbal Plants**" has not been submitted in parts or full to any other university by me. This is the original work undertaken by me under the supervision of **Miss. Astha Sharma** in the Department of Pharmaceutical chemistry, Laureate Institute of Pharmacy, Kathog. Such materials that had been obtained for the research work have been duly acknowledged in the project.

Date: 14/06/23

Place: Kathog

  
Anmol Sharma

(1931141013)

Laureate institute of  
Pharmacy,

Kathog, Teh. Jawalamukhi,

Distt- Kangra, HP-177101

**CERTIFICATE BY PRINCIPAL**



This is to certify that the work presented in the project entitled "An Overview on Antiproliferative Herbal Plants" for the-Degree of Bachelor of pharmacy has been carried out by ANMOL SHARMA (1931141013) himself under the supervision of Miss Astha Sharma Assistant Professor of Pharmaceutical chemistry in Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 14/06/23

Place: Kathog  
3

DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
Prof. (Dr.) M. BHANU KATHOG  
TEH. JAWALAMUKHI  
Distt. Kangra (H.P.)  
Director cum Principal  
Laureate Institute of  
Pharmacy.  
Kathog, Teh. Jawalamukhi,  
Distt. Kangra, HP- 177101.


**CERTIFICATE BY DEAN OF ACADEMICS AND STUDENT  
WELFARE**



This is to certify that the work presented in the project entitled "An Overview on Antiproliferative Herbal Plants" for the Degree of Bachelor of pharmacy has been carried out by ANMOL SHARMA (1931141013) himself under the supervision of Miss Astha Sharma Assistant Professor of Pharmaceutical chemistry in Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 14/06/23

Place: Kathog

  
Prof. (Dr.) C.P.S Verma

Dean of Academics and

Student Welfare

HOD of Pharmacognosy

Laureate Institute of Pharmacy,

Kathog, Teh. Jawalamukhi,

Distt. Kangra, HP- 177101.

## CERTIFICATE BY GUIDE



This is to certify that the work presented in the project entitled "An Overview on Antiproliferative Herbal Plants" for the Degree of Bachelor of pharmacy has been carried out by ANMOL SHARMA (1931141013) himself under my supervision and guidance in the Department of pharmaceutical chemistry, Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 10/06/23

Place: Kathog

MISS. ASTHA SHARMA

Assistant Professor of  
Pharmaceutical chemistry  
Laureate Institute of Pharmacy,  
Kathog, Teh. Jawalamukhi,  
Distt. Kangra, HP - 177101

# **ETHOSOMES AS NOVEL VESICULAR CARRIER**

A Project Submitted to  
Himachal Pradesh Technical University, Hamirpur



In the partial fulfillment of the requirement for the degree of

**BACHELOR OF PHARMACY**

BY

**Anshul choudhary**

**Roll No. 1931141014**

*Under the guidance of*  
**Mr. Keshav Dhiman**

**Asst. Professor**

**Department. of Pharmaceutics**



**Laureate Institute of Pharmacy**

Kathog, Teh. Jawala Mukhi Distt. Kangra, (H.P.) Pin code 176031

## CERTIFICATE BY CANDIDATE



I am hereby declare the work described in this project entitled " **Ethosome as a novel vasicular carrier**" which is being submitted by me in partial fulfillment for the award of Bachelor of Pharmacy in Himachal Pradesh Technical University, Hamirpur, is the result of review carried out by me under the guidance **Mr. Keshav Dhiman (Asst. Professor Department of Pharmaceutics)**.

The work is original and has not been submitted for any degree/diploma of this or any university.

Date: 14/06/2023

Place: LIPh, Kathog

A handwritten signature in black ink, appearing to read 'Anshul Choudhary', written over a circular stamp.

Signature of the Candidate

Mr. Anshul Choudhary

Roll No. -1931141014

## CERTIFICATE BY GUIDE



It is certify that the project entitled "Ethosome as a novel vasicular carrier" submitted by **Mr. Anshul Choudhary (Roll No.-1931141014)** Laureate Institute of Pharmacy, Kathog under my supervision and guidance.

The work is original and has not been submitted for any degree/diploma of this or any university.

Date: 14/06/2023

Place: LIPh, Kathog

A handwritten signature in black ink, appearing to read 'Keshav Dhiman', is written over a set of three parallel diagonal lines.

Signature of the Guide

Mr. Keshav Dhiman

Asst. Professor (Department of  
Pharmaceutics)

# CERTIFICATE BY PRINCIPAL



It is certify that the project entitled "A review on Ethosome" is a bonafide and genuine work carried out by Mr. Anshul Choudhary (Roll No.-1931141014) under the guidance of Mr. Keshav Dhiman (Asst. Professor, Department of **Pharmaceutics**).

The work is original and has not been submitted for any degree/diploma of this or any university.

Date: 14/06/2023

Place: LIPh, Kathog.

  
DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
TEH. JAWALAMUKHI  
Dr. M. S. Ashawat KANGRA (H.P.)

Principal

Laureate Institute of Pharmacy

**REVIEW ON**  
**VAGINAL DRUG DELIVERY SYSTEM**  
A DISSERTATION SUBMITTED TO  
HIMACHAL PRADESH TECHNICAL UNIVERSITY,  
HAMIRPUR



IN THE PARTIAL FULFILMENT FOR AWARD OF THE DEGREE OF  
**BACHELOR OF PHARMACY**  
2023

**SUBMITTED BY**

**MR. ANSHUL KATOCH**

ROLL NO.1931141015

UNDER THE GUIDENCE OF

**DR. SHAMMY JINDAL (DEPARTMENT OF PHARMACEUTICS)**



LAUREATE INSTITUTE OF PHARMACY, KATHOG,  
TEHSIL - JAWALAMUKHI, DISTT. - KANGRA (HP)-177101

## DECLARATION

This is to certify that the project work entitled "Review on Vaginal Drug Delivery System" has not been submitted in parts or full to any other university by me. This is the original work undertaken by me under the supervision of DR. SHAMMY JINDAL, ASSOCIATE PROFESSOR in the Department of Pharmaceutics, Laureate Institute of Pharmacy, Kathog.

ate: 13/06/2023  
ce: Kathog

*Anshul katoch*

Anshul katoch (1931141015)  
Laureate institute of Pharmacy,  
Kathog, Teh. Jawalamukhi

Distt- Kangra, HP-177101

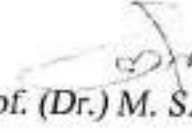
**CERTIFICATE BY PRINCIPAL**



This is to certify that the work presented in the project entitled "REVIEW ON VAGINAL DRUG DELIVERY SYSTEM" for the Degree of Bachelor of pharmacy has been carried out by ANSHUL KATOCH himself under the supervision of DR. SHAMMY JINDAL, Associate Professor of Pharmaceutics in Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 13/06/2023

Place: Kathog

  
DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
TEH. JAWALAMUKHI  
DISTT. KANGRA (H.P.)

Director cum Principal  
Laureate Institute of  
Pharmacy,  
Kathog, Teh. Jawalamukhi,  
Distt. Kangra, HP- 177101.

## CERTIFICATE BY GUIDE

This is to certify that the work presented in the project entitled "REVIEW ON VAGINAL DRUG DELIVERY SYSTEM" for the Degree of Bachelor of pharmacy has been carried out by ANSHUL KATOCH (1931141015) himself under my supervision and guidance in the Department of Pharmaceutical chemistry, Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.



Dr. Shammy Jindal

Associate Professor of  
Pharmaceutics

Laureate Institute of Pharmacy,  
Kathog, Teh. Jawalamukhi,  
Distt. Kangra, HP - 177101

Date: 13/06/2023

Place: Kathog

A SURVEY  
OF  
DIABETES PATIENT IN DIFFERENT GOVERNMENT HOSPITALS OF  
DISTRICT KANGRA

A Project Submitted to  
Himachal Pradesh Technical University, Hamirpur



In the partial fulfillment of the requirement for the degree of

**BACHELOR OF PHARMACY**

By

**ANSHUL SAINI**

Roll no.1931141017

Under the guidance of

**Mrs. ANCHAL GULERIA**

Asst. Professor of Pharmaceutics



**LAUREATE INSTITUTE OF PHARMACY KATHOG,**  
TEHSIL- JAWALAMUKHI DISTT-KANGRA, (HP) PIN - 176031



# Laureate Institute of Pharmacy

Recognized under section 2(f) of the UGC Act 1956  
Approved by H.P. Govt. AICTE, PCI & Affiliated to HP Technical University

## CERTIFICATE BY CANDIDATE

I hereby declare that work described in this project entitled "SURVEY OF DIABETES PATIENT IN DIFFERENT GOVERNMENT HOPITALS OF DISTRICT KANGRA" which is being submitted by me in partial fulfillment for the award of Bachelor in Pharmacy to Himachal Pradesh Technical University, Hamirpur, is the result of reviews carried out by use under the guidance of Mrs. ANCHAL GULERIA Assistant Professor, Department of Pharmaceutics. The work is original and has not been submitted for any degree/diploma of this or any university.

DO:: 13-06-2023

Place: Laureate Institute of  
Pharmacy

Signature of the Candidate

ANSHUL SAINI

Roll no. 1931141017



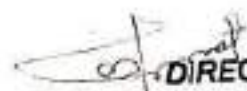
# Laureate Institute of Pharmacy

Recognized under section 2(f) of the UGC Act 1956

Approved by H.P. Govt. AICTE, PCI & Affiliated to HP Technical University

## CERTIFICATE BY PRINCIPAL

This is to certify that the work contained in the Project entitled "SURVEY OF DIABETES PATIENT IN DIFFERENT GOVERNMENT HOSPITALS OF DISTRICT KANGRA" submitted to partial fulfillment of the requirement for the degree of bachelor of pharmacy to Himachal Pradesh Technical University, Jalandhar, embodies the research work carried out by ANSHUL SAINI (Roll no. 31141017) himself under the supervision and guidance of Mrs. ANCHAL KUMAR in the department of Pharmaceutics, Laureate Institute of Pharmacy, Kathog Jawalamukhi (H.P). The work has not been submitted in part or full for award of any other degree in any other university in my knowledge.

  
DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
Dr M.S. Asthana  
JAWALAMUKHI  
DISTT. KANGRA (H.P.)

Laureate Institute of Pharmacy  
Kathog, Jawalamukhi

Date: 13-06-2023

Place: Laureate Institute of  
Pharmacy

# Laureate Institute of Pharmacy

Recognized under section 2(f) of the UGC Act 1956

Approved by H.P. Govt. AICTE, PCI & Affiliated to HP Technical University

## CERTIFICATE BY GUIDE

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Date: 13-06-2021

Place: Laureate Institute of Pharmacy.

Signature of the Guide

Mrs. ANCHAL GULERIA

Asst. Professor

Laureate Institute of Pharmacy

Kathog Jawalamukhi

# RECENT ADVANCES IN NOVEL DRUG DELIVERY SYSTEM

A Project Submitted to  
Himachal Pradesh Technical University, Hamirpur



In the partial fulfillment of the requirement for the degree of

## **BACHELOR OF PHARMACY**

**2023**

By

**ARUSH SHARMA**

Roll no.1931141018

Under the guidance of

**Mr. DEV RAJ**

Asst. Professor of Pharmaceutics



**LAUREATE INSTITUTE OF PHARMACY KATHOG,**

**TEHSIL- JAWALAMUKHI DISTT-KANGRA, (HP)**

**PIN - 176031**



# Laureate Institute of Pharmacy

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## CERTIFICATE BY GUIDE

This is to certify that the work contained in this dissertation entitled "**RECENT ADVANCES IN NOVEL DRUG DELIVERY SYSTEM**" submitted to partial fulfillment of the requirement for the degree of bachelor of pharmacy to Himachal Pradesh Technical University, Hamirpur, embodies the research work carried out by **ARUSH SHARMA (Roll no. 1931141018)** himself under my supervision and guidance in the department of Pharmaceutics, Laureate Institute Of Pharmacy, Kathog, Jawalamukhi (H.P). The work has not been submitted in part or full for the award of any other degree in any other university in my knowledge

Date: 14/June/2023

Place: Kathog

Signature of the Guide

Mr. DEV RAJ

Asst. Professor

Laureate Institute of Pharmacy

Kathog Jawalamukhi



# Laureate Institute of Pharmacy

Recognized under section 2(f) of the UGC Act 1956  
Approved by H.P. Govt. AICTE PCI & Affiliated to HP Technical University

## CERTIFICATE BY PRINCIPAL

This is to certify that the work contained in the Project entitled "**RECENT ADVANCES IN NOVEL DRUG DELIVERY SYSTEM**" submitted to partial fulfillment of the requirement for the degree of bachelor of pharmacy to Himachal Pradesh Technical University, Hamirpur, embodies the research work carried out by **ARUSH SHARMA (Roll no. 1931141018)** himself under the supervision and guidance of **Mr. DEV RAJ** in the department of **Pharmaceutics**, Laureate Institute of Pharmacy, Kathog Jawalamukhi (H.P). The work has not been submitted in part or full for the award of any other degree in any other university in my knowledge.

Date: 14/June/2023

Place: Kathog

DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
TEH. JAWALAMUKHI  
DISTT. KANGRA (H.P.)

Principal

Dr M.S. Ashawat

Laureate Institute of Pharmacy

Kathog, Jawalamukhi

**A Review Article on Malaria Pathophysiology and treatment**

**A Dissertation Submitted to**

**Himachal Pradesh Technical University,**

**Hamirpur**



**In the partial fulfilment for award of the Degree of**

**BACHELOR OF PHARMACY**

**2023**

**Submitted by**

**MR. ARVIND KUMAR**

**ROLL NO. 1931141019**

**UNDER THE GUIDANCE OF**

**Mrs. ANKITA**

**Asst. Professor of Pharmaceutical Analysis and quality assurance**



**LAUREATE INSTITUTE OF PHARMACY, KATHOG,  
TEHSIL - JAWALAMUKHI, DISTT. - KANGRA (HP)-177101**

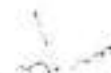
## CERTIFICATE BY PRINCIPAL



This is to certify that the work presented in the project entitled "A Review Article on **MALARIA: PATHOPHYSIOLOGY AND TREATMENT**" for the Degree of Bachelor of pharmacy has been carried out by **ARVIND KUMAR (1931141019)** himself under the supervision of **Mrs. ANKITA** Assistant Professor of Pharmaceutics in Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 17/06/2023

Place: Laureate Institute of  
Pharmacy 'Kathog'

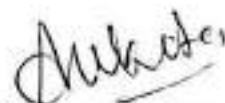
  
DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
TEH. JAWALAMUKHI  
DIST. KANGRA (H.P.)  
Prof. (Dr.) M. S. Ashawat  
Director cum Principal  
Laureate Institute of  
Pharmacy,  
Kathog, Teh. Jawalamukhi,  
Distt. Kangra, HP- 177101.

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Date: 14/06/23

Place: Laureate Institute of  
Pharmacy



Mrs. ANKITA

Assistant Professor of

Pharmaceutical analysis and  
quality assurance

Laureate Institute of

Pharmacy,

Kathog,

Teh. Jawalamukhi

Distt. Kangra, HP - 177101

## DECLARATION

This is to certify that the project work entitled "A Review Article on MALARIA: PATHOPHYSIOLOGY AND TREATMENT" has not been submitted in parts or full to any other university by me. This is the original work undertaken by me under the supervision of Mrs. ANKITA in the Department of Pharmaceutics, Laureate Institute of Pharmacy, Kathog. Such materials that had been obtained for the research work have been duly acknowledged in the project.

Date: 14/06/23

Place: Laureate Institute of  
Pharmacy

*Arvind*  
Mr. ARVIND KUMAR  
ROLL NO (1931141019)  
Laureate Institute of  
Pharmacy,  
Kathog, Teh. Jawalamukhi,  
Distt- Kangra, HP-177101

**A SURVEY  
OF  
DIABETES PATIENT IN DIFFERENT GOVERNMENT HOSPITALS OF  
DISTRICT KANGRA**

A Project Submitted to  
Himachal Pradesh Technical University, Hamirpur



In the partial fulfillment of the requirement for the degree of

**BACHELOR OF PHARMACY**

By

**ARYAN SHARMA**

Roll no.1931141020

Under the guidance of

**Mrs. ANCHAL GULERIA**

Asst. Professor of Pharmaceutics



**LAUREATE INSTITUTE OF PHARMACY KATHOG,  
TEHSIL- JAWALAMUKHI DISTT-KANGRA, (HP) PIN - 177101**



# Laureate Institute of Pharmacy

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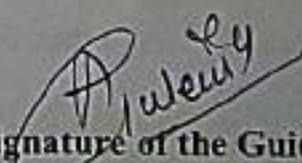
Approved by H.P. Govt. AKTE, PCI & Affiliated to HP Technical University

## CERTIFICATE BY GUIDE

This is to certify that the work contained in this dissertation entitled "SURVEY OF DIABETES PATIENTS IN DIFFERENT GOVERNMENT HOSPITALS OF DISTRICT KANGRA" submitted to partial fulfillment of the requirement for the degree of bachelor of pharmacy to Himachal Pradesh Technical University, Hamirpur, embodies the research work carried out by **ARYAN SHARMA (Roll no. 1931141020)** himself under my supervision and guidance in the department of Pharmaceutics, Laureate Institute Of Pharmacy, Kathog, Jawalamukhi (H.P). The work has not been submitted in part or full for the award of any other degree in any other university in my knowledge

Date: 13-06-2023

Place: Laureate Institute of  
Pharmacy

  
Signature of the Guide

Mrs. ANCHAL GULERIA

Asst. Professor

Laureate Institute of Pharmacy

Kathog Jawalamukhi



# Laureate Institute of Pharmacy

Recognized under section 2(f) of the UGC Act 1956


Approved by H.P. Govt. AICTE, PCI & Affiliated to HP Technical University

## CERTIFICATE BY PRINCIPAL

This is to certify that the work contained in the Project entitled "SURVEY OF DIABETES PATIENT IN DIFFERENT GOVERNMENT HOSPITALS OF DISTRICT KANGRA" submitted to partial fulfillment of the requirement for the degree of bachelor of pharmacy to Himachal Pradesh Technical University, Hamirpur, embodies the research work carried out by **ARYAN SHARMA** (Roll no. 1931141020) himself under the supervision and guidance of **Mrs. ANCHAL GULERIA** in the department of **Pharmaceutics**, Laureate Institute of Pharmacy, Kathog Jawalamukhi (H.P). The work has not been submitted in part or full for the award of any other degree in any other university in my knowledge.

Date: 13-06-2023

Place: Laureate institute of  
Pharmacy

  
DIRECTOR CUM PRINCIPAL  
Principal  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
Dr M.S. Ashawat  
JAWALAMUKHI  
DIST. KANGRA (H.P.)

Laureate Institute of Pharmacy  
Kathog, Jawalamukhi

AREVIEW  
ARTICLE ON  
MALARIA:  
PATHOPHYSIOLOY  
AND TREATMENT

A Project Submitted to  
Himachal Pradesh Technical University, Hamirpur



In the partial fulfillment of the requirement for the degree of

BACHELOR OF PHARMACY

By

Ashish Sharma

Roll No. 1931141021

Under the guidance of

Ms. Pratibha

Choudhary

Asst. Professor of Pharmaceutics



LAUREATE INSTITUTE OF PHARMACY KATHOG,  
TEHSIL-JAWALAMUKHI DISTT-KANGRA, (HP) PIN-177101



# Laureate Institute of Pharmacy

Recognized under section 2 (f) of the UGC Act 1956

Approved by H.P. Govt, AICTE, PCI & Affiliated to HP Technical University

## CERTIFICATE BY CANDIDATE

I hereby declare that work described in this project entitled "A REVIEW ARTICLE ON MALARIA: PATHOPHYSIOLOGY AND TREATMENT" which is being submitted by me in partial fulfillment for the award of Bachelor in Pharmacy to Himachal Pradesh Technical University, Hamirpur, is the result of reviews carried out by use under the guidance of Ms. Pratibha Choudhary Assistant Professor, Department of Pharmaceutics. The work is original and has not been submitted for any degree/diploma of this or any university.

Date: 14/01/23

Place: LPH

Ashish.

Signature of the Candidate

Mr. Ashish Sharma

Rollno.1931141021



# Laureate Institute of Pharmacy

Reconized under section 2 (f) of the UGC Act 1956

Approved by H.P. Govt, AICTE, PCI & Affiliated to HP Technical University

## CERTIFICATE BY PRINCIPAL

This is to certify that the work contained in the Project entitled "A REVIEW ARTICLE ON MALARIA: PATHOPHYSIOLOGY AND TREATMENT" submitted to partial fulfillment of the requirement for the degree of bachelor of pharmacy to Himachal Pradesh Technical University, Hamirpur, embodies the review work carried out by Mr. Ashish Sharma Rollno.1931141021 himself under the supervision and guidance of Ms. Pratibha Choudhary in the department of Pharmaceutics, Laureate Institute of Pharmacy, Kathog Jawalamukhi (H.P). The work has not been submitted in part or full for the award of any other degree in any other university in my knowledge.

Date: 14/06/23

Place: LIPH Kathog

Dr. M.S. Ashawat

Principal

Laureate Institute of Pharmacy

Kathog, Jawalamukhi

**DIRECTOR CUM PRINCIPAL**

**LAUREATE INSTITUTE OF**

**PHARMACY KATHOG**

**TEH. JAWALAMUKHI**

**DIST. MANGRA (H.P.)**



# Laureate Institute of Pharmacy


Recognized under section 2 (f) of the UGC Act 1956  
Approved by H.P. Govt, AICTE, PCI & Affiliated to HP Technical University

## CERTIFICATE BY GUIDE

This is to certify that the work contained in this dissertation entitled "A REVIEW ARTICLE ON MALARIA: PATHOPHYSIOLOGY AND TREATMENT" submitted to partial fulfillment of the requirement for the degree of bachelor of pharmacy to Himachal Pradesh Technical University, Hamirpur, embodies the review work carried out by Mr. Ashish Sharma (Rollno.1931141021) himself under my supervision and guidance in the department of Pharmaceutics, Laureate Institute of Pharmacy, Kathog, Jawalamukhi (H.P). The work has not been submitted in part or full for the award of any other degree in any other university in my knowledge.

Date: 14/06/23

Place LIPH

  
Signature of the Guide

Ms. Pratibha Choudhary

Asst. Professor  
Laureate Institute of Pharmacy  
Kathog Jawalamukhi

**A REVIEW**  
**ON**  
**TAP WATER:**  
**ASSESSING QUALITY AND SAFETY**

A Project Submitted to Himachal Pradesh Technical University, Hamirpur



In the partial fulfillment of the requirement for the degree of

**BACHELOR OF PHARMACY**

BY

Mr. AYUSH BHARDWAJ

ROLL NO. 1931141022

Under the guidance of

Mr. NISHANT GAUTAM

Asst. Professor of Pharmacology



**LAUREATE INSTITUTION OF PHARMACY KATHOG**

TESHIL-JAWALAMUKHI, DISTT-KANGRA (H.P.) PINCODE-177101



# Laureate Institute of Pharmacy

Recognized under section 2 (f) of the UGC Act 1956

Approved by H.P. Govt, AICTE, PCI & Affiliated to HP Technical University

## CERTIFICATE BY CANDIDATE

I hereby declare that work described in this project entitled "A REVIEW ON TAP WATER: ASSESSING QUALITY AND SAFETY" which is being submitted by me in partial fulfillment for the award of Bachelor in Pharmacy to Himachal Pradesh Technical University, Hamirpur, is the result of reviews carried out by use under the guidance of Mr. Nishant Gautam Assistant Professor, Department of Pharmacology. The work is original and has not been submitted for any degree/diploma of this or any university.

Date: 14/06/2023

Place: Laureate institute  
of pharmacy

*Ayush Bhardwaj*  
Signature of the Candidate

Ayush Bhardwaj

Roll No. 1931141022



# Laureate Institute of Pharmacy

Recognized under section 2 (f) of the UGC Act 1956

Approved by H.P. Govt, AICTE, PCI & Affiliated to HP Technical University

## CERTIFICATE BY PRINCIPAL

This is to certify that the work contained in the Project entitled "A REVIEW ON TAP WATER:ASSESSING QUALITY AND SAFETY " submitted to partial fulfillment of the requirement for the degree of bachelor of pharmacy to Himachal Pradesh Technical University, Hamirpur, embodies the research work carried out by Mr.Ayushl Bhardwaj (ROLL NO. 1931141022) himself under the supervision and guidance of in the department of Pharmaceutics , Mr.Nishant Gautam , Laureate Institute of Pharmacy, Kathog Jawalamukhi (H.P).The work has not been submitted in part or full for the award of any other degree in any other university in my knowledge.

Date: 14/06/2023

Place: Laureate institute  
of pharmacy

  
Dr. M.S. Ashawat

Principal

Laureate Institute of Pharmacy

Kathog, Jawalamukhi



# Laureate Institute of Pharmacy

Recognized under section 2 (f) of the UGC Act 1956

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Date: 14/06/2023

Place: Laureate Institute  
of Pharmacy

Signature of the Guide Mr. Nishant Gautam

Assistant Professor,

Department of Pharmacology

Laureate Institute of Pharmacy

Kathog, Jawalamukhi

**A REVIEW  
ARTICLE ON  
MALARIA:  
PATHOPHYSIOLOGY  
AND TREATMENT**

A Project Submitted to  
Himachal Pradesh Technical University, Hamirpur



In the partial fulfillment of the requirement for the degree of

**BACHELOR OF PHARMACY**

By

Ayush Gautam

Roll No.1931141023

Under the guidance of

Ms. Pratibha

Choudhary

Asst.Professor of Pharmaceutics



**LAUREATE INSTITUTE OF PHARMACY KATHOG,  
TEHSIL- JAWALAMUKHI DISTT-KANGRA, (HP) PIN -177101**



# Laureate Institute of Pharmacy

Recognized under section 2 (f) of the UGC Act 1956

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Date: 14/06/23

Place: LI PH

Signature of the Candidate

Mr. Avish Gautam

Roll no. 1931141023



# Laureate Institute of Pharmacy

Reconized under section 2 (f) of the UGC Act 1956

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Date: 14/06/2023

Place: LIPI, Kathog

Dr. M.S. Ashawat  
Principal

Laureate Institute of Pharmacy  
DIRECTOR CUM PRINCIPAL  
KATHOG, JAWALAMUKHI  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
TEH. JAWALAMUKHI  
DISTT. KANGRA (H.P.)



# Laureate Institute of Pharmacy

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Approved by H.P. Govt, AICTE, PCI & Affiliated to HP Technical University

## CERTIFICATE BY GUIDE

This is to certify that the work contained in this dissertation entitled "A REVIEW ARTICLE ON MALARIA : PATHOPHYSIOLOGY AND TREATMENT" submitted to partial fulfillment of the requirement for the degree of bachelor of pharmacy to Himachal Pradesh Technical University, Hamirpur, embodies the research work carried out by Mr. Avush Gautam (Roll no. 1931141023) himself under my supervision and guidance in the department of Pharmaceutics, Laureate Institute of Pharmacy, Kathog, Jawalamukhi (H.P). The work has not been submitted in part or full for the award of any other degree in any other university in my knowledge.

Date: 14/06/2023

Place: LIP, Kathog

Signature of the Guide

Ms. Pratibha Choudhary

Asst. Professor

Laureate Institute of Pharmacy

Kathog Jawalamukhi

**PATHOLOGICAL MECHANISM INVOLVED IN ALZHEIMER'S DISEASE**

**A Dissertation Submitted to  
Himachal Pradesh Technical University,  
Hamirpur**



**In the partial fulfilment for award of the Degree of**

**BACHELOR OF PHARMACY**

**2023**

**Submitted by**

**MR. BADAL SINGH**

**ROLL NO. 1931141024**

**UNDER THE GUIDENCE OF**

**Mrs. VANDANA BHATIA**



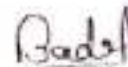
**LAUREATE INSTITUTE OF PHARMACY, KATHOG,  
TEHSIL - JAWALAMUKHI, DISTT. - KANGRA (HP)-177101**

## DECLARATION

This is to certify that the project work entitled "PATHOLOGICAL MECHANISM INVOLVED IN ALZHEIMER'S DISEASE" has not been submitted in parts or full to any other university by me. This is the original work undertaken by me under the supervision of Mrs. VANDANA BHATIA in the Department of Pharmacology, Laureate Institute of Pharmacy, Kathog. Such materials that had been obtained for the research work have been duly acknowledged in the project.

Date: 14/06/2023

Place: Kathog



Mr. BADAL SINGH

(1931141024)

Laureate Institute of  
Pharmacy,

Kathog, Teh. Jawalamukhi,

Distt- Kangra, HP-177101


CERTIFICATE BY PRINCIPAL



This is to certify that the work presented in the project entitled "PATHOLOGICAL MECHANISM INVOLVED IN ALZHEIMER'S DISEASE" for the Degree of Bachelor of pharmacy has been carried out by BADAL SINGH (1931141024) herself under the supervision of Mrs. VANDANA BHATIA Assistant Professor of Pharmacology in Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 17/06/2023

Place: Laureate institute of  
Pharmacy Kathog

  
DIRECTOR CUM PRINCIPAL  
Prof. (Dr.) M. SANJAY  
INSTITUTE OF  
PHARMACY KATHOG  
Director cum Principal  
LIPs JAWALAMUKHI  
DIST. KANGRA (H.P.)  
Laureate Institute of  
Pharmacy,  
Kathog, Teh. Jawalamukhi,  
Distt. Kangra, HP- 177101.

## CERTIFICATE BY GUIDE

This is to certify that the work presented in the project entitled "PATHOLOGICAL MECHANISM INVOLVED IN ALZHEIMER'S DISEASE" for the Degree of Bachelor of pharmacy has been carried out by BADAL SINGH (1931141024) herself under my supervision and guidance in the Department of Pharmacology, Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 14/06/2023

Place: Kathog

*Lamba*  
14/6/23

Mrs. VANDANA BHATIA

Assistant Professor

Department Pharmacology

Laureate Institute of

Pharmacy,

Kathog, Teh. Jawalamukhi,

Distt. Kangra, H.P 177101

# OVERVIEW ON DIABETES MELLITUS AND ITS MANAGEMENT

A Project Submitted to  
Himachal Pradesh Technical University, Hamirpur



In the partial fulfillment of the requirement for the degree of  
**BACHELOR OF PHARMACY**

**BY**

**DEEPAK SHARMA**

**Roll No. 1931141025**

*Under the guidance of*

**Mr. DEV RAJ**

**Asst. Professor**

**Dept. of Pharmaceutics**



## CERTIFICATE BY CANDIDATE



I am hereby declare the work described in this project entitled "OVERVIEW ON DIABETES MELLITUS AND ITS MANAGEMENT" which is being submitted by me in partial fulfillment for the award of Bachelor of Pharmacy in Himachal Pradesh Technical University, Hamirpur, is the result of review carried out by me under the guidance Mr. DEV RAJ (Asst. Professor, Department of Pharmaceutics).

The work is original and has not been submitted for any degree/diploma of this or any university.

Date: 14/06/23

Place: LIPh, Rathog

  
Signature of the Candidate

Mr. Deepak Sharma

Roll No. BP-1931141025

## CERTIFICATE BY GUIDE



It is certify that the project entitled "OVERVIEW ON DIABETES MELLITUS AND ITS MANAGEMENT" submitted by Mr. Deepak Sharma (Roll No. BP-1931141025) Laureate Institute of Pharmacy, Kathog under my supervision and guidance.

The work is original and has not been submitted for any degree/diploma of this or any university.

Date: 14/06/23

Place: LIPh, Kathog

  
Signature of the Guide

Mr. DEV RAJ

Asst. Professor

Department of Pharmaceutics


# CERTIFICATE BY PRINCIPAL



It is certify that the project entitled "OVERVIEW ON DIABETES MELLITUS AND ITS MANAGEMENT" is a bonafide and genuine work carried out by Mr. Deepak Sharma (Roll No. BP-1931141025) under the guidance of Mr. DEV RAJ (Asst. Professor, Department of Pharmaceutical).

The work is original and has not been submitted for any degree/diploma of this or any university.

Date: 14/06/23  
Place: LIPH, Kathog

  
Signature of Principal  
Dr. M. S. Ashawat  
Principal  
Laureate Institute Of Pharmacy  
DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
TEH. JAWALAMUKHI  
DISTT. KANGRA (H.P.)

**RECENT ADVANCEMENT IN NANOSCIENCE FOR THE MANAGEMENT OF  
METASTASIS STAGES OF CANCER**

**A Dissertation Submitted to Himachal Pradesh Technical University,  
Hamirpur**



**In the Partial Fulfillment of the Degree of Bachelor of Pharmacy**

**By**

**Devi Singh**

**Roll number: - 1931141026**

**Under the Guidance of: - Dr. Amardeep Anklagi**

**Professor and Head of Department: Pharmaceutical Analysis  
and Quality Assurance**

**LAUREATE INSTITUTE OF PHARMACY KATHOG, JWALAJI,  
TEHSIL DEHRA DISTRICT KANGRA  
HIMACHAL PRADESH**

**PIN NO.: - 176031**

## CERTIFICATE BY PRINCIPAL



This is certified that the work contained in the project entitled "Recent Advancement in Nanoscience for the Management of Metastasis Stages of Cancer" submitted to partial fulfillment of the requirement for the Degree Of Bachelor Of Pharmacy to Himachal Pradesh Technical University, Hamirpur, embodies the research work carried out by **Mr. Devi Singh (Roll no. 1931141026 )** himself under the supervision and guidance of **Dr. Amardeep Anklagi** in the Department of Pharmaceutical Analysis, Laureate institute of pharmacy, kathog, jawalaji, Kangra (H.P). The work has not been submitted in part or full for the award of any other degree in any university in my knowledge.

**Dr. Mahendra Singh Ashawat**

**Principal**

**Laureate Institute of Pharmacy**

**Kathog, jawalaji, kangra. (H.P)-176031**

**Date: - 19/06/2023.**

DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY  
KATHOG  
TEH. JAWALAMUKH  
DISTT. KANGRA (H.P.)

## CERTIFICATE BY HEAD OF DEPARTMENT



This is certified that the work contained in the project entitled “Recent Advancement in Nanoscience for the Management of Metastasis Stage of Cancer” Submitted to partial fulfillment of the requirement for the Degree of Bachelor of Pharmacy to Himachal Pradesh Technical University, Hamirpur, embodies the research work carried out by **Mr. Devi Singh (Roll no. 1931141026)** himself under the supervision and guidance of **Dr. Amardeep Anklagi** in the department of pharmaceutical analysis, Laureate institute of pharmacy, Kathog, Kangra (H.P). The work has not been submitted in part or full for the award of any other degree in any University in my knowledge.

**Dr. Amardeep Anklagi**

*A. D. Anklagi*

**HOD Pharmaceutical Analysis**

**Laureate institute of pharmacy**

**Kathog, jawalaji, Kangra (H.P) -176031**

**Date: - 19/6/23.**

# DIABETES MELLITUS

A Dissertation Submitted to  
Himachal Pradesh Technical University,  
Hamirpur



In the partial fulfilment for award of the Degree of  
**BACHELOR OF PHARMACY**

2023

Submitted by

**Mr. DHEERAJ**

**ROLL NO. 1931141027**

**UNDER THE GUIDENCE OF**

**Mr. NISHANT GAUTAM**



**LAUREATE INSTITUTE OF PHARMACY, KATHOG,  
TEHSIL - JAWALAMUKHI, DISTT. - KANGRA (HP)-177101**

## DECLARATION

This is to certify that the project work entitled "LITERATURE ON DIABETES MELLITUS" has not been submitted in parts or full to any other university by me. This is the original work undertaken by me under the supervision of Mr. NISHANT GAUTAM in the Department of Pharmacology, Laureate Institute of Pharmacy, Kathog. Such materials that had been obtained for the research work have been duly acknowledged in the project

Date: 11/06/25

Place: LPH Kathog (Jwalaji)

**DHEERAJ**

(1931141027)

Laureate Institute of pharmacy

Kathog, Teh. Jawalamukhi,

Distt. Kangra, HP- 177101


# CERTIFICATE BY PRINCIPAL



This is to certify that the work presented in the project entitled "LITERATURE ON DIABETES MELLITUS" for the Degree of Bachelor of pharmacy has been carried out by DHEERAJ (1931141027) herself under the supervision Mr. NISHANT GAUTAM Assistant Professor of Pharmacology in Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 14/06/23

Place: LIPh Kathog (Jawalajji)

  
DIRECTOR CUM PRINCIPAL  
Prof. (Dr.) M.S. LAMBA  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
TEH. JAWALAMUKHI  
DISTT. KANGRA (H.P.)  
Director cum principal  
Laureate Institute of pharmacy,  
Kathog, Teh. Jawalamukhi,  
Distt. Kangra, HP- 177101.

## CERTIFICATE BY GUIDE

This is to certify that the work presented in the project entitled "LITERATURE ON DIABETES MELLITUS" for the Degree of Bachelor of pharmacy has been carried out by DHEERAJ (1931141027) herself under my supervision and guidance in the Department of Pharmacology, Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 14/06/2023

Place: Kathog.



Mr. NISHANT GAUTAM

Assistant Professor of  
Pharmacology

Laureate Institute of Pharmacy,  
Kathog, Teh. Jawalamukhi,  
Distt. Kangra, HP - 177101

# EVALUATION OF ANTI-OXIDANT ACTIVITY OF CITRUS FRUIT PEELS

A Project Submitted to  
Himachal Pradesh Technical University, Hamirpur



In the partial fulfillment of the requirement for the degree of

**BACHELOR OF PHARMACY**

BY

**Divyanshi**

Roll No. 1931141028

*Under the guidance of*

**Mrs. Rinu Rana**

Asst. Professor

Department Of Pharmacognosy



**Laureate Institute of Pharmacy**

Kathog, Teh. JawalaMukhi Distt. Kangra, (H.P.) Pin code 176031

## CERTIFICATE BY PRINCIPAL

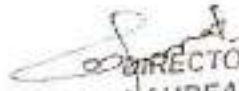


It is certify that the project entitled "Evaluation of Antioxidant activity of citrus fruit peels" is a bonafide and genuine work carried out by Ms. Divyanshi (Roll No.1931141028) under the guidance of Mrs. Rinu Rana (Asst. Professor, Department of Pharmacognosy).

The work is original and has not been submitted for any degree/diploma of this or any university.

Date: 16/6/23

Place: Kathog

  
DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
TEH. JAWALAMUKHI  
DIST. KANGRA (H.P.)  
**Signature of Principal**  
**Dr. M. S. Ashawat**  
**Principal**  
**Laureate Institute of Pharmacy**

## CERTIFICATE BY GUIDE



It is certify that the project entitled “**Evaluation of Antioxidant activity of citrus fruit peels**” submitted by **Ms. Divyanshi** (Roll No. 1931141028) Laureate Institute of Pharmacy, Kathog under my supervision and guidance.

The work is original and has not been submitted for any degree/diploma of this or any university.

**Date:** 16/6/23

**Place:** Kathog.

A handwritten signature in black ink, appearing to read 'Rinu', is written over a horizontal line.

**Signature of the Guide**

**Mrs. Rinu Rana**

**Asst. Professor Department of**

**Pharmacognosy**

# REVIEW ON BREAST CANCER

A Project Submitted to

Himachal Pradesh Technical University, Hamirpur



In the partial fulfillment of the requirement for the degree of

**BACHELOR OF PHARMACY**

**2023**

By

**EKANSH SHARMA**

Roll no.193114129

Under the guidance of

**Mr. TARUN SHARMA**

Asst. Professor of Pharmaceutics



**LAUREATE INSTITUTE OF PHARMACY KATHOG,**

TEHSIL- JAWALAMUKHI DISTT-KANGRA, (HP)

PIN - 176031



# Laureate Institute of Pharmacy

Recognized under section 2(1) of the U.P. Act 1956

## CERTIFICATE BY GUIDE

This is to certify that the work contained in this dissertation entitled "REVIEW ON BREAST CANCER" submitted to partial fulfillment of the requirement for the degree of bachelor of pharmacy to Himachal Pradesh Technical University, Hamirpur, embodies the research work carried out by **EKANSH SHARMA (Roll no. 1931141029)** himself under my supervision and guidance in the department of Pharmaceutics, Laureate Institute Of Pharmacy, Kathog, Jawalamukhi (H.P). The work has not been submitted in part or full for the award of any other degree in any other university in my knowledge

Date: 17/06/2023

Place: Kathog

Signature of the Guide

Mr. TARUN SHARMA

Asst. Professor

Laureate Institute of Pharmacy

Kathog Jawalamukhi



# Laureate Institute of Pharmacy


Recognized under section 2(f) of the U.G.A. Act 1956

## CERTIFICATE BY PRINCIPAL

This is to certify that the work contained in the Project entitled "REVIEW ON BREAST CANCER" submitted to partial fulfillment of the requirement for the degree of-bachelor of pharmacy to Himachal Pradesh Technical University, Hamirpur, embodies the research work carried out by **EKANSH SHARMA** (Roll no. 1931141029) himself under the supervision and guidance of **Mr. TARUN SHARMA** in the department of **Pharmaceutics**, Laureate Institute of Pharmacy, Kathog Jawalamukhi (H.P).The work has not been submitted in part or full for the award of any other degree in any other university in my knowledge.

Date: 17/06/2023

Place: Kathog

  
Principal

Dr M.S. Ashawat

Laureate Institute of Pharmacy

Kathog, Jawalamukhi

**A Review on Diabetes Mellitus**  
**A Dissertation Submitted to**  
**Himachal Pradesh Technical University,**  
**Hamirpur**



**In the partial fulfilment for award of the Degree of**  
**BACHELOR OF PHARMACY**

**2023**

**Submitted by**

**MR. GOPAL KUMAR**

**ROLL NO. 1931141030**

**UNDER THE GUIDENCE OF**

**Miss. Astha Sharma**



**LAUREATE INSTITUTE OF PHARMACY, KATHOG,**  
**TEHSIL - JAWALAMUKHI, DISTT. - KANGRA (HP)-177101**

## DECLARATION



I certify that the project work entitled "Review on Diabetes mellitus" has not been done in parts or full to any other university by me. This is the original work undertaken under the supervision of Miss. Astha Sharma in the Department of Pharmaceutical Chemistry, Laureate Institute of Pharmacy, Kathog. Such materials that had been obtained for research work have been duly acknowledged in the project.

14/06/2023

Kathog

Gopal Kumar

GOPAL KUMAR

(1931141030)

Laureate institute of Pharmacy,

Kathog, Teh. Jawalamukhi,

Distt- Kangra, HP-177101


## CERTIFICATE BY PRINCIPAL



This is to certify that the work presented in the project entitled "Diabetes mellitus" for the Degree of Bachelor of pharmacy has been carried out by Gopal kumar (1931141030) himself under the supervision of Miss Astha Sharma Associate Professor of Pharmaceutical Chemistry in Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 14/06/2023

Place: Kathog

  
DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
JWALAMUKHI  
DISTT KANGRA (H.P.)  
Prof. (Dr.) M. S. Ashwari  
Director cum Principal  
Laureate Institute of Pharmacy,  
Kathog, Teh. Jawalamukhi,  
Distt. Kangra, HP- 177101.

CERTIFICATE BY DEAN OF ACADEMICS AND STUDENT WELFARE



This is to certify that the work presented in the project entitled "An Overview on Antiproliferative Herbal Plants" for the Degree of Bachelor of pharmacy has been carried out by **GOPAL KUMAR** (1931141030) himself under the supervision of **Miss Astha Sharma Assistant Professor of Pharmaceutical chemistry** in Laureate Institute of Pharmacy, the work has not been submitted in parts or full to any other university in my knowledge.

Date: 14/06/2023

Place: Kathog

A handwritten signature in black ink, appearing to read 'C.P.S Verma', is written over the printed name.

PROF. C.P.S Verma

Dean of Academics and  
Student welfare

HOD of Pharmacognosy

Laureate Institute of Pharmacy,

Kathog, Teh: Jawalamukhi,

Dist. Kangra (H.P) 177101

## CERTIFICATE BY GUIDE



This is to certify that the work presented in the project entitled "Diabetes mellitus" for the Degree of Bachelor of pharmacy has been carried out by **Gopal kumar (1931141030)** himself under my supervision and guidance in the Department of Pharmaceutical Chemistry, Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 14/06/2023

Place: Kathog

**MISS. ASTHA SHARMA**

Associate Professor of  
Pharmaceutical chemistry

Laureate Institute of Pharmacy,

Kathog, Teh. Jawalamukhi,

Distt. Kangra, HP-177101

**A Review Article on Diabetes Mellitus**  
**A Dissertation Submitted to**  
**Himachal Pradesh Technical University,**  
**Hamirpur**



**In the partial fulfilment for award of the Degree of**  
**BACHELOR OF PHARMACY**

**2023**

**Submitted by**

**MR. GOURAV**

**ROLL NO. 1931141031**

**UNDER THE GUIDENCE OF**

**Ms. PRATIBHA CHAUDHARY**



**LAUREATE INSTITUTE OF PHARMACY, KATHOG,**  
**TEHSIL - JAWALAMUKHI, DISTT. - KANGRA (HP)-177101**

## DECLARATION

This is to certify that the project work entitled "A Review Article on Diabetes Mellitus" has not been submitted in parts or full to any other university by me. This is the original work undertaken by me under the supervision of Ms. PRATIBHA CHAUDHARY in the Department of Pharmaceutics, Laureate Institute of Pharmacy, Kathog. Such materials that had been obtained for the research work have been duly acknowledged in the project.

Date: 14 / 06 / 23

Place: Laureate Institute of  
Pharmacy Kathog (Jawalamukhi)

Mr. GOURAV  
(1931141031) *Gourav*

Laureate Institute of  
Pharmacy,  
Kathog, Teh. Jawalamukhi,  
Distt- Kangra, HP-177101


## CERTIFICATE BY PRINCIPAL



This is to certify that the work presented in the project entitled "A Review Article on Diabetes Mellitus" for the Degree of Bachelor of pharmacy has been carried out by GOURAV (1931141031) himself under the supervision of Ms. PRATIBHA CHAUDHARY Assistant Professor of Pharmaceutics in Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 14/06/23

Place: Laureate Institute of  
Pharmacy Kathog  
Jawalamukhi.


  
DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
TEH. JAWALAMUKHI  
DISTT. KANGRA (H.P.)  
Director cum Principal  
Laureate Institute of  
Pharmacy,  
Kathog, Teh. Jawalamukhi,  
Distt. Kangra, HP- 177101.

## CERTIFICATE BY GUIDE

This is to certify that the work presented in the project entitled "A Review Article on Diabetes Mellitus" for the Degree of Bachelor of pharmacy has been carried out by GOURAV (1931141031) himself under my supervision and guidance in the Department of Pharmaceutics, Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 14/06/23

Place: Laureate Institute of Pharmacy  
Kathog (Jawalamukhi)



MS. PRATIBHA  
CHAUDHARY

Assistant Professor of  
Pharmaceutics  
Laureate Institute of  
Pharmacy,  
Kathog,  
Teh. Jawalamukhi  
Distt. Kangra, HP - 177101

**A Potential Applications of Antioxidants- A Review**  
**A Dissertation Submitted to**  
**Himachal Pradesh Technical University,**  
**Hamirpur**



**In the partial fulfilment for award of the Degree of**  
**BACHELOR OF PHARMACY**

**2023**

**Submitted by**

**MR. GOURAV BANYAL**

**ROLL NO. 1931141033**

**UNDER THE GUIDENCE OF**

**Mrs. DIMPLE RANA**



**LAUREATE INSTITUTE OF PHARMACY, KATHOG,**  
**TEHSIL - JAWALAMUKHI, DISTT. - KANGRA (HP)-177101**

## DECLARATION

This is to certify that the project work entitled "A Potential Applications of Antioxidants-A Review" has not been submitted in parts or full to any other university by me. This is the original work undertaken by me under the supervision of Mrs. DIMPLE RANA in the Department of Pharmaceutics, Laureate Institute of Pharmacy, Kathog. Such materials that had been obtained for the research work have been duly acknowledged in the project.

GOURAV BANYAL

Sign - Gourav

(1931141033)

Laureate Institute of Pharmacy,

Kathog, Teh. Jawalamukhi,

Distt- Kangra, HP-177101

file: 13/06/2023

acc: Kathog

## CERTIFICATE BY PRINCIPAL



This is to certify that the work presented in the project entitled "A Potential Applications of Antioxidants- A Review" for the Degree of Bachelor of pharmacy has been carried out by GOURAV BANYAL (1931141033) himself under the supervision of Mrs. DIMPLE RANA Assistant Professor of Pharmaceutics in Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 13/06/2023

Place: Kathog

*M. Ashwari*  
DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
TEH. JAWALAMUKHI  
DIST. KANGRA (H.P.)  
Director cum Principal  
Laureate Institute of  
Pharmacy,  
Kathog, Teh. Jawalamukhi,  
Distt. Kangra, HP- 177101.

## CERTIFICATE BY GUIDE

This is to certify that the work presented in the project entitled "A Potential Applications of Antioxidants-A Review" for the Degree of Bachelor of pharmacy has been carried out by GOURAV BANYAL (1931141033) himself under my supervision and guidance in the Department of Pharmaceutics, Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 13/06/2023

Place: Kathog

  
Mrs. DIMPLE RANA

Assistant Professor of  
Pharmaceutics  
Laureate Institute of  
Pharmacy,  
Kathog, Teh. Jawalamukhi  
Distt. Kangra, HP - 177101

# DIABETES MELLITUS AND ITS MANAGEMENT

A Project Submitted to

Himachal Pradesh Technical University, Hamirpur



In the partial fulfilment for award of the Degree of

**BACHELOR OF PHARMACY**

2023

Submitted by

Gourav Singh

1931141034

Under the Guidance

Mrs. Ankita



**LAUREATE INSTITUTE OF PHARMACY, KATHOG,  
TEHSIL - JAWALAMUKHI, DISTT.-KANGRA (HP)-176031**

## DECLARATION BY STUDENT

I hereby declare that the work contained in this dissertation entitled "Diabetes Mellitus and its Management" is my own work and is original. This work has not been submitted in part or full for the award of any other degree in any other university.

Date: 17-06-2023

Place: Laureate institute of  
Pharmacy Kathog

Gourav Singh

Mr. Gourav Singh

1931141034

Laureate Institute of Pharmacy

Kathog (Jawalaji) 177101

## CERTIFICATE BY SUPERVISOR



It is to certify that the work contained in this project entitled "Diabetes Mellitus and its Management" submitted to partial fulfillment of the requirement for the degree of Bachelor of Pharmacy to Himachal Pradesh Technical University, Hamirpur, by Mr Gourav Singh (1931141034) has carried out his research work under my supervision.

The work is original and has not been submitted for any degree/diploma in this or any other university.

Date: 17-06-2023

  
Mrs. Ankita

Place: Laureate institute of  
Pharmacy Kathog


Asst. Professor. of Pharmaceutical Analysis and Quality Assurance  
Laureate Institute of Pharmacy Kathog  
(Jawalaji) 177101



It is to certify that the work contained in this project entitled "Diabetes Mellitus and its Management" submitted to partial fulfillment of the requirement for the Degree of Bachelor of Pharmacy to Himachal Pradesh Technical University, Hamirpur, embodies the work carried out by Gourav Singh (1931141034) himself under the supervision of Mrs. Ankita, Assistant Professor. of Pharmaceutical Analysis and Quality Assurance . The work is original and has not been submitted for any degree/diploma in this or any other university.

Date: 17-06-2023

Place: Laureate institute of Pharmacy Kathog.

  
DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
TEH. JAWALAMUKHI  
DISTT. KANGRA (H.P.)  
Director cum Principal

Laureate Institute of Pharmacy,  
Kathog, Teh. Jawalamukhi,  
Distt. Kangra, HP-

# A REVIEW ON ARTIFICIAL INTELLIGENCE IN THE FIELD OF PHARMACY

A Dissertation submitted to Himachal Pradesh Technical University, Hamirpur for the  
fulfillment the Degree of Bachelor of Pharmacy



2023

By

Harshita

Roll No.1931141035



Supervisor

**Mr. Ajay Kumar**

Laureate Institute of Pharmacy Kathog, Tehsil- Dehra, Kangra (HP)


Pin- 177101

## CERTIFICATE BY PRINCIPAL



This is the certificate that the work contained in the thesis entitled "A Review on Artificial Intelligence in the field of Pharmacy" submitted to partial fulfillment of the requirement for Degree of Bachelor of Pharmacy to Himachal Pradesh Technical University, Hamirpur, embodies the research work carried out by **Ms. Harshita (1931141035)** herself under the supervision and guidance of **Mr. Ajay Kumar** in the Department of Pharmaceutics, Laureate Institute of Pharmacy, Kathog, Kangra (H.P.). The work has not been submitted in part or full for the award of any other degree in any other University in my knowledge.

Date: 16/06/2023

  
**Prof. (Dr.) M.S. Ashawat**  
DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
TEH. JAWALAMUKHI  
DISTT. KANGRA (H.P.)  
**Principal,**  
**Laureate Institute of Pharmacy,**

Kathog, Distt. Kangra (H.P.)177101

## CERTIFICATE BY GUIDE



This is certify that the work contained in this dissertation entitled “**A Review On Artificial Intelligence in the field of Pharmacy**” submitted to partial fulfillment of the requirement for the Degree of Bachelor of Pharmacy to Himachal Pradesh Technical University, Hamirpur, embodies the research work carried out by **Ms. Harshita (1931141035)** herself under my supervision and guidance in the Département of Pharmaceutics, Laureate Institute of Pharmacy, Kathog, Kangra(H.P.). The work has not been submitted in part or full for the award of any other degree in any other degree in any other University in my knowledge.

Date: 16/06/2023

Supervisor

Mr. Ajay Kumar

Assistant Professor,

Laureate Institute of Pharmacy,

Kathog, Distt. Kangra (H.P.)177101

PROJECT WORK  
ON  
STUDY ON MEDICINAL PLANTS IN ALL DISTRICT OF HIMACHAL PRADESH

A PROJECT SUBMITTED TO  
HIMACHAL PRADESH TECHNICAL UNIVERSITY,  
HAMIRPUR



IN THE PARTIAL FULFILMENT FOR AWARD OF THE DEGREE OF  
**BACHELOR OF PHARMACY**

2023

**SUBMITTED BY**

**MISS. HIMANI SHARMA**

ROLL NO. 1931141036

UNDER THE GUIDENCE OF

**MR. DEV RAJ SHARMA**

LAUREATE INSTITUTE OF PHARMACY, KATHOG,  
TEHSIL - JAWALAMUKHI, DISTT. - KANGRA (HP)-177101

### CERTIFICATE BY GUIDE

This is to certify that the work presented in the project entitled "STUDY ON MEDICINAL PLANT IN ALL DISTRICT OF HIMACHAL PRADESH" for the Degree of Bachelor of pharmacy has been carried out by HIMANI SHARMA (1931141036) herself under my supervision and guidance in the Department of pharmaceutics, Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 14/6/23

Place: LIPI, Kathog



Mr. Dev Raj Sharma

Asst. Professor of pharmaceutics  
Laureate Institute of Pharmacy,

Kathog, The. Jawalamukhi,

Distt. Kangra, HP - 177101

**CERTIFICATE BY DIRECTOR CUM PRINCIPAL**



This is to certify that the work presented in the project entitled "STUDY ON MEDICINAL PLANT IN ALL DISTRICT OF HIMACHAL PRADESH" for the Degree of Bachelor of pharmacy has been carried out by **HIMANI SHARMA (1931141036)** under the supervision of **MR. DEV RAJ SHARMA**, Department of Pharmaceutic, Laureate Institute of Pharmacy. The work is original and has not been submitted for any degree/diploma in this or any other university.

Date: 14/6/23

Place: LIPh, Kathog

**DIRECTOR CUM PRINCIPAL**  
**LAUREATE INSTITUTE OF**  
**PHARMACY KATHOG**  
**Teh. JAWALAMUKHI**  
**DIST. KANGRA, HP**  
Prof. (Dr.) M. S. Ashawat  
Director cum Principal  
Laureate Institute of Pharmacy,  
Kathog, Teh. Jawalamukhi,  
Distt. Kangra, HP- 176031.

**A PROSPECTIVE STUDY ON THE PREVALENCE OF HYPERTENSION,  
DIABETES MELLITUS AND DYSLIPIDAEMIA IN HEALTH AWARENESS CAMP  
IN RURAL AREAS OF H.P**

**A PROJECT SUBMITTED TO  
HIMACHAL PRADESH TECHNICAL UNIVERSITY,  
HAMIRPUR**



**IN THE PARTIAL FULFILMENT FOR AWARD OF THE DEGREE  
OF  
BACHELOR OF PHARMACY**

**2023**

**MS. JAHNVI SHARMA**

**ROLL NO. 1931141037**

**UNDER THE GUIDENCE OF**

**Dr. SWATI RANA**

**(ASST. PROFESSOR OF PHARMACOLOGY)**



**LAUREATE INSTITUTE OF PHARMACY, KATHOG  
TEH. JAWALAMUKHI, DISTT. KANGRA (HP) - 177101**

CERTIFICATE BY PRINCIPAL

This is to certify that the work presented in the project entitled "A PROSPECTIVE STUDY ON THE PREVALENCE OF HYPERTENSION, DIABETES MELLITUS AND DYSLIPIDAEMIA IN HEALTH AWARENESS CAMP IN RURAL AREAS OF H.P" for the Degree of Bachelor of Pharmacy has been carried out by VANSHIKA herself under the supervision of Dr. SWATI RANA (Assistant Professor of Pharmacology), Laureate Institute of Pharmacy, Kathog. The work has not been submitted in parts or full to any other university in my knowledge.

Date:

Place:

DIRECTOR CUM PRINCIPAL  
& LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
TEH. JAWALAMUKHI  
DIST. KANGRA (H.P.)

Prof. (Dr.) M.S. Ashawat

Director cum Principal

Laureate Institute of Pharmacy,


Kathog, Teh. Jawalamukhi,

Distt. Kangra, (HP)-177101

CERTIFICATE BY GUIDE

This is to certify that the work presented in the project entitled "A RETROSPECTIVE STUDY ON THE PREVALENCE OF HYPERTENSION, DIABETES MELLITUS AND DYSLIPIDAEMIA IN HEALTH AWARENESS CAMP IN RURAL AREAS OF H.P" for the Degree of Bachelor of pharmacy has been carried out by JAHNVI SHARMA (1931141037) herself under my supervision and guidance in the Department of Pharmacology, Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date:



Dr. Swati rana

Place:

(Assistant professor of Pharmacology)  
Laureate Institute of Pharmacy, Kathog,  
Teh. Jawalamukhi. Distt. Kangra, (HP)  
- 177101

# **Literature Review on Diabetes Mellitus**

**A Dissertation Submitted to  
Himachal Pradesh Technical University,  
Hamirpur**



**In the partial fulfilment for award of the Degree of  
BACHELOR OF PHARMACY**

**2023**

**Submitted by**

**Ms. Kajal**

**ROLL NO. 1931141038**

**UNDER THE GUIDENCE OF**

**Mr. Nikhil Sharma**



**LAUREATE INSTITUTE OF PHARMACY, KATHOG,  
TEHSIL - JAWALAMUKHI, DISTT. - KANGRA (HP)-177101**

**CERTIFICATE BY GUIDE**

This is to certify that the work presented in the project entitled "Literature Review on Diabetes Mellitus" for the Degree of Bachelor of pharmacy has been carried out by Kajal (1931141038) himself under my supervision and guidance of MR. Nikhil Sharma in Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 16/06/2023

Place: LIPN/Kathog.

  
1931141038  
16/06/23

**MR. Nikhil Sharma**

Assistant Professor

Laureate Institute of Pharmacy,

Kathog, Teh. Jawalamukhi,

Distt. Kangra, HP - 177101

CERTIFICATE BY PRINCIPAL



This is to certify that the work presented in the project entitled "Literature Review on Diabetes Mellitus" for the Degree of Bachelor of pharmacy has been carried out by Kajal(1931141038) himself under the supervision of MR. Nikhil Sharma Assistant Professor of in Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 16/06/2023

Place: LIPh / Kathog

~~DIRECTOR CUM PRINCIPAL~~  
~~LAUREATE INSTITUTE OF~~  
~~PHARMACY KATHOG~~  
~~TEH. JAWALAMUKHI~~  
~~DISTT. KANGRA (H.P.)~~  
**Prof. (Dr.) M.S. Ashawat**  
Director cum principal  
Laureate Institute of pharmacy,  
Kathog, Teh. Jawalamukhi,  
Distt. Kangra, HP- 177101.

**A Review on  
CURRENT ADVANCES IN 3D BIOPRINTING OF HUMAN ORGANS AND TISSUE  
ENGINEERING**

A Dissertation Submitted to  
Himachal Pradesh Technical University,  
Hamirpur



In the partial fulfilment for award of the Degree of  
**BACHELOR OF PHARMACY**

2023

Submitted by

Miss. kamakshi

ROLL NO. 1931141039

UNDER THE GUIDANCE OF

MR. AJAY KUMAR



LAUREATE INSTITUTE OF PHARMACY, KATHOG,  
TEHSIL - JAWALAMUKHI, DISTT. - KANGRA (HP)-177101

## CERTIFICATE BY GUIDE



This is to certify that the work presented in the project entitled "A Review on current advances in 3D bioprinting of human organ and tissue engineering" for the Degree of Bachelor of pharmacy has been carried out by **Kamakshi (1931141039)** herself under my supervision and guidance in the Department of Pharmaceutics, Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 16/06/2023

Place: Kathog

A handwritten signature in black ink, appearing to read 'Ajay Kumar', is written above the printed name.

Mr. Ajay Kumar

Assistant Professor of Pharmaceutics  
Laureate Institute of Pharmacy,  
Kathog, Teh. Jawalamukhi,  
Distt. Kangra, HP - 177101


CERTIFICATE BY PRINCIPAL



This is to certify that the work presented in the project entitled "A Review on current advances in 3D bioprinting of human organ and tissue engineering" for the Degree of Bachelor of pharmacy has been carried out kamakshi (1931141039) herself under the supervision of Mr. Ajay Kumar Assistant Professor of Pharmaceutics in Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 16/06/2023

Place: Kathog

  
DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
JAWALAMUKHI  
DISTT. KANGRA (H.P.)  
Laureate Institute of Pharmacy  
Kathog, Teh. Jawalamukhi,  
Distt. Kangra, HP- 177101

**PROJECT WORK**  
**ON**  
**A REVIEW ON POTENTIAL APPLICATION OF ANTIOXIDANTS**

**A PROJECT SUBMITTED TO**  
**HIMACHAL PRADESH TECHNICAL UNIVERSITY,**  
**HAMIRPUR**



**IN THE PARTIAL FULFILMENT FOR AWARD OF THE DEGREE OF**  
**BACHELOR OF PHARMACY**

**2023**

**SUBMITTED BY**

**MISS. KAMNI THAKUR**

**ROLL NO. 1931141040**

**UNDER THE GUIDENCE OF**

**MR. NIKHIL SHARMA**

**LAUREATE INSTITUTE OF PHARMACY, KATHOG,**  
**TEHSIL - JAWALAMUKHI, DISTT. - KANGRA (HP)-177101**

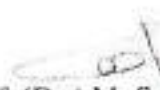
## CERTIFICATE BY PRINCIPAL



This is to certify that the work presented in the project entitled "A REVIEW ON POTENTIAL APPLICATION OF ANTIOXIDANTS" for the Degree of Bachelor of pharmacy has been carried out by **KAMNI THAKUR (1931141040)** under the supervision of **MR. NIKHIL SHARMA**, Department of Pharmaceutical Chemistry, Laureate Institute of Pharmacy. The work is original and has not been submitted for any degree/diploma in this or any other university.

Date: 14/6/23

Place: LIPH, Kathog

  
Prof. (Dr.) M. S. Ashwari  
Director cum Principal  
Laureate Institute of Pharmacy,  
Kathog, Teh. Jawalamukhi,  
Distt. Kangra (H.P.)

## CERTIFICATE BY GUIDE

This is to certify that the work presented in the project entitled "A REVIEW ON POTENTIAL APPLICATION OF ANTIOXIDANTS" for the Degree of Bachelor of pharmacy has been carried out by KAMNI THAKUR (1931141040) herself under my supervision and guidance in the Department of pharmaceutics, Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 14/6/23

Place: LIPI, Kathog

  
1931141040  
14/6/2023  
Mr. Nikhil Sharma

Assistant Professor

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Laureate Institute of Pharmacy,

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Distt. Kangra, HP - 177101

PHARMACOTHERAPY OF DIABETIC  
KETOACIDOSIS

A Dissertation Submitted to  
Himachal Pradesh Technical University, Hamirpur



In the partial fulfilment for award of the Degree of  
**BACHELOR OF PHARMACY**

2023

Submitted by

Miss Kanak Guleria

ROLL NO. 1931141041

UNDER THE GUIDENCE OF

Dr. Amardeep Ankalgi



LAUREATE INSTITUTE OF PHARMACY, KATHOG,  
TEHSIL - JAWALAMUKHI, DISTT - KANGRA (HP)-176031

## CERTIFICATE BY GUIDE

This is to certify that the work contained in this dissertation entitled "**Pharmacotherapy of diabetic ketoacidosis**" submitted to partial fulfillment of the requirement for the degree of bachelor of pharmacy to Himachal Pradesh Technical University, Hamirpur, embodies the research work carried out by **Kanak Guleria (Roll no. 1931141041)** herself under my supervision and guidance in the department of Pharmacology, **Laureate Institute of Pharmacy Kathog, Jawalamukhi (H.P.)**. The work has not been submitted in part or full for the award of any other degree in any other university in my knowledge.

Date: 17/06/23

Place: Kathog

A.D. Ankalgi

**Signature of the Guide**

**Dr. Amar deep Ankalgi**

## CERTIFICATE BY PRINCIPAL



This is to certify that the work presented in the project entitled "**Pharmacotherapy of diabetic ketoacidosis**" for the Degree of Bachelor of pharmacy has been carried out by **Kanak Guleria [1931141041]** herself under the supervision of **Dr.Amardeep Ankalgi** prof. and head of Pharmaceutical chemistry in Laureate Institute of Pharmacy.

**Date:** 17/06/23

**Place** Kathog

**Prof. (Dr.) M. S. Ashawaf**

**Director cum Principal**

**Laureate Institute of Pharmacy,**

**Kathog, Teh. Jawalamukhi,**

**Distt. Kangra, HP- 176031**

# Formulate And Evaluate Aloe Vera Cold Cream

A Project Submitted to  
Himachal Pradesh Technical University, Hamirpur



In the partial fulfillment of the requirement for the degree of

**BACHELOR OF PHARMACY**

BY

**Kanika**

Roll No. 1931141042

*Under the guidance of*  
**Mrs. Anchal Guleria**

Asst. Professor

Department. of Pharmaceutics



**Laureate Institute of Pharmacy**

Kathog, Teh. Jawala Mukhi Distt. Kangra, (H.P.) Pin code 176031

# CERTIFICATE BY PRINCIPAL




It is certify that the project entitled "**Formulate And Evaluate Aloe Vera Cold Cream**" is a bonafide and genuine work carried out by Miss. **KANIKA** (Roll No. **BP-1931141042**) under the guidance of Mrs. **Anchal Guleria** (Asst. Professor, Department of Pharmaceutics).

The work is original and has not been submitted for any degree/diploma of this or any university.

Date: 16 June 2023

Place: Kathog

  
Signature of Principal

Dr. M. S. Ashawat

Principal

Laureate Institute of Pharmacy

## CERTIFICATE BY GUIDE



It is certify that the project entitled "**Formulate And Evaluate Aloe Vera Cold Cream**" submitted by **Miss. Kanika (Roll No.-1931141042)** Laureate Institute of Pharmacy, Kathog under my supervision and guidance.

The work is original and has not been submitted for any degree/diploma of this or any university.

**Date:** 16 June 2023

**Place:** Kathog

**Signature of the Guide** 

**Mrs. Anchal Guleria**

**Asst.Professor Department of  
Pharmaceutics**

**Topic: ALOPECIA**  
**A Dissertation Submitted to**  
**Himachal Pradesh Technical University,**  
**Hamirpur**



**In the partial fulfilment for award of the Degree of**  
**BACHELOR OF PHARMACY**  
**2023**

**Submitted by**  
**Miss. KASHISH**  
**ROLL NO. 1931141043**  
**UNDER THE GUIDENCE OF**  
**ASST. PROF. ARTI DEVI**



**LAUREATE INSTITUTE OF PHARMACY, KATHOG,**  
**TEHSIL - JAWALAMUKHI, DISTT. - KANGRA (HP)-177101**

## CERTIFICATE BY GUIDE

This is to certify that the work presented in the project entitled "ALOPECIA" for the Degree of Bachelor of pharmacy has been carried out by **Kashish(1931141043)** herself under my supervision and guidance in the Department of Pharmaceutical analysis, Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 16/06/2023

Place: JIM Valley



ASST.PROF.ARTI DEVI

Assistant Professor  
of Pharmaceutics.

Laureate Institute of Pharmacy,  
Kathog, Teh. Jawalamukhi,  
Distt. Kangra, HP - 177101


CERTIFICATE BY PRINCIPAL.



This is to certify that the work presented in the project entitled "Alopecia" for the Degree of Bachelor of pharmacy has been carried out **Káshish(1931141043)** herself under the supervision of **ASST.PROF.ARTI DEVI**, Assistant Professor of Pharmaceutical analysis, in Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 14/06/2023

Place: LIPh Kathog

  
DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
TEH. JAWALAMUKHI  
DIST. KANGRA, HP

Director cum Principal

Laureate Institute of Pharmacy,  
Kathog, Teh. Jawalamukhi,  
Distt. Kangra, HP- 177101.

**A PROSPECTIVE OBSERVATIONAL STUDY ON THE PREVALENCE OF  
HYPERTENSION, DIABETES MELLITUS AND DYSLIPIDAEMIA IN HEALTH  
AWARENESS CAMP IN RURAL AREAS OF H.P**

**A PROJECT SUBMITTED TO  
HIMACHAL PRADESH TECHNICAL UNIVERSITY,  
HAMIRPUR**



**IN THE PARTIAL FULFILMENT FOR AWARD OF THE DEGREE  
OF**

**BACHELOR OF PHARMACY**

**2023**

**MS. KHUSHBOO**

**ROLL NO. 1931141044**

**UNDER THE GUIDENCE OF**

**Dr. SWATI RANA**

**(ASST. PROFESSOR OF PHARMACOLOGY)**



**LAUREATE INSTITUTE OF PHARMACY, KATHOG  
TEH. JAWALAMUKHI, DISTT. KANGRA (HP) – 177101**

This is to certify that the work presented in the project entitled "A PROSPECTIVE STUDY ON THE PREVALENCE OF HYPERTENSION, DIABETES MELLITUS AND DYSLIPIDAEMIA IN HEALTH AWARENESS CAMP IN RURAL AREAS OF H.P" for the Degree of Bachelor of Pharmacy has been carried out by KHUSHBOO herself under the supervision of Dr. SWATI RANA (Assistant Professor of Pharmacology), Laureate Institute of Pharmacy, Kathog. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 20/06/2023

Place: Kathog

DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
TEH. JAWALAMUKHI  
DIST. KANGRA

Prof. (Dr.) M.S. Ashawat  
Director cum Principal  
Laureate Institute of Pharmacy,  
Kathog, Teh. Jawalamukhi,  
Distt. Kangra, (HP)-177101

This is to certify that the work presented in the project entitled "A PROSPECTIVE OBSERVATIONAL STUDY ON THE PREVALENCE OF HYPERTENSION, DIABETES MELLITUS AND DYSLIPIDAEMIA IN HEALTH AWARENESS CAMP IN RURAL AREAS OF H.P." for the Degree of Bachelor of pharmacy has been carried out by KHUSHBOO (1931141044) herself under my supervision and guidance in the Department of Pharmacology, Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 20/06/2023

Place: Kathog



**Dr. Swati rana**

(Assistant professor of Pharmacology)  
Laureate Institute of Pharmacy, Kathog,  
Teh. Jawalamukhi, Distt. Kangra, (HP)  
- 177101

# LIPOSOMES AS NOVEL VESICULAR CARRIER

A Project Submitted to  
Himachal Pradesh Technical University, Hamirpur



In the partial fulfillment of the requirement for the degree of

**BACHELOR OF PHARMACY**

BY

**Kritika Rana**

**Roll No. 1931141045**

*Under the guidance of*

**Mr. Keshav Dhiman**

**Asst. Professor**

**Department. of Pharmaceutics**



**Laureate Institute of Pharmacy**

**Kathog, Teh. Jawalamukhi Distt. Kangra, (H.P.) Pin code 176031**

## CERTIFICATE BY GUIDE



It is certify that the project entitled "Liposome as a novel vasicular carrier" submitted by Miss. Kritika Rana (Roll No.-1931141045) Laureate Institute of Pharmacy, Kathog under my supervision and guidance.

The work is original and has not been submitted for any degree/diploma of this or any university.

Date: 16-06-23

Place: Kathog



Signature of the Guide

Mr. Keshav Dhiman

Asst. Professor

(Department of Pharmaceutics)

## CERTIFICATE BY PRINCIPAL




It is certify that the project entitled "Liposome as a novel vasicular carrier" is a bonafide and genuine work carried out by Miss. Kritika Rana (Roll No.-1931141045) under the guidance of Mr. Keshav Dhiman (Asst. Professor, Department of Pharmaceutics).

The work is original and has not been submitted for any degree/diploma of this or any university.

Date: 16-06-23

Place: Kathog

  
DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
KATHOG  
WALAMUKHI  
Dr. M. S. Ashawat  
Principal  
Laureate Institute of Pharmacy

# Simultaneous Estimation of Diclofenac and Paracetamol on UV spectroscopy

A Dissertation submitted to Himachal Pradesh Technical University, Hamirpur  
for the fulfillment the Degree of Bachelor of Pharmacy



2023

By

Manjeet

Roll No.1931141046



Supervisor

Mr. Tarun Sharma

Laureate Institute of Pharmacy Kathog, Tehsil- Dehra


Kangra (HP) Pin- 177101

CERTIFICATE BY GUIDE



This is certify that the work contained in this dissertation entitled "Simultaneous Estimation of Diclofenac and Paracetamol on UV Spectroscopy" submitted to partial fulfillment of the requirement for the Degree of Bachelor of Pharmacy to Himachal Pradesh Technical University, Hamirpur, embodies the research work carried out by **Mr. Manjeet (1931141046)** himself under my supervision and guidance in the Department of Pharmaceutics, Laureate Institute of Pharmacy, Kathog, Kangra(H.P.). The work has not been submitted in part or full for the award of any other degree in any other degree in any other University in my knowledge.

Date: 22/6/23 .

Supervisor 

**Mr. Tarun Sharma**

Assistant Professor,

Laureate Institute of Pharmacy,

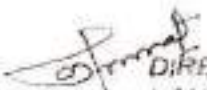
Kathog, Distt. Kangra (HP) 177101

CERTIFICATE BY PRINCIPAL



This is the certificate that the work contained in the thesis entitled "Simultaneous Estimation of Diclofenac and Paracetamol on UV Spectroscopy" submitted to partial fulfillment of the requirement for Degree of Bachelor of Pharmacy to Himachal Pradesh Technical University, Hamirpur, embodies the research work carried out by Mr. Manjeet (1931141046) himself under the supervision and guidance of Mr. Tarun Sharma in the Department of Pharmaceutics, Laureate Institute of Pharmacy, Kathog, Kangra (H.P.). The work has not been submitted in part or full for the award of any other degree in any other University in my knowledge.

Date: 22/6/23

  
DIRECTOR/PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
TEH. JAWALAMUKHI  
DISTT. KANGRA (H.P.)  
**Prof. (Dr.) M.S. Ashawat**  
**Principal,**  
**Laureate Institute of Pharmacy,**  
**Kathog, Distt. Kangra (HP) 177101**

# **A REVIEW LITERATUER ON GINGER**

A Project Submitted to  
Himachal Pradesh Technical University, Hamirpur



In the partial fulfilment of the requirement for the degree of  
**BACHELOR OF PHARMACY**

By

**MEHAK SHARMA**

Roll no.1931141047

Under the guidance of

**Mr. NIKHIL SHARMA**

Asst. Professor of Pharmaccetical Chemistry



**LAUREATE INSTITUTE OF PHARMACY KATHOG,**  
**TEHSIL- JAWALAMUKHI DISTT-KANGRA, (HP)**  
**PIN - 176031**



# Laureate Institute of Pharmacy

Recognized under section 2(f) of the UGC Act 1956

Approved by H.P. Govt. AICTE, PCI & Affiliated to HP Technical University

## CERTIFICATE BY GUIDE

This is to certify that the work contained in this dissertation entitled "**A Review Literature on Ginger**" submitted to partial fulfilment of the requirement for the degree of bachelor of pharmacy to Himachal Pradesh Technical University, Hamirpur, embodies the research work carried by **Mehak Sharma (Roll no. 1931141047)** herself under my supervision and guidance in the department of Chemistry, Laureate Institute of Pharmacy, Kathog, Jawalamukhi (H.P). The work has not been submitted in part or full for the award of any other degree in any other university in my knowledge

Date: 14/06/2023

Place: Kathog

Signature of the Guide

Mr. Nikhil Sharma

Asst. Professor

Laureate Institute of Pharmacy

Kathog Jawalamukhi



# Laureate Institute of Pharmacy

Recognized under section 2(f) of the UGC Act 1956

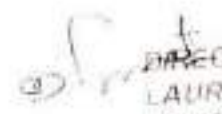
Approved by H.P. Govt. All India PCIE & Affiliated to HP Technical University

## CERTIFICATE BY PRINCIPAL

This is to certify that the work contained in the Project entitled "A Review Literature On Ginger" submitted to partial fulfilment of the requirement for the degree of bachelor of pharmacy to Himachal Pradesh Technical University, Hamirpur, embodies the research work carried out by **Mehak Sharma (Roll no. 1931141647)** himself under the supervision and guidance of **Mr. Nikhil Sharma** in the department of **Pharmaceutical Chemistry**, Laureate Institute of Pharmacy, Kathog Jawalamukhi (H.P). The work has not been submitted in part or full for the award of any other degree in any other university in my knowledge.

Date:

Place:

  
DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG - H  
DISTT. KANGRA (H.P.)  
**Director Cum-Principal**

**Dr M.S. Ashawat**

**Laureate Institute of Pharmacy**

**Kathog, Jawalamukhi**

**EVALUATION OF GLIMEPIRIDE FORMULATION AS GASTRO  
RETENTIVE DOSAGE FORM**

A Project Submitted to  
Himachal Pradesh Technical University, Hamirpur



In the partial fulfilment of the requirement for the degree of

**BACHELOR OF PHARMACY**

By

**MINAKSHI**

Roll no.1931141048

Under the guidance of

**Mrs. VANDANA BHATIA**

Asst. Professor of Pharmacology



**LAUREATE INSTITUTE OF PHARMACY KATHOG,**

**TEHSIL- JAWALAMUKHI DISTT-KANGRA, (HP) PIN -**

**176031**



# Laureate Institute of Pharmacy

Recognized under section 2(F) of the U.G. Act 1956

## CERTIFICATE BY GUIDE

This is to certify that the work contained in this dissertation entitled "EVALUATION OF GLIMEPIRIDE FORMULATION AS GASTRO RETENTIVE DOSAGE FORM" submitted to partial fulfillment of the requirement for the degree of bachelor of pharmacy to Himachal Pradesh Technical University, Hamirpur, embodies the research work carried out by **MINAKSHI (Roll no. 1931141048)** herself under my supervision and guidance in the department of Pharmaceutics, Laureate Institute Of Pharmacy, Kathog, Jawalamukhi (H.P). The work has not been submitted in part or full for the award of any other degree in any other university in my knowledge

Date: 19-06-2023

Place: Kathog

Signature of the Guide

Mrs. Vandana Bhatia

Asst. Professor

Laureate Institute of Pharmacy

Kathog Jawalamukhi



# Laureate Institute of Pharmacy

Recognized under section 2(F) of the U.G. Act 1956

## CERTIFICATE BY PRINCIPAL

This is to certify that the work contained in the Project entitled "EVALUATION OF GLIMEPIRIDE FORMULATION AS GASTRORETENTIVE DOSAGE FORM" submitted to partial fulfilment of the requirement for the degree of bachelor of pharmacy to Himachal Pradesh Technical University, Hamirpur, embodies the research work carried out by MINAKSHI (Roll no. 1931141048) herself under the supervision and guidance of Mrs. VANDANA BHATIA in the department of Pharmacology, Laureate Institute of Pharmacy, Kathog Jawalamukhi (H.P). The work has not been submitted in part or full for the award of any other degree in any other university in my knowledge.

**Principal**

Date: 19-06-2023

Place: Kathog

DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
JAWALAMUKHI  
H.P. KANGRA (H.P.)

Dr M.S. Ashawat

Laureate Institute of Pharmacy

Kathog, Jawalamukhi

**Meta-analysis of the Therapeutic Potential of Edible Mushrooms: A Comprehensive  
Evaluation of Anti-Diabetic and Anti-Inflammatory Effects**

**A Dissertation Submitted to  
Himachal Pradesh Technical University,  
Hamirpur**



**In the partial fulfilment for award of the Degree of**

**BACHELOR OF PHARMACY**

**2023**

**Submitted by**

**MR. MOHIT KUMAR**

**ROLL NO. 1931141049**

**UNDER THE GUIDENCE OF**

**MR. SHIV KUMAR KUSHAWAHA**



**LAUREATE INSTITUTE OF PHARMACY, KATHOG,  
TEHSIL - JAWALAMUKHI, DISTT. - KANGRA (HP)-177101**

## DECLARATION



This is to certify that the project work entitled ""Meta-analysis of the Therapeutic Potential of Edible Mushrooms: A Comprehensive Evaluation of Anti-Diabetic and Anti-Inflammatory Effects"" has not been submitted in parts or full to any other university by me. This is the original work undertaken by me under the supervision of Mr. Shiv Kumar Kushawaha in the Department of pharmacology, Laureate Institute of Pharmacy, Kathog. Such materials that had been obtained for the research work have been duly acknowledged in the project.

Date: 14/06/2023

Place: Kathog

A handwritten signature in black ink, appearing to read 'Mohit S.' with a flourish at the end.

MOHIT KUMAR  
(1931141049)

Laureate institute of Pharmacy,  
Kathog, Teh. Jawalamukhi,  
Distt- Kangra, HP-177101

CERTIFICATE BY PRINCIPAL



This is to certify that the work presented in the project entitled "Meta-analysis of the Therapeutic Potential of Edible Mushrooms: A Comprehensive Evaluation of Anti-Diabetic and Anti-Inflammatory Effects" for the Degree of Bachelor of pharmacy has been carried out by MOHIT KUMAR (1931141049) himself under the supervision of MR. SHIV KUMAR KUSHAWAHA Associate Professor and H.O.D OF Pharmacolgy in Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 14/06/2023

Place: Kathog

DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
TEH. JAWALAMUKHI  
DIST. KANGRA (H.P.)  
Prof. (Dr.) M. S. Ashwari  
Director cum Principal  
Laureate Institute of Pharmacy,  
Kathog, Teh. Jawalamukhi,  
Distt. Kangra, HP- 177101.

## CERTIFICATE BY GUIDE



This is to certify that the work presented in the project entitled "**Meta-analysis of the Therapeutic Potential of Edible Mushrooms: A Comprehensive Evaluation of Anti-Diabetic and Anti-Inflammatory Effects**" for the Degree of Bachelor of pharmacy has been carried out by **Mohit kumar (1931141049)** himself under my supervision and guidance in the Department of Pharmacolgy, Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 14/06/2023

Place: Kathog

*M. Shiv Kumar Kushawaha*  
M. SHIV KUMAR KUSHAWAHA

Associate Professor and Head  
Department of Pharmacology  
Laureate Institute of Pharmacy.

Kathog, Teh. Jawalamukhi, Distt.  
Kangra, HP - 177101

**A Review on Alzheimer s Disease**  
**A Dissertation Submitted to**  
**Himachal Pradesh Technical University,**  
**Hamirpur**



**In the partial fulfilment for award of the Degree of**

**BACHELOR OF PHARMACY**

**2023**

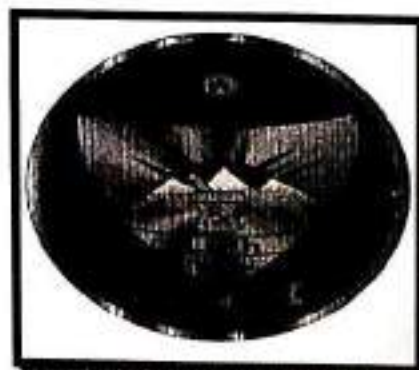
**Submitted by**

**Miss. NANCY BHARDWAJ**

**ROLL NO. 1931141050**

**UNDER THE GUIDANCE OF**

**MISS. ASTHA SHARMA**



**LAUREATE INSTITUTE OF PHARMACY, KATHOG,**  
**TEHSIL - JAWALAMUKHI, DISTT. - KANGRA (HP)-177101**

**CERTIFICATE BY DEAN OF ACADEMICS AND STUDENT WELFARE**



This is to certify that the work presented in the project entitled "An Overview on Alzheimer s Disease" for the Degree of Bachelor of pharmacy has been carried out by **Nancy Bhardwaj (1931141030)** himself under the supervision of **Miss Astha Sharma Assistant Professor of Pharmaceutical chemistry** in Laureate Institute of Pharmacy, the work has not been submitted in parts or full to any other university in my knowledge.

Date: 16/6/2023

Place Kathog

A handwritten signature in black ink, appearing to read 'C.P.S Verma', is written over the printed name.

PROF. C.P.S Verma

Dean of Academics and  
Student welfare

HOD of Pharmacognosy

Laureate Institute of Pharmacy,

Kathog, Teh: Jawalamukhi,

Distt. Kangra (H.P) 177101


CERTIFICATE BY PRINCIPAL



This is to certify that the work presented in the project entitled "A Review on Alzheimer's Disease" for the Degree of Bachelor of pharmacy has been carried out Nancy Bhardwaj(1931141050) herself under the supervision of Miss. Astha Sharma Assistant Professor of Pharmaceutical Chemistry in Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 16/6/2023

Place: Kathog

  
DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY  
KATHOG  
TEH. JAWALAMUKHI  
DIST. KANGRA (H.P.)  
Director cum Principal  
Laureate Institute of Pharmacy  
Kathog, Teh. Jawalamukhi,  
Distt. Kangra, HP- 177101

**PROJECT WORK**  
**ON**  
**STUDY ON MEDICINAL PLANTS IN ALL DISTRICT OF HIMACHAL PRADESH**

**A PROJECT SUBMITTED TO**  
**HIMACHAL PRADESH TECHNICAL UNIVERSITY,**

**HAMIRPUR**



**IN THE PARTIAL FULFILMENT FOR AWARD OF THE DEGREE OF**  
**BACHELOR OF PHARMACY**

**2023**

**SUBMITTED BY**

**MISS. NEERAJ KUMARI**

**ROLL NO. 1931141051**

**UNDER THE GUIDENCE OF**

**MR. DEV RAJ SHARMA**


**LAUREATE INSTITUTE OF PHARMACY, KATHOG,**  
**TEHSIL - JAWALAMUKHI, DISTT. - KANGRA (HP)-177101**

## CERTIFICATE BY GUIDE

This is to certify that the work presented in the project entitled "STUDY ON MEDICINAL PLANT IN ALL DISTRICT OF HIMACHAL PRADESH" for the Degree of Bachelor of pharmacy has been carried out by NEERAJ KUMARI (1931141051) herself under my supervision and guidance in the Department of pharmaceutics, Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 14/6/23

Place: LI?H, Kathog

  
Mr. Dev Raj Sharma

Asst. Professor of pharmaceutics  
Laureate Institute of Pharmacy,

Kathog, The. Jawalamukhi,

Distt. Kangra, HP - 177101

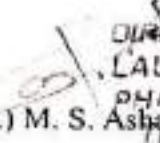
**CERTIFICATE BY DIRECTOR CUM PRINCIPAL**



This is to certify that the work presented in the project entitled "STUDY ON MEDICINAL PLANT IN ALL DISTRICT OF HIMACHAL PRADESH" for the Degree of Bachelor of pharmacy has been carried out by NEERAJ KUMARI (1931141051) under the supervision of MR. DEV RAJ SHARMA, Department of Pharmaceutic, Laureate Institute of Pharmacy. The work is original and has not been submitted for any degree/diploma in this or any other university.

Date: 14/6/23

Place: LIPh, Kathog

  
DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
TEH. JAWALAMUKHI  
DISTT. KANGRA (H.P.)  
Director cum Principal  
Laureate Institute of Pharmacy,  
Kathog, Teh. Jawalamukhi,  
Distt. Kangra, HP- 176031.

***Rhododendron arboreum* and its potential health benefits**

A PROJECT REPORT

Submitted to

Himachal Pradesh Technical University, Hamirpur



In the partial fulfilment for award of the Degree of

**BACHELOR OF PHARMACY**

2023

**Submitted by**

**Mr. Parvez Khan**

ROLL NO.1931141057

UNDER THE GUIDENCE OF

**Dr.Pravin Kumar (Ph.D., M.Pharm)**

Associate Professor and Head

Department of Pharmaceutics

Laureate Institute of Pharmacy



LAUREATE INSTITUTE OF PHARMACY, KATHOG.  
TEHSIL - JAWALAMUKHI, DISTT. - KANGRA (HP)-176031

## DECLARATION

This is to certify that the project work entitled "Rhododendron arboreum and its potential health benefits" has not been submitted in parts or full to any other university by me. This is the original work undertaken by me under the supervision of **DR. PRAVINKUMAR** in the Department of Pharmaceutics, Laureate Institute of Pharmacy, Kathog.

Date: 16/6/2023.

Place: Laureate Institute of Pharmacy,  
Kathog, Jawahali



PARVEZ KHAN (1931141057)

Laureate institute of Pharmacy.

Kathog, Teh. Jawalamukhi,

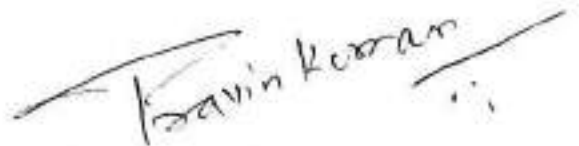
Distt- Kangra, HP-176031

## CERTIFICATE BY GUIDE

This is to certify that the work presented in the project entitled "Rhododendron arboreum and its potential health benefits" for the Degree of Bachelor of pharmacy has been carried out by **PARVEZ KHAN (1931141057)** himself under my supervision and guidance in the Department of Pharmaceutics, Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 16/06/2023.

Place: Laureate Institute of Pharmacy,  
Kathog, Jawalaji



Dr. Pravin Kumar

Associate Professor and Head  
Department of Pharmaceutics

Laureate Institute of Pharmacy,

Kathog, Teh. Jawalamukhi,

Distt. Kangra, HP - 176031

## CERTIFICATE BY PRINCIPAL



This is to certify that the work presented in the project entitled "Rhododendron arboreum and its potential health benefits" for the Degree of Bachelor of pharmacy has been carried out by **PARVEZ KHAN** himself under the supervision of **DR. PRAVINKUMAR**, Associate Professor of Pharmaceutics in Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 16/06/2023.

Place: Laureate Institute of Pharmacy,  
Kathog, Jawalaji

DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
TEH. JAWALAMUKHI  
KANGRA (H.P.)

Prof. (Dr.) M. S. Ashwat  
Director cum Principal

Laureate Institute of Pharmacy,

Kathog, Teh. Jawalamukhi,

Distt. Kangra, HP- 176031.

**REVIEW ON HAIRFALL**  
A Dissertation Submitted to  
Himachal Pradesh Technical University,  
Hamirpur



In the partial fulfilment for award of the Degree of  
**BACHELOR OF PHARMACY**

2023

Submitted by

Miss. NEHA BHARTI

ROLL NO. 1931141052

UNDER THE GUIDENCE OF

ASST. PROF. ARTI DEVI



LAUREATE INSTITUTE OF PHARMACY, KATHOG,  
TEHSIL - JAWALAMUKHI, DISTT. - KANGRA (HP)-177101


CERTIFICATE BY PRINCIPAL



This is to certify that the work presented in the project entitled "REVIEW ON HAIRFALL" for the Degree of Bachelor of pharmacy has been carried out Neha Bharti herself under the supervision of ASST.PROF. ARTI DEVI, Assistant Professor of Pharmaceutical Analysis in Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 16/06/2023

Place: LIPh Kathog


  
DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
TEH. JAWALAMUKHI  
DIST. KANGRA (H.P.)  
Prof. (Dr.) M. S. Ashwari  
Director cum Principal  
Laureate Institute of Pharmacy,  
Kathog, Teh. Jawalamukhi,  
Distt. Kangra, HP- 177101.

## CERTIFICATE BY GUIDE

This is to certify that the work presented in the project entitled "REVIEW ON HAIRFALL" for the Degree of Bachelor of pharmacy has been carried out by Neha Bharti (1931141052) herself under my supervision and guidance in the Department of Pharmaceutical analysis, Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 16/06/2023

Place: LIPH Kathog

  
ASST.PROF. ARTI DEVI

Assistant Professor of  
Pharmaceutical Analysis.

Laureate Institute of Pharmacy,  
Kathog, Teh. Jawalamukhi,  
Distt. Kangra, HP - 177101

**REVIEW ON  
CROHN'S DISEASE**

A DISSERTATION SUBMITTED TO  
HIMACHAL PRADESH TECHNICAL UNIVERSITY,  
HAMIRPUR



IN THE PARTIAL FULFILMENT FOR AWARD OF THE DEGREE OF  
**BACHELOR OF PHARMACY**

2023

**SUBMITTED BY**

**MR. NIKHIL**

ROLL NO.1931141053

UNDER THE GUIDENCE OF

**MISS. PRATIBHA CHAUDHARY**



LAUREATE INSTITUTE OF PHARMACY, KATHOG,  
TEHSIL - JAWALAMUKHI, DISTT. - KANGRA (HP)-177101

## DECLARATION

This is to certify that the project work entitled "Review on CROHN's DISEASE" has not been submitted in parts or full to any other university by me. This is the original work undertaken by me under the supervision of MISS. PRATIBHA CHAUDHARY, in the Department of Pharmaceutics, Laureate Institute of Pharmacy, Kathog. Such material that has been obtained for the research work have been duly acknowledged in the project.

Date: 16/6/23

Place: Kathog

  
Nikhil

(1931141053)

Laureate institute of Pharmacy,  
Kathog, Teh. Jawalamukhi,  
Distt- Kangra, HP-177101

## CERTIFICATE BY PRINCIPAL



This is to certify that the work presented in the project entitled "REVIEW ON CROHN'S DISEASE" for the Degree of Bachelor of pharmacy has been carried out by NIKHIL himself under the supervision of MISS. PRATIBHA CHAUDHARY, Assistant Professor of Pharmaceutics in Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 16/06/2023

Place: Kathog

DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
Pharm. (Dr.) NIKHIL KATHOG  
Director cum Principal  
TEH. JAWALAMUKHI  
DIST. KANGRA - C  
Laureate Institute of  
Pharmacy,  
Kathog, Teh. Jawalamukhi,  
Distt. Kangra, HP- 177101.

## CERTIFICATE BY GUIDE

This is to certify that the work presented in the project entitled "REVIEW ON CROHN'S DISEASE" for the Degree of Bachelor of pharmacy has been carried out by NIKHIL (1931141053) herself under my supervision and guidance in the Department of Pharmaceutical chemistry, Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 16/06/2023

Place: Kathog



Miss. Pratibha Chaudhary  
Assistant Professor  
Laureate Institute of Pharmacy,  
Kathog, Teh. Jawalamukhi,  
Distt. Kangra, HP - 177101

# **ETHOSOMES AS NOVEL VESICULAR CARRIER**

A Project Submitted to  
Himachal Pradesh Technical University, Hamirpur



In the partial fulfillment of the requirement for the degree of

**BACHELOR OF PHARMACY**

BY

**Nikhil Rana**

**Roll No. 1931141054**

*Under the guidance of*

**Mr. Keshav Dhiman**

**Asst. Professor**

**Dept. of Pharmaceutics**



**Laureate Institute of Pharmacy**

Kathog, Teh. Jawala Mukhi Distt. Kangra, (H.P.) Pin code 177101

## CERTIFICATE BY CANDIDATE



I am hereby declare the work described in this project entitled “**Ethosome as a novel vasicular carrier**” which is being submitted by me in partial fulfillment for the award of Bachelor of Pharmacy in Himachal Pradesh Technical University, Hamirpur, is the result of review carried out by me under the guidance Mr. **Keshav Dhiman (Asst. Professor, Department of Pharmaceutics)**.

The work is original and has not been submitted for any degree/diploma of this or any university.

**Date:** 17/06/23

**Place:** Kathog

*Nikhil Rana*  
**Signature of the Candidate**

**Mr. Nikhil Rana**

**Roll No. - 1931141054**

## CERTIFICATE BY GUIDE




It is certify that the project entitled "Ethosome as a novel vasicular carrier" submitted by **Mr. Nikhil Rana** (Roll No. -1931141054) Laureate Institute of Pharmacy, Kathog under my supervision and guidance.

The work is original and has not been submitted for any degree/diploma of this or any university.

**Date:** 17/06/23

**Place:** Kathog

  
Signature of the Guide

**Mr. Keshav Dhiman**

**Asst. Professor** ( Department of  
**Pharmaceutics**)

## CERTIFICATE BY PRINCIPAL




It is certify that the project entitled "A review on Ethosomes" is a bonafide and genuine work carried out by Mr. Nikhil Rana (Roll No. BP-1931141054) under the guidance of Mr. Keshav Dhiman (Asst. Professor, Department of Pharmaceutics).

The work is original and has not been submitted for any degree/diploma of this or any university.

Date: 17/06/23

Place: Kathog

  
Signature of Principal  
Dr. M. S. Ashawa  
Principal  
Laureate Institute Of Pharmacy  
DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE  
PHARMACY KATHOG  
TEH. JAWALAMUKHI  
DISTT. KANGRA (H.P.)

# A REVIEW ON DIARRHEA IN PEDIATRICS

A Project Submitted to  
Himachal Pradesh Technical University, Hamirpur



In the partial fulfillment of the requirement for the degree of

**BACHELOR OF PHARMACY**

BY

**Nishad Malik**

**Roll No. 1931141055**

*Under the guidance of*

**Dr. Swati Rana**

**Asst. Professor**

**Dept. of Pharmacology**



**Laureate Institute of Pharmacy**

**Kathog, Teh. Jawalamukhi Distt. Kangra, (H.P.) Pin code 177101**

# CERTIFICATE BY PRINCIPAL

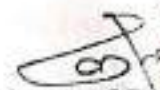


This is to certify that the project entitled “**A REVIEW ON DIRRHEA IN PEDIATRICS**” is a bonafide and genuine work carried out by Mr. Nishad Malik (Roll No. -1931141055) under the guidance of Dr. Swati Rana (Asst. Professor, Department of Pharmacology).

The work is original and has not been submitted for any degree/diploma of this or any university.

Date: 16/06/23

Place: Kathog.

  
DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
WALAMUKHI  
DISTT. KANGRA (H.P.)

Dr. M. S. Ashawat

**Director cum Principal**

**Laureate Institute of Pharmacy**

## CERTIFICATE BY GUIDE



It is certify that the project entitled "A REVIEW ON DIARRHEA IN PEDIATRICS" submitted by Mr. Nishad Malik (Roll No. -1931141055) Laureate Institute of Pharmacy, kathog under my supervision and guidance.

The work is original and has not been submitted for any degree/diploma of this or any university.

**Date:** 16/06/23

**Place:** Kathog.

A handwritten signature in black ink, appearing to be 'Dr. Swati Rana', written over a horizontal line.

**Signature of the Guide**

Dr. Swati Rana

**Asst. Professor**

**Department of Pharmacology**

## CERTIFICATE BY CANDIDATE



I am hereby declaring the work described in this project entitled "A REVIEW ON DIARRHEA IN PEDIATRICS" which is being submitted by me in partial fulfillment for the award of Bachelor of Pharmacy in Himachal Pradesh Technical University, Hamirpur, is the result of review carried out by me under the guidance Dr. Swati Rana (Asst. Professor, Department of Pharmacology).

The work is original and has not been submitted for any degree/diploma of this or any university.

Date: 16/06/23

Place: Kathog.

*Nishad Malik*

Signature of the Candidate

Mr. Nishad Malik

Roll No. -1931141055

# A REVIEW ON DIABETES MELLITUS

A Project Submitted to  
Himachal Pradesh Technical University, Hamirpur



In the partial fulfillment of the requirement for the degree of

**BACHELOR OF PHARMACY**

BY

**Pardyum kaushal**  
Roll No. 1931141056

*Under the guidance of*  
**Mr. Nikhil sharma**

**Asst. Professor**  
**Dept. of Pharmaceutical Chemistry**



**Laureate Institute of Pharmacy**

Kathog, Teh. Jawala Mukhi Distt. Kangra, (H.P.) Pin code 177101

## CERTIFICATE BY PRINCIPAL




It is certify that the project entitled "A REVIEW ON DIABETES MELLITUS" is a bonafide and genuine work carried out by **Mr. Pardyum Kaushal** (Roll No. BP-1931141056) under the guidance of **Mr. Nikhil Sharma** (Asst. Professor, Department of Pharmaceutical Chemistry).

The work is original and has not been submitted for any degree/diploma of this or any university.

Date: 16/06/23

Place: Kathog

  
DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
TEN, JAWALAMUKHI  
(DIST. KANGRA (H.P.))  
**Signature of Principal**  
**Dr. M. S. Ashawat**  
**Principal**  
**Laureate Institute Of Pharmacy**

## CERTIFICATE BY GUIDE



It is certify.that the project entitled "A REVIEW ON DIABETES MELLITUS" submitted by **Mr. Pardyum Kaushal** (Roll No. BP-1931141056) Laureate Institute of Pharmacy, Kathog under my supervision and guidance.

The work is original and has not been submitted for any degree/diploma of this or any university.

**Date:** 16/06/23

**Place:** Kathog

Signature of the Guide

Mr. Nikhil Sharma

Asst. Professor

Department of Pharmaceutical Chemistry

*Nikhil Sharma*  
16/06/2023

**A Review Article on Diabetes Mellitus**  
**A Dissertation Submitted to**  
**Himachal Pradesh Technical University,**  
**Hamirpur**



**In the partial fulfilment for award of the Degree of**  
**BACHELOR OF PHARMACY**

**2023**

**Submitted by**

**MR. Prajwal mehta**

**ROLL NO. 1931141058**

**UNDER THE GUIDENCE OF**

**Mr. Akshay kumar**



**LAUREATE INSTITUTE OF PHARMACY, KATHOG,**  
**TEHSIL - JAWALAMUKHI, DISTT. - KANGRA (HP)-177101**

## CERTIFICATE BY PRINCIPAL



This is to certify that the work presented in the project entitled "A Review Article on Diabetes Mellitus" for the Degree of Bachelor of pharmacy has been carried out by Mr. Prajwal mehta(1931141058)himself under the supervision of Mr.akshay kumar Assistant Professor of Pharmaceutics in Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 14/06/23

Place: Laureate Institute of Pharmacy

  
DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
TEH. JAWALAMUKHI  
DISTT. KANGRA (H.P.)  
Laureate Institute of  
Pharmacy,  
Kathog, Teh. Jawalamukhi,  
Distt. Kangra, HP- 177101.

## CERTIFICATE BY GUIDE

This is to certify that the work presented in the project entitled "A Review Article on Diabetes Mellitus" for the Degree of Bachelor of pharmacy has been carried out by Prajjwal mehta (1931141058) himself under my supervision and guidance in the Department of Pharmaceutics, Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 14/06/23

Place: Laureate Institute of  
Pharmacy

Mr. Akshay kumar  
Assistant Professor of  
Pharmaceutics  
Laureate Institute of  
Pharmacy,  
Kathog,  
Teh. Jawalamukhi  
Distt. Kangra, HP - 177101



# DIABETES MELLITUS AND ITS MANAGEMENT

A Project Submitted to  
Himachal Pradesh Technical University, Hamirpur



In the partial fulfilment for award of the Degree of  
BACHELOR OF PHARMACY

2023

Pranshul Awasthi

1931141059

Under the Guidance

Mrs. Ankita



LAUREATE INSTITUTE OF PHARMACY, KATHOG,  
TEHSIL - JAWALAMUKHI, DISTT.-KANGRA (HP)-176031

## CERTIFICATE BY SUPERVISOR



It is to certify that the work contained in this project entitled "Diabetes Mellitus and its Management" submitted to partial fulfillment of the requirement for the degree of Bachelor of Pharmacy to Himachal Pradesh Technical University, Hamirpur, by Mr Pranshul Awasthi (1931141059) has carried out his research work under my supervision.

The work is original and has not been submitted for any degree/diploma in this or any other university.

Date: 20, June 2023

Place: Kathog

*Ankita*  
Mrs. Ankita

Asst. Professor. of Pharmaceutical Analysis and Quality Assurance  
Laureate Institute of Pharmacy Kathog  
(Jwala) 177101

## CERTIFICATE BY PRINCIPAL



It is to certify that the work contained in this project entitled "Diabetes Mellitus and its Management" submitted to partial fulfillment of the requirement for the Degree of Bachelor of Pharmacy to Himachal Pradesh Technical University, Hamirpur, embodies the work carried out by Pranshul Awasthi(1931141059) himself under the supervision of Mrs. Ankita, Assistant Professor, of Pharmaceutical Analysis and Quality Assurance . The work is original and has not been submitted for any degree/diploma in this or any other university.

Date: 26, June, 2023

Place: Kathog

DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
TEH. JAWALAMUKHI  
DISTT. KANGRA (H.P.)

Director cum Principal

Laureate Institute of Pharmacy,

Kathog, Teh. Jawalamukhi,

Distt. Kangra, HP

ALZHEIMER'S DISEASE: A REVIEW ON ETIOLOGY, RISK FACTORS AND  
MECHANISM

A Dissertation Submitted to  
Himachal Pradesh Technical University, Hamirpur



In the partial fulfilment for award of the Degree of  
BACHELOR OF PHARMACY

2023

Submitted by

Mr. Pratham Sharma

ROLL NO. 1931141060

UNDER THE GUIDENCE OF

Dr. C.P.S Verma



LAUREATE INSTITUTE OF PHARMACY, KATHOG,  
TEHSIL - JAWALAMUKHI, DISTT - KANGRA (HP)-176031

## CERTIFICATE BY GUIDE

This is to certify that the work contained in this dissertation entitled "Alzeiheimer's disease: Review on pathological mechanism" submitted to partial fulfillment of the requirement for the degree of bachelor of pharmacy to Himachal Pradesh Technical University, Hamirpur, embodies the research work carried out by **Pratham Sharma** (Roll no. 1931141060) himself under my supervision and guidance in the department of Pharmacology, Laureate Institute of Pharmacy, Kathog, Jawalamukhi (H.P). The work has not been submitted in part or full for the award of any other degree in any other university in my knowledge.

Date: 17/06/2023

Place: Kathog



Signature of Guide

**Dr. C.P.S Verma**

**Prof. and head of Pharmacognosy**

**Laureate Institute of Pharmacy**


## CERTIFICATE BY PRINCIPAL



This is to certify that the work presented in the project entitled "Alzeiheimer's disease: Review on pathological mechanism" for the Degree of Bachelor of pharmacy has been carried out by Pratham Sharma [1931141060] himself under the supervision of Dr. C.P.S. Verma Prof. and head of Pharmacognosy in Laureate Institute of Pharmacy.

Date: 17/06/2023

Place: Kathog

  
Prof. (Dr.) M. S. Ashawat  
DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
TEH. JAWALAMUKHI,  
DIST. KANGRA (H.P.)  
Director cum Principal  
Laureate Institute of Pharmacy,  
Kathog, Teh. Jawalamukhi,  
Distt. Kangra, HP- 176031

# To Formulate And Evaluate Aloe VeraCold Cream

A Project Submitted to  
Himachal Pradesh Technical University, Hamirpur



In the partial fulfillment of the requirement for the degree of

**BACHELOR OF PHARMACY**

BY

**Priya Rana**

Roll No. 1931141061

*Under the guidance of*

**Mrs. Anchal Guleria**

Asst. Professor

Department. of Pharmaceutics



**Laureate Institute of Pharmacy**

Kathog, Teh. Jawala Mukhi Distt. Kangra, (H.P.) Pin code 176031

# CERTIFICATE BY CANDIDATE



I am hereby declare the work described in this project entitled "**To Formulate And Evaluate Aloe Vera Cold Cream**" which is being submitted by me in partial fulfillment for the award of Bachelor of Pharmacy in Himachal Pradesh Technical University, Hamirpur, is the result of review carried out by me under the guidance **Mrs. Anchal guleria** (Asst.Professor, Department of **Pharmaceutics**).

The work is original and has not been submitted for any degree/diploma of this or any university.

**Date:** 19/06/23

**Place:** Kathog

*Priya Rana*  
**Signature of the Candidate**

**Miss. Priya Rana**

**Roll No.-1931141061**

## CERTIFICATE BY PRINCIPAL



is certify that the project entitled "To Formulate And Evaluate Aloe Vera  
ld Cream" is a bonafide and genuine work carried out by Miss. Priya (Roll  
- 1931141061) under the guidance of Mrs. Anchal Guleria (Asst.  
fessor, Department of Pharmaceutics).

work is original and has not been submitted for any degree/diploma of this  
y university.

: 19/06/23

: Kathog

*[Signature]*  
DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
TEH. JAWALAMUKHI  
DIST. KANGRA (H.P.)

Principal

Laureate Institute of Pharmacy

# To Formulate And Evaluate Aloe VeraCold Cream

A Project Submitted to  
Himachal Pradesh Technical University, Hamirpur



In the partial fulfillment of the requirement for the degree of

**BACHELOR OF PHARMACY**

BY

Priya Rana

Roll No. 1931141061

*Under the guidance of*

Mrs. Anchal Guleria

Asst. Professor

Department. of Pharmaceutics



**Laureate Institute of Pharmacy**

Kathog, Teh. Jawala Mukhi Distt. Kangra, (H.P.) Pin code 176031

**REVIEW ON ALOPECIA**  
**A Dissertation Submitted to**  
**Himachal Pradesh Technical University,**  
**Hamirpur**



**In the partial fulfilment for award of the Degree of**

**BACHELOR OF PHARMACY**

**2023**

**Submitted by**

**MR. RAHIL RANDHAWA**

**ROLL NO. 1931141062**

**UNDER THE GUIDENCE OF**

**ASST.PROF.ARTI DEVI**



**LAUREATE INSTITUTE OF PHARMACY, KATHOG,**  
**TEHSIL - JAWALAMUKHI, DISTT. - KANGRA (HP)-177101**

## DECLARATION

This is to certify that the project work entitled "Alopecia" has not been submitted in parts or full to any other university by me. This is the original work undertaken by me under the supervision of ASST.PROF.ARTI DEVI in the Department of Pharmaceutical analysis, Laureate Institute of Pharmacy, Kathog. Such materials that had been obtained for the research work have been duly acknowledged in the project.

Date: 21-06-2023

Place: Laureate Institute of Pharmacy

Rahil Randhawa

Laureate institute of Pharmacy,  
Kathog Teh. Jawalamukhi,  
Distt- Kangra, HP-176031


CERTIFICATE BY PRINCIPAL



This is to certify that the work presented in the project entitled "Alopecia" for the Degree of Bachelor of pharmacy has been carried out by **Rahil Randhawa (1931141062)** himself under the supervision of **ASST.PROF.ARTI DEVI**, Assistant Professor of Pharmaceutical analysis, in Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 21-06-2023

Place: Laureate Institute of Pharmacy

  
DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
TEH. JAWALAMUKHI  
DIST. KANGRA (H.P.)  
Laureate Institute of Pharmacy,  
Kathog, Teh. Jawalamukhi,  
Distt. Kangra, HP- 177101.

### CERTIFICATE BY GUIDE

This is to certify that the work presented in the project entitled "Alopecia" for the Degree of Bachelor of pharmacy has been carried out by **Rahil Randhawa (1931141062)** himself under my supervision and guidance in the Department of Pharmaceutical analysis, Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 21-06-2023

Place: Laureate Institute of Pharmacy  
AA

ASST.PROF.ARTI DEVI

Associate professor of  
pharmaceutical analysis

Laureate Institute of Pharmacy,

Kathog, Teh. Jawalamukhi,

Distt. Kangra, HP - 177101

**A REVIEW  
ON  
TAP WATER:  
ASSESSING QUALITY AND SAFETY**

A Project Submitted to Himachal Pradesh Technical University, Hamirpur



In the partial fulfillment of the requirement for the degree of

**BACHELOR OF PHARMACY**

BY

Mr. Rahul Bhardwaj

ROLL NO. 1931141063

Under the guidance of

Mrs Dimple Rana

Asst. Professor of Pharmaceutics



**LAUREATE INSTITUTION OF PHARMACY KATHOG**

TESHIL-JAWALAMUKHI, DISTT-KANGRA (H.P.) PINCODE-177101



# Laureate Institute of Pharmacy

Recognized under section 2 (f) of the UGC Act 1956

Approved by H.P. Govt. AICTE, PCI & Affiliated to HP Technical University

## CERTIFICATE BY PRINCIPAL

This is to certify that the work contained in the Project entitled "A REVIEW ON TAP WATER: ASSESSING QUALITY AND SAFETY " submitted to partial fulfillment of the requirement for the degree of bachelor of pharmacy to Himachal Pradesh Technical University, Hamirpur, embodies the research work carried out by Mr. Rahul Bhardwaj (ROLL NO. 1931141063) himself under the supervision and guidance of in the department of Pharmaceutics, Mrs Dimple Rana, Laureate Institute of Pharmacy, Kathog Jawalamukhi (H.P.). The work has not been submitted in part or full for the award of any other degree in any other university in my knowledge.

Date: 14/06/2023

Place: Laureate Institute of Pharmacy  
Kathog Jawalamukhi

DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
TEH. JAWALAMUKHI  
DIST. KANGRA (H.P.)  
Principal

Laureate Institute of Pharmacy  
Kathog, Jawalamukhi



# Laureate Institute of Pharmacy

Reconized under section 2 (f) of the UGC Act 1956

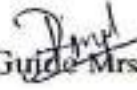
Approved by H.P. Govt, AICTE, PCI & Affiliated to HP Technical University

## CERTIFICATE BY GUIDE

This is to certify that the work contained in this dissertation entitled "A REVIEW ON TAP WATER:ASSESSING QUALITY AND SAFETY " submitted to partial fulfillment of the requirement for the degree of bachelor of pharmacy to Himachal Pradesh Technical University, Hamirpur, embodies the research work carried out by Mr.Rahul Bhardwaj (ROLL NO. 1931141063) himself under my supervision and guidance in the department of Pharmaceutics, Laureate Institute of Pharmacy, Kathog, Jawalamukhi (H.P). The work has not been submitted in part or full for the award of any other degree in any other university in my knowledge.

Date: 14/06/2023

Place: Laureate Institute of  
Pharmacy Kathog  
Jawalamukhi

Signature of the Guide  Mrs Dimple Rana  
Assistant Professor,  
Department of Pharmaceutics,  
Laureate Institute of Pharmacy  
Kathog, Jawalamukhi

# A Review On Ocular Drug Delivery System (Ocuser)

A Project Submitted to  
Himachal Pradesh Technical University, Hamirpur



In the partial fulfillment of the requirement for the degree of

**BACHELOR OF PHARMACY**

BY

**Rahul Thakur**

Roll No. 1931141064

*Under the guidance of*  
**Mr. Nishant Goutam**  
Associate Professor  
Dept. of Pharmacology



**Laureate Institute of Pharmacy**

Kathog, Teh. JawalaMukhi Distt. Kangra, (H.P.) Pin code 177101

## CERTIFICATE BY CANDIDATE



I am hereby declaring the work described in this project entitled "A REVIEW ON OCULAR DRUG DELIVERY SYSTEM (OCUSERT)" which is being submitted by me in partial fulfillment for the award of Bachelor of Pharmacy in Himachal Pradesh Technical University, Hamirpur, is the result of review carried out by me under the guidance Mr. Nishant Goutam (Associate Professor, Department of Pharmacology).

The work is original and has not been submitted for any degree/diploma of this or any university.

Date: 16/06/2023

Place: Kathog

*Rahul Thakur*  
Signature of the Candidate

Mr. Rahul Thakur

Roll No: 1931141064

## CERTIFICATE BY PRINCIPAL




It is certifythat the project entitled "A REVIEW ON OCULAR DRUG DELIVERY SYSTEM (OCUSERT)" is a bonafide and genuine work carried out by Mr. Rahul Thakur (Roll No.1931141064) under the guidance of Mr. Nishant Goutam (Associate Professor, Department of Pharmacology).

The work is original and has not been submitted for any degree/diploma of this or any university.

Date: 16/06/2023

Place: Kathog

  
Signature of Principal

Dr. M. S. Ashawat

Principal

Laureate Institute Of Pharmacy

# CERTIFICATE BY GUIDE



It is certify that the project entitled "A REVIEW ON OCULAR DRUG DELIVERY SYSTEM (OCUSERT)" submitted by Mr. Rahul Thakur (Roll No.1931141064) Laureate Institute of Pharmacy, Kathog under my supervision and guidance.

The work is original and has not been submitted for any degree/diploma of this or any university.

Date: 16/06/2023

Place: Kathog

Signature of the Guide

Mr. Nishant Goutam

Associate Professor

Department of Pharmacology

**REVIEW ON ALOPECIA**  
A Dissertation Submitted to  
**Himachal Pradesh Technical University,**  
**Hamirpur**



**In the partial fulfilment for award of the Degree of**  
**BACHELOR OF PHARMACY**

**2023**

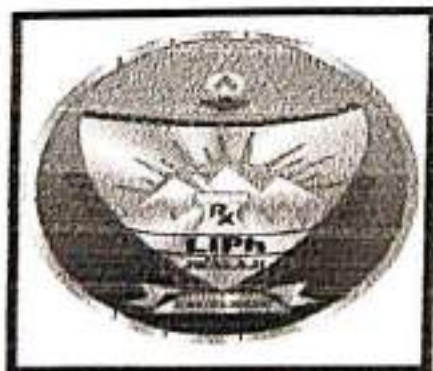
**Submitted by**

**MR. RAHIL RANDHAWA**

**ROLL NO. 1931141062**

**UNDER THE GUIDENCE OF**

**ASST.PROF.ARTI DEVI**



**LAUREATE INSTITUTE OF PHARMACY, KATHOG,**  
**TEHSIL - JAWALAMUKHI, DISTT. - KANGRA (HP)-177101**

## DECLARATION

This is to certify that the project work entitled "Alopecia" has not been submitted in parts or full to any other university by me. This is the original work undertaken by me under the supervision of ASST.PROF.ARTI DEVI in the Department of Pharmaceutical analysis, Laureate Institute of Pharmacy, Kathog. Such materials that had been obtained for the research work have been duly acknowledged in the project.

Date: 21-06-2023

Place: Laureate Institute of Pharmacy

Rahil Randhawa

Laureate institute of Pharmacy,

Kathog, Teh. Jawalamukhi,

Dist- Kangra, HP-176031

**CERTIFICATE BY PRINCIPAL**



This is to certify that the work presented in the project entitled "Alopecia" for the Degree of Bachelor of pharmacy has been carried out by **Rahil Randhawa (1931141062)** himself under the supervision of **ASST.PROF.ARTI DEVI**, Assistant Professor of Pharmaceutical analysis, in Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 21-06-2023

  
DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
TEH. JAWALAMUKHI  
DIST. KANGRA (H.P.)

Place: Laureate Institute of Pharmacy  
Laureate Institute of Pharmacy,  
Kathog, Teh. Jawalamukhi,  
Distt. Kangra, HP- 177101.

## CERTIFICATE BY GUIDE

This is to certify that the work presented in the project entitled "Alopecia" for the Degree of Bachelor of pharmacy has been carried out by **Rahil Randhawa (1931141062)** himself under my supervision and guidance in the Department of Pharmaceutical analysis, Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 21-06-2023

Place: Laureate Institute of Pharmacy  
AA

ASST.PROF.ARTI DEVI

Associate professor of  
pharmaceutical analysis

Laureate Institute of Pharmacy,

Kathog, Teh. Jawalamukhi,

Distt. Kangra, HP - 177101

**A Potential Applications of Antioxidants-A Review**  
**A Dissertation Submitted to**  
**Himachal Pradesh Technical University,**  
**Hamirpur**



**In the partial fulfilment for award of the Degree of**  
**BACHELOR OF PHARMACY**  
**2023**

**Submitted by**  
**MR. RAMESH KUMAR**  
**ROLL NO. 1931141065**  
**UNDER THE GUIDANCE OF**  
**DR. SWATI RANA**



**LAUREATE INSTITUTE OF PHARMACY, KATHOG,**  
**TEHSIL - JAWALAMUKHI, DISTT. - KANGRA (HP)-177101**

## DECLARATION

This is to certify that the project work entitled "A Potential Applications of Antioxidants-A Review" has not been submitted in parts or full to any other university by me. This is the original work undertaken by me under the supervision of Dr. Swati Rana in the Department of Pharmacology, Laureate Institute of Pharmacy, Kathog. Such materials that had been obtained for the research work have been duly acknowledged in the project.

Date: 16-6-23

Place: LIPY (Kathog)

*Ramesh Kumar*

RAMESH KUMAR

(1931141065)

Laureate institute of Pharmacy,

Kathog, Teh. Jawalamukhi,

Distt- Kangra, HP-177101


## CERTIFICATE BY PRINCIPAL



This is to certify that the work presented in the project entitled "A Potential Applications of Antioxidants-A Review" for the Degree of Bachelor of pharmacy has been carried out by RAMESH KUMAR (1931141065) himself under the supervision of Dr. SWATI RANA Assistant Professor of Pharmacology in Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 11-6-23

Place: LIPh (Kathog)

  
DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
TEH. JAWALAMUKHI  
DISTT. KANGRA (H.P.)

Director cum Principal  
Laureate Institute of  
Pharmacy,  
Kathog, Teh. Jawalamukhi,  
Distt. Kangra, HP- 177101.

## CERTIFICATE BY GUIDE

This is to certify that the work presented in the project entitled "A Potential Application of Antioxidants-A Review" for the Degree of Bachelor of pharmacy has been carried out by RAMESH KUMAR (1931141065) himself under my supervision and guidance in the Department of Pharmacology, Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: { 6-6-23

Place: LIPY (Kathog)



Dr. SWATI RANA

Assistant Professor of  
Pharmacology

Laureate Institute of  
Pharmacy,

Kathog, Teh. Jawalamukhi,

Distt. Kangra, HP - 177101

**A Review on Cardiac Arrest**  
**A Dissertation Submitted to**  
**Himachal Pradesh Technical University,**  
**Hamirpur**



**In the partial fulfilment for award of the Degree of**  
**BACHELOR OF PHARMACY**  
**2023**

**Submitted by**

**Miss. Richa Sharma**

**ROLL NO. 1931141066**

**UNDER THE GUIDANCE OF**

**Miss. Astha Sharma**

**(ASSISTANT PROF. IN THE DEPT. OF PHARMACEUTICAL CHEMISTRY)**



**LAUREATE INSTITUTE OF PHARMACY, KATHOG,**  
**TEHSIL - JAWALAMUKHI, DISTT. - KANGRA (HP)-177101**


## CERTIFICATE BY PRINCIPAL



This is to certify that the work presented in the project entitled "A Review On Cardiac Arrest" for the Degree of Bachelor of Pharmacy has been carried out by Richa Sharma (1931141066) herself under the supervision of Miss Astha Sharma, Assistant Professor of Pharmaceutical Chemistry in Laureate Institute of Pharmacy, Kathog. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 15-06-23

Place: LSPH, Kathog

  
DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF PHARMACY  
KATHOG  
TEH. JAWALAMUKHI  
DIST. KANGRA (H.P.)  
Laureate Institute of Pharmacy  
Kathog, Teh. Jawalamukhi,  
Distt. Kangra, HP- 177101.

## CERTIFICATE BY THE GUIDE



This is to certify that the work presented in the project entitled "A Review on Cardiac Arrest" for the Degree of Bachelor of Pharmacy has been carried out by Richa Sharma (1931141066) herself under my supervision and guidance in the Department of Pharmaceutical Chemistry, Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 15-06-23

Place: LIPh, Kathog

A handwritten signature in black ink, appearing to read 'Astha Sharma', is written over a circular stamp area.

**MISS. ASTHA SHARMA**

Assistant Professor of Pharmaceutical  
chemistry

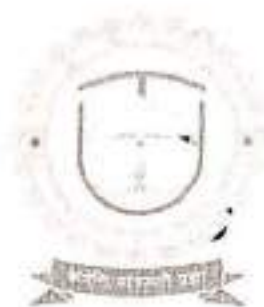
Laureate Institute of Pharmacy,

Kathog, Teh. Jawalamukhi,

Distt. Kangra, HP - 177101

# A REVIEW ON ARTIFICIAL INTELLIGENCE IN THE FIELD OF PHARMACY

A Dissertation submitted to Himachal Pradesh Technical University, Hamirpur for the  
fulfillment the Degree of Bachelor of Pharmacy



2023

By

Riya Parmar

Roll No.1931141067



Supervisor

**Mr. Ajay Kumar**

Laureate Institute of Pharmacy Kathog, Tehsil- Dehra, Kangra (HP)

Pin- 177101

## CERTIFICATE BY GUIDE



This is certify that the work contained in this dissertation entitled “A Review On Artificial Intelligence in the field of Pharmacy” submitted to partial fulfillment of the requirement for the Degree of Bachelor of Pharmacy to Himachal Pradesh Technical University, Hamirpur, embodies the research work carried out by Ms. Riya Parmar (1931141067) herself under my supervision and guidance in the Department of Pharmaceutics, Laureate Institute of Pharmacy, Kathog, Kangra(H.P.). The work has not been submitted in part or full for the award of any other degree in any other degree in any other University in my knowledge.

Date:

16/06/2023

Supervisor

Mr. Ajay Kumar

A handwritten signature in black ink, appearing to read 'Ajay Kumar', written over a horizontal line.


Assistant Professor,  
Laureate Institute of Pharmacy  
Kathog, Distt. Kangra (H.P.)177101

## CERTIFICATE BY PRINCIPAL



This is the certificate that the work contained in the thesis entitled “A Review on Artificial Intelligence in the field of Pharmacy” submitted to partial fulfillment of the requirement for Degree of Bachelor of Pharmacy to Himachal Pradesh Technical University, Hamirpur, embodies the research work carried out by **Ms. Riya Parmar (1931141067)** herself under the supervision and guidance of **Mr. Ajay Kumar** in the Department of Pharmaceutics, Laureate Institute of Pharmacy, Kathog, Kangra (H.P.). The work has not been submitted in part or full for the award of any other degree in any other University in my knowledge.

Date: 16/06/2023

  
**Prof. (Dr.) M.S. Ashawat**  
Principal,  
Laureate Institute of Pharmacy,

DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
TEH. JAWALAMUKHI  
DISTT KANGRA (H.P.)

Kathog, Distt. Kangra (H.P.)177101

# EVALUATION OF ANTI-OXIDANT ACTIVITY OF VASAKA (*Adhatoda vasica*)

A Project Submitted to  
Himachal Pradesh Technical University, Hamirpur



In the partial fulfillment of the requirement for the degree of

**BACHELOR OF PHARMACY**

BY

**Rohan Thakur**

**Roll No. 1931141068**

*Under the guidance of*

**Mrs. Rinu Rana**

**Asst. Professor**

**Department Of Pharmacognosy**



**Laureate Institute of Pharmacy**

**Kathog, Teh. JawalaMukhi Distt. Kangra, (H.P.) Pin code 176031**

## CERTIFICATE BY GUIDE



It is certify that the project entitled “**Evaluation of Antioxidant activity of Vasaka (Adhatoda vasica)**” submitted by **Mr.Rohan Thakur (Roll No. 1931141068)** Laureate Institute of Pharmacy, Kathog under my supervision and guidance.

The work is original and has not been submitted for any degree/diploma of this or any university.

**Signature of the Guide**

**Mrs. Rinu Rana**

**Asst.Professor Department of**

**Pharmacognosy**

Date: 16/06/2023

Place: Kathog

## CERTIFICATE BY PRINCIPAL



It is certify that the project entitled “**Evaluation of Antioxidant activity of Vasaka (Adhatoda vasica)**” is a bonafide and genuine work carried out by **Mr. Rohan Thakur (Roll No.1931141068)** under the guidance of **Mrs. Rinu Rana (Asst. Professor, Department of Pharmacognosy)**.

The work is original and has not been submitted for any degree/diploma of this or any university.

Date: 16/06/2023

Place: Kathog

Signature of Principal

Dr. M. S. Ashawat

Principal

Laureate Institute of Pharmacy

DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY, KATHOG  
TEH. JAWALAMUKHI  
DIST. ANGRAH.D.

**Murraya Koenigii and its potential health benefits**

**A PROJECT REPORT**

Submitted to

Himachal Pradesh Technical University, Hamirpur



In the partial fulfilment for award of the Degree of

**BACHELOR OF PHARMACY**

2023

**Submitted by**

**Mr. Rohit Dhillon**

ROLL NO.1931141069

**UNDER THE GUIDENCE OF**

**Dr. Pravin Kumar (Ph.D., M.Pharm)**

Associate Professor and Head

Department of Pharmaceutics

Laureate Institute of Pharmacy



**LAUREATE INSTITUTE OF PHARMACY, KATHOG,  
TEHSIL - JAWALAMUKHI, DISTT. - KANGRA (HP)-176031**

## DECLARATION

This is to certify that the project work entitled "Murraya koenigii and its potential health benefits" has not been submitted in parts or full to any other university by me. This is the original work undertaken by me under the supervision of **DR. PRAVIN KUMAR** in the Department of Pharmaceutics, Laureate Institute of Pharmacy, Kathog.

Date: 16-06-2023

Place: Kathog



Rohit Dhillon (1931141069)

Laureate institute of Pharmacy,

Kathog, Teh. Jawalamukhi,

Distt- Kangra, HP-176031

## CERTIFICATE BY GUIDE

This is to certify that the work presented in the project entitled "Murraya Koenigii and its potential health benefits" for the Degree of Bachelor of pharmacy has been carried out by **ROHIT DHILLON (1931141069)** herself under my supervision and guidance in the Department of Pharmaceutics, Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.



Dr. Pravin Kumar

Associate Professor and Head  
Department of Pharmaceutics  
Laureate Institute of Pharmacy,  
Kathog, Teh. Jawalamukhi,  
Distt. Kangra, HP - 176031

Date: 16-06-2023

Place: Kathog


## CERTIFICATE BY PRINCIPAL



This is to certify that the work presented in the project entitled "Murraya Koenigii and its potential health benefits" for the Degree of Bachelor of pharmacy has been carried out by **ROHIT DHILLON** herself under the supervision of **DR. PRAVIN KUMAR**, Associate Professor of Pharmaceutics in Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 15-6-2023

Place: Kathog

  
Prof. (Dr.) M. S. Ashawat

Director cum Principal

Laureate Institute of Pharmacy,

Kathog, Teh. Jawalamukhi,

Distt. Kangra, HP- 176031.

## ACKNOWLEDGEMENT

A journey is easier when you travel together. Interdependence is certainly more valuable than independence. First of all; I would like to thank my family, and especially my parents, for their absolute confidence in me. I thank the almighty for showering infinite bounties and grace upon me and for being my constant companion.

The first one people I would like to thank my Guide **DR. PRAYIN KUMAR** the best advisor and guide I could have wished for. Her enthusiasm and integral view on research and her mission for providing 'only high-quality work and not less', has made a deep impression on me. I owe her lots of gratitude for having me shown this way of research.

I express my regards to **DIRECTOR CUM PRINCIPAL DR. M.S ASHAWAT** for their timely suggestions. I am thankful to our **MANAGING DIRECTOR (DR. RAN SINGH)** for providing proper resources and infrastructure to carry out the work of this stature.

**MR.ROHIT DHILLON**

***Rhododendron arboreum* and its potential health benefits**

**A PROJECT REPORT**

**Submitted to**

**Himachal Pradesh Technical University, Hamirpur**



**In the partial fulfilment for award of the Degree of**

**BACHELOR OF PHARMACY**

**2023**

**Submitted by**

**Miss. Ruchika**

**ROLL NO.1931141070**

**UNDER THE GUIDENCE OF**

**Dr. Pravin Kumar (Ph.D., M.Pharm)**

**Associate Professor and Head**

**Department of Pharmaceutics**

**Laureate Institute of Pharmacy**



**LAUREATE INSTITUTE OF PHARMACY, KATHOG,  
TEHSIL - JAWALAMUKHI, DISTT. - KANGRA (HP)-176031**

## CERTIFICATE BY PRINCIPAL



This is to certify that the work presented in the project entitled "Rhododendron arboreum and its potential health benefits" for the Degree of Bachelor of pharmacy has been carried out by **RUCHIKA** herself under the supervision of **DR. PRAVIN KUMAR**, Associate Professor of Pharmaceutics in Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 14/06/2023

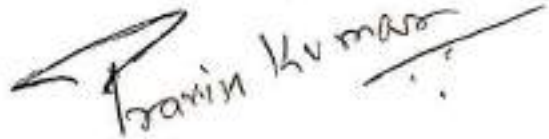
Place: Laureate Institute of Pharmacy  
Kathog (Jawalamukhi)

DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
JAWALAMUKHI  
DISTT. KANGRA (H.P.)

Prof. (Dr.) M. S. Astawat  
Director cum Principal  
Laureate Institute of Pharmacy,  
Kathog, Teh. Jawalamukhi,  
Distt. Kangra, HP- 176031.

## CERTIFICATE BY GUIDE

This is to certify that the work presented in the project entitled "Rhododendron arboreum and its potential health benefits" for the Degree of Bachelor of pharmacy has been carried out by **RUCHIKA (1931141070)** herself under my supervision and guidance in the Department of Pharmaceutics, Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.



Dr. Pravin Kumar

Associate Professor and Head  
Department of Pharmaceutics

Laureate Institute of Pharmacy.

Kathog, Teh. Jawalamukhi,

Distt. Kangra, HP - 176031

Date: 16/06/2023.

Place: Laureate Institute of Pharmacy  
Kathog [Jawalamukhi].

**STANDARDIZATION AND PHYTOCHEMICAL SCREENING OF CINCHONA**

**A Dissertation Submitted to  
Himachal Pradesh Technical University,  
Hamirpur**



**In the partial fulfilment for award of the Degree of  
BACHELOR OF PHARMACY  
2023**

**Submitted by**

**Mr. Sagar Kumar**

**ROLL NO. 1931141071**

**UNDER THE GUIDANCE OF**

**Dr. SANJAY KUMAR**



**LAUREATE INSTITUTE OF PHARMACY, KATHOG,  
TEHSIL - JAWALAMUKHI, DISTT. - KANGRA (HP)-177101**

CERTIFICATE BY PRINCIPAL



This is to certify that the work presented in the project entitled "STANDARDIZATION AND PHYTOCHEMICAL SCREENING OF CINCHONA" for the Degree of Bachelor of pharmacy has been carried out by SAGAR KUMAR (1931141071) himself under the supervision of Dr SANJAY KUMAR Assistant Professor of Pharmacognosy in Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 14/06/2023

Place: Laureate Institute  
of Pharmacy

*Dr. S. Ashwari*  
**DIRECTOR CUM PRINCIPAL**  
**LAUREATE INSTITUTE OF**  
**PHARMACY KATHOG,**  
**TEH. JAWALAMUKHI**  
**Distt. Kangra, H.P.**  
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Kathog, Teh. Jawalamukhi,  
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## CERTIFICATE BY GUIDE

This is to certify that the work presented in the project entitled "STANDARDIZATION AND PHYTOCHEMICAL SCREENING OF CINCHONA" for the Degree of Bachelor of pharmacy has been carried out by SAGAR KUMAR (1931141071) himself under my supervision and guidance in the Department of Pharmacognosy, Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 14/06/2023

Place: Laureate Institute  
of Pharmacy



Dr. SANDAY KUMAR

Assistant Professor of  
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Laureate Institute of Pharmacy,  
Kathog, Teh. Jawalamukhi,  
Distt. Kangra, HP - 177101

**REVIEW ON TRADITIONAL MEDICINAL USES, PHARMACOLOGICAL  
ACTIVITIES AND HEALTH BENIFITS OF TERMINILIA CHEBULA**

A DISSERTATION SUBMITTED TO  
HIMACHAL PRADESH TECHNICAL UNIVERSITY,

HAMIRPUR



IN THE PARTIAL FULFILMENT FOR AWARD OF THE DEGREE OF  
**BACHELOR OF PHARMACY**

2023

**SUBMITTED BY**

**MR. SAHIL CHOPRA**

ROLL NO. 1931141072

UNDER THE GUIDENCE OF

**MRS. VANDANA BHATIA**



LAUREATE INSTITUTE OF PHARMACY, KATHOG,  
TEHSIL - JAWALAMUKHI, DISTT. - KANGRA (HP)-176031

## DECLARATION

This is to certify that the project work entitled "Review on Traditional medicinal uses, pharmacological activities and health benefits of *Terminilia Chebula*" has not been submitted in parts or full to any other university by me. This is the original work undertaken by me under the supervision of **MRS. VANDANA BHATIA** in the Department of Pharmacology, Laureate Institute of Pharmacy, Kathog. Such materials that had been obtained for the research work have been duly acknowledged in the project.

Date: 14/06/2023

Place: Kathog

Sahil Chopra (1931141072)

Laureate institute of Pharmacy,

Kathog, Teh. Jawalamukhi,

Distt- Kangra, HP-176031

Sahil chopra

## CERTIFICATE BY PRINCIPAL



This is to certify that the work presented in the project entitled "REVIEW ON TRADITIONAL MEDICINAL USES, PHARMACOLOGICAL ACTIVITIES AND HEALTH BENEFITS OF TERMINILIA CHEBULA" for the Degree of Bachelor of pharmacy has been carried out by SAHIL CHOPRA (19S1141072) himself under the supervision of MRS. VANDANA BHATIA, Assistant Professor of Pharmacology in Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 14/06/2023

Place: Kathog


DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
Prof. (Dr.) M. S. Ashwari  
KATHOG  
TEH. JAWALAMUKHI  
Director cum Principal  
Laureate Institute of Pharmacy,  
Kathog, Teh. Jawalamukhi,  
Distt. Kangra, HP- 176031.

## CERTIFICATE BY GUIDE

This is to certify that the work presented in the project entitled "**REVIEW ON TRADITIONAL MEDICINAL USES, PHARMACOLOGICAL ACTIVITIES AND HEALTH BENEFITS OF TERMINILIA CHEBULA**" for the Degree of Bachelor of pharmacy has been carried out by **SAHIL CHOPRA (1931141072)** himself under my supervision and guidance in the Department of Pharmaceutical chemistry, Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 14/06/2023

Place: Kathog

  
Mrs. Vandana Bhatia  
Assistant Professor of  
Pharmacology  
Laureate Institute of Pharmacy,  
Kathog, Teh. Jawalamukhi,  
Distt. Kangra, HP - 176031

# **A Review on Leiomyoma: Uterine Fibroids**

**A dissertation submitted to Himachal Pradesh Technical  
University, Hamirpur**



**In the partial fulfilment of for the award of the degree of**

**Bachelors of Pharmacy**

**2023**

**Submitted By:**

**Sahil Chaudhary**

**Roll No.: 1931141073**

*Under the supervision of*

*Mrs. Shanu Priya*

*Assistant Professor*

*Pharmaceutical Chemistry*



**LAUREATE INSTITUTE OF PHARMACY, KATHOG  
TEHSIL - JAWALAMUKHI, DISTT. - KANGRA (HP)-176031**

## DECLARATION BY CANDIDATE



I hereby declare that the work contained in this Dissertation "A Review on Leiomyoma: Uterine Fibroids" is my own work and is original. This work has not been submitted in part or full for the award of degree in any other university.

Date: 16/6/23

Place: Kothog

Name of Student: Sahil Chaudhary

Roll No. 1931141073

## CERTIFICATE BY SUPERVISOR

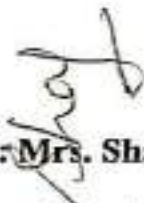


It is to certify that the work contained in this Dissertation "A Review on Leiomyoma: Uterine Fibroids" submitted to partial fulfilment of requirement of the award of degree of Bachelors of Pharmacy to Himachal Pradesh Technical University, Hamirpur, by Sahil Chaudhary (Roll no. 1931141073) himself has carried out his project work under my supervision.

The work is original and has not been submitted in part or full for the award of degree in any other university.

Date: 16/6/23

Place: Kathog

  
Name: Mrs. Shanu Priya

Designation: Assistant Professor  
Pharmaceutical Chemistry

## CERTIFICATE BY PRINCIPAL



It is to certify that the work contained in this Dissertation "A Review on Leiomyoma: Uterine Fibroids" submitted to partial fulfilment of requirement of the award of degree of Bachelors of Pharmacy to **Himachal Pradesh Technical University, Hamirpur** embodies the work carried out by **Sahil Chaudhary (Roll no. 1931141073)** himself under the supervision of **Mrs. Shanu Priya, Assistant Professor Department Pharmaceutical Chemistry**. The work is original and has not been submitted in part or full for the award of degree in any other university.

Date: 16/6/23

Place: Kathog

  
Prof. (Dr.) Mahendra Singh Ashawat

**Director-cum-Principal**

**Laureate Institute of Pharmacy**

**Kathog Teh. Jawalamukhi Distt.**

**Kangra (H.P.) 176031**

## *Acknowledgement*

*I dedicate my research work to my beloved parents and teachers, who provided inspirational opportunities and energized me to perform this task of lifelong importance.*

*A whole hearted gratitude to my esteemed guide Mrs. Shanu Priya (Assistant Professor, Pharmaceutical Chemistry, Department Pharmaceutical Analysis and Quality Assurance) at Laureate Institute of Pharmacy, Kathog under whose constant help, motivation, suggestion and encouragement this work has been completed.*

*I extend my thanks to Prof. (Dr.) Mahendra Singh Ashawat, Director cum Principal, Laureate Institute of Pharmacy, Kathog to provide all the facilities in institute to complete my project work.*

*I would like to give my sincere regards to Managing Director Prof. (Dr.) Ran Singh and General Secretary Dr. Meera Singh of Laureate Educational Society, Shimla for their academic vision and motivation.*

*I would like to thanks Prof. (Dr.) Chander Pal Verma, H. O. D., Department of Pharmacognosy, Laureate Institute of Pharmacy, Kathog for his help during the dissertation work and providing the moral support.*

*I am also grateful to other teaching staff Prof. (Dr.) Mr. Shiv Kumar Khuswaha HOD, Department of Pharmacology, Prof. (Dr.) Mr. Pravin Kumar, Prof. (Dr.) Mr. Shammy Jindal, Mr. Tarun Sharma. their help during my literature survey.*

*I express my deep love and sincere sense of gratitude to my family; my Grandparents. I wish to regard my heartfelt thanks to other family members who stood behind me and without their support and encouragement I would not have achieved this goal.*

*I would like to mention my supporting hands.....*

*I would like to mention my friends who supported and entertain, during the course of time, Rohit Dhillon, Vishal Jamwal, Sehdev Chandel, Sushant Thakur.*

*I would like to express my warm and a very special thanks to God. Without their blessing it would have been impossible for me to finish this work. Finally, I would like to thanks all those people who have been directly or indirectly helps in completion of this thesis work.*

**REVIEW ON ALOPECIA**  
A Dissertation Submitted to  
Himachal Pradesh Technical University,  
Hamirpur



In the partial fulfilment for award of the Degree of

**BACHELOR OF PHARMACY**

**2023**

Submitted by

**Mr. SAHIL RANDHAWA**

**ROLL NO. 1931141074**

UNDER THE GUIDENCE OF

**ASST.PROF.MR. TARUN SHARMA**



**LAUREATE INSTITUTE OF PHARMACY, KATHOG,  
TEHSIL - JAWALAMUKHI, DISTT. - KANGRA (HP)-177101**

## DECLARATION

This is to certify that the project work entitled "Alopecia" has not been submitted in parts or full to any other university by me. This is the original work undertaken by me under the supervision of ASST.PROF.MR. TARUN SHARMA in the Department of Pharmaceutics, Laureate Institute of Pharmacy, Kathog. Such materials that had been obtained for the research work have been duly acknowledged in the project.

Date: 21/06/2023

*Sahil Randhawa*

Sahil Randhawa

Laureate institute of Pharmacy,  
Kathog, Teh. Jawalamukhi,  
Distt- Kangra, HP-177101

Place: Laureate Institute of Pharmacy

## CERTIFICATE BY GUIDE

This is to certify that the work presented in the project entitled "Alopecia" for the Degree of Bachelor of pharmacy has been carried out by Sahil Randhawa (1931141074) himself under my supervision and guidance in the Department of Pharmaceutics, Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 21/06/2023

Place: Laureate Institute of Pharmacy



ASST.PROF. Mr. Tarun Sharma

Assistant professor of  
pharmaceutics

Laureate Institute of Pharmacy,

Kathog, Teh. Jawalamukhi,

Distt. Kangra, HP - 177101


CERTIFICATE BY PRINCIPAL



This is to certify that the work presented in the project entitled "Alopecia" for the Degree of Bachelor of pharmacy has been carried out by Sahil Randhawa (1931141074) himself under the supervision of ASST.PROF.MR. TARUN SHARMA Assistant Professor of Pharmaceutics, Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 21/06/2023

Place: Laureate Institute of Pharmacy

  
Prof. (Dr.) M. S. Ashwat  
DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
JAWALAMUKHI  
KANGRA (H.P.)

Laureate Institute of Pharmacy,  
Kathog, Teh. Jawalamukhi,  
Distt. Kangra, HP- 177101.

**REVIEW ON  
MINITABLETS**

A DISSERTATION SUBMITTED TO  
HIMACHAL PRADESH TECHNICAL UNIVERSITY,  
HAMIRPUR



IN THE PARTIAL FULFILMENT FOR AWARD OF THE DEGREE OF  
**BACHELOR OF PHARMACY**

2023

**SUBMITTED BY**

**MR. SAHIL SHARMA**

ROLL NO.1931141075

UNDER THE GUIDENCE OF

**DR. SHAMMY JINDAL (DEPARTMENT OF PHARMACEUTICS)**



LAUREATE INSTITUTE OF PHARMACY, KATHOG,  
TEHSIL - JAWALAMUKHI, DISTT. - KANGRA (HP)-177101


**CERTIFICATE BY PRINCIPAL**



This is to certify that the work presented in the project entitled "REVIEW ON MINITABLETS" for the Degree of Bachelor of pharmacy has been carried out by SAHIL SHARMA himself under the supervision of DR. SHAMMY JINDAL, Associate Professor of Pharmaceutics in Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 16/06/2023

Place: Laureate Institute of  
Pharmacy Kathog

  
DIRECTOR CUM PRINCIPAL  
Prof. (Dr.) M. S. JINDAL  
LAUREATE INSTITUTE  
OF PHARMACY  
KATHOG, JAWALAMUKHI  
Distt. Kangra, HP- 177101.

## CERTIFICATE BY GUIDE

This is to certify that the work presented in the project entitled "REVIEW MINITABLETS" for the Degree of Bachelor of pharmacy has been carried out by SA SHARMA (1931141075) himself under my supervision and guidance in the Department of Pharmaceutics, Laureate Institute of Pharmacy. The work has not been submitted in part or full to any other university in my knowledge.

Date: 16/06/2023

Place: Laureate Institute of  
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Dr. Shammy Jindal

Associate Professor  
Pharmaceutics.

Laureate Institute of Pharmacy  
Kathog, Teh. Jawalamukhi,  
Distt. Kangra, HP - 177101

**A Potential Applications of Antioxidants-A Review**  
**A Dissertation Submitted to**  
**Himachal Pradesh Technical University,**  
**Hamirpur**



**In the partial fulfilment for award of the Degree of**  
**BACHELOR OF PHARMACY**  
**2023**

**Submitted by**

**MR. SAKSHAM KAISTHA**

**ROLL NO. 1931141076**

**UNDER THE GUIDENCE OF**

**Mrs. DIMPLE RANA**



**LAUREATE INSTITUTE OF PHARMACY, KATHOG,**  
**TEHSIL - JAWALAMUKHI, DISTT. - KANGRA (HP)-177101**

# CERTIFICATE BY PRINCIPAL



This is to certify that the work presented in the project entitled "A Potential Applications of Antioxidants-A Review" for the Degree of Bachelor of pharmacy has been carried out by SAKSHAM KAISTHA (1931141076) himself under the supervision of Mrs. DIMPLE RANA Assistant Professor of Pharmaceutics in Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 13/06/2023

Place: Kathog

DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
Prof. (Dr.) M. S. Ashwari  
KATHOG  
JAWALAMUKHI

Director cum Principal

Laureate Institute of  
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Kathog, Teh. Jawalamukhi,  
Distt. Kangra, HP- 177101.

## CERTIFICATE BY GUIDE

This is to certify that the work presented in the project entitled "A Potential Application of Antioxidants-A Review" for the Degree of Bachelor of pharmacy has been carried out by SAKSHAM KAISTHA (1931141076) himself under my supervision and guidance in the Department of Pharmaceutics, Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 13/06/23

Place: Kathog

  
Mrs. DIMPLE RANA

Assistant — Professor — of  
Pharmaceutics

Laureate — Institute — of  
Pharmacy,

Kathog, Teh. Jawalamukhi,

Distt. Kangra, HP - 177101

## DECLARATION

This is to certify that the project work entitled "A Potential Applications of Antioxidants-A Review" has not been submitted in parts or full to any other university by me. This is the original work undertaken by me under the supervision of Mrs. DIMPLE RANA in the Department of Pharmaceutics, Laureate Institute of Pharmacy, Kathog. Such materials that had been obtained for the research work have been duly acknowledged in the project.

Date: 13/06/2023

Place: Kathog

SAKSHAM KAISTHA  
*Saksham Kaistha*  
(1931141076)

Laureate institute of  
Pharmacy,  
Kathog, Teh. Jawalamukhi,  
Distt- Kangra, HP-177101

**REVIEW ON STANDARDIZATION AND PHYTOCHEMICAL SCREENING  
OF CINCHONA**

**A Dissertation Submitted to  
Himachal Pradesh Technical University,  
Hamirpur**



**In the partial fulfilment for award of the Degree of  
BACHELOR OF PHARMACY**

**2023**

**Submitted by**

**MS. SAKSHI**

**ROLL NO. 1931141077**

**UNDER THE GUIDENCE OF**

**Dr. SANJAY KUMAR**




**LAUREATE INSTITUTE OF PHARMACY, KATHOG,  
TEHSIL - JAWALAMUKHI, DISTT. - KANGRA (HP)-177101**

## CERTIFICATE BY GUIDE

This is to certify that the work presented in the project entitled "STANDARDIZATION AND PHYTOCHEMICAL SCREENING OF CINCHONA" for the Degree of Bachelor of pharmacy has been carried out by Sakshi (1931141077) himself under my supervision and guidance in the Department of Pharmacognosy, Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 17/06/23

Place: JIRAJI



Dr. SANJAY KUMAR

Assistant Professor of  
Pharmacognosy

Laureate Institute of Pharmacy,

Kathog, Teh. Jawalamukhi,

Distt. Kangra, HP - 177101

CERTIFICATE BY PRINCIPAL



This is to certify that the work presented in the project entitled "STANDARDIZATION AND PHYTOCHEMICAL SCREENING OF CINCHONA" for the Degree of Bachelor of pharmacy has been carried out by Sakshi (1931141077) himself under the supervision of Dr SANJAY KUMAR Assistant Professor of Pharmacognosy in Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 17/06/23

Place: Kathog

*M.S. Ashtawat*  
DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG

TEH. JAWALAMUKHI  
DIST. KANGRA (H.P.)  
Director cum principal  
Laureate Institute of pharmacy,  
Kathog, Teh. Jawalamukhi,  
Distt. Kangra, HP- 177101.

# EVALUATION OF ANTI-OXIDANT ACTIVITY OF AGERATUM CONYZOIDES

A Project Submitted to  
Himachal Pradesh Technical University, Hamirpur



In the partial fulfillment of the requirement for the degree of

**BACHELOR OF PHARMACY**

BY

Mr. SANKET SHARMA

Roll No. 1931141078

*Under the guidance of*

Mrs. Rinu Rana

Asst. Professor

Department

Of Pharmacognosy



**Laureate Institute of Pharmacy**

Kathog. Teh. JawalaMukhi Distt. Kangra, (H.P.) Pin code 176031

# CERTIFICATE BY CANDIDATE



I am hereby declaring the work described in this project entitled “**Evaluation of Antioxidant activity of Ageratum Conyzoides**” which is being submitted by me in partial fulfillment for the award of Bachelor of Pharmacy in Himachal Pradesh Technical University, Hamirpur, is the result of review carried out by me under the guidance **Mrs. Rinu Rana (Asst.Professor, Department of Pharmacognosy)**.

The work is original and has not been submitted for any degree/diploma of this or any university.

Date: 16/06/23

Place: Kathog

Signature of the Candidate

Mr. Sanket Sharma

Roll No. -1931141078

## CERTIFICATE BY GUIDE



It is certified that the project entitled “Evaluation of Antioxidant activity of Ageratum Conyzoides” submitted by Mr. Sanket Sharma (Roll No. - 1931141078) Laureate Institute of Pharmacy, Kathog under my supervision and guidance.

The work is original and has not been submitted for any degree/diploma of this or any university.

Date: 16/06/23

Place: Kathog

A handwritten signature in black ink, appearing to read 'Rinu', with a long horizontal stroke extending to the right.

Signature of the Guide

Mrs. Rinu Rana

Asst. Professor Department of

Pharmacognosy

## CERTIFICATE BY PRINCIPAL

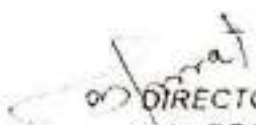


It is certified that the project entitled “**Evaluation of Antioxidant activity of Ageratum Conyzoides**” is a bonafide and genuine work carried out by Mr. Sanket Sharma (Roll No. -1931141078) under the guidance of Mrs. Rinu Rana (Asst. Professor, Department of Pharmacognosy).

The work is original and has not been submitted for any degree/diploma of this or any university.

Date: 16/06/23

Place: Kathog

  
DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
TEH. JAWALAMUKHI  
DIST. KANGRA (J.P.)  
Principal  
Laureate Institute of Pharmacy

**REVIEW ON  
CROHN'S DISEASE**

A DISSERTATION SUBMITTED TO  
HIMACHAL PRADESH TECHNICAL UNIVERSITY,  
HAMIRPUR



IN THE PARTIAL FULFILMENT FOR AWARD OF THE DEGREE OF  
**BACHELOR OF PHARMACY**

2023

**SUBMITTED BY**

**MR. SAURAV CHAUDHARY**

ROLL NO.1931141079

UNDER THE GUIDENCE OF

**MISS. PRATIBHA CHAUDHARY**



LAUREATE INSTITUTE OF PHARMACY, KATHOG,  
TEHSIL - JAWALAMUKHI, DISTT. - KANGRA (HP)-177101

## CERTIFICATE BY GUIDE

This is to certify that the work presented in the project entitled "REVIEW ON CROHN'S DISEASE" for the Degree of Bachelor of pharmacy has been carried out by SAURAV CHAUDHARY (1931141079) herself under my supervision and guidance in the Department of Pharmaceutical chemistry, Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.



**Miss. Pratibha Chaudhary**

Assistant Professor

Laureate Institute of Pharmacy,

Kathog, Teh. Jawalamukhi,

Distt. Kangra, HP - 177101

Date: 14/06/23

Place: Laureate Institute of Pharmacy  
Kathog (Jawalamukhi)


## CERTIFICATE BY PRINCIPAL



This is to certify that the work presented in the project entitled "REVIEW ON CROHN'S DISEASE" for the Degree of Bachelor of pharmacy has been carried out by SAURAV CHAUDHARY himself under the supervision of MISS. PRATIBHA CHAUDHARY, Assistant Professor of Pharmaceutics in Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 14/06/23

Place: Laureate Institute of Pharmacy  
Kathog (Jawalamukhi)

  
DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
AWALAMUKHI  
DISTT. KANGRA (H.P.)

Director cum Principal  
Laureate Institute of Pharmacy,  
Kathog, Teh. Jawalamukhi,  
Distt. Kangra, HP- 177101.

# **DIABETES MELLITUS**

**A Dissertation Submitted to  
Himachal Pradesh Technical University,  
Hamirpur**



**In the partial fulfilment for award of the Degree of  
BACHELOR OF PHARMACY**

**2023**

**Submitted by**

**Mr. SEHDEV CHANDEL**

**ROLL NO. 1931141080**

**UNDER THE GUIDENCE OF**

**Mr. NISHANT GAUTAM**



**LAUREATE INSTITUTE OF PHARMACY, KATHOG,  
TEHSIL - JAWALAMUKHI, DISTT. - KANGRA (HP)-177101**


## CERTIFICATE BY PRINCIPAL



This is to certify that the work presented in the project entitled "LITERATURE ON DIABETES MELLITUS" for the Degree of Bachelor of pharmacy has been carried out by SEHDEV CHANDEL (1931141080) herself under the supervision Mr. NISHANT GAUTAM Assistant Professor of Pharmacology in Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 16/06/23

Place: LIPh, Kathog

  
Prof. (Dr.) M.S. Ashawat  
DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
TEH. JAWALAMUKHI  
DISTT. KANGRA (H.P.)  
Director cum principal  
Laureate Institute of pharmacy,  
Kathog, Teh. Jawalamukhi,  
Distt. Kangra, HP- 177101.

## CERTIFICATE BY GUIDE

This is to certify that the work presented in the project entitled "LITERATURE ON DIABETES MELLITUS" for the Degree of Bachelor of pharmacy has been carried out by SEHDEV CHANDEL (1931141080) herself under my supervision and guidance in the Department of Pharmacology, Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 16/06/23

Place: LIP, Kathog



**Mr. NISHANT GAUTAM**

Assistant Professor of  
Pharmacology

Laureate Institute of Pharmacy,

Kathog, Teh. Jawalamukhi,

Distt. Kangra, HP - 177101

A Review on  
**CURRENT ADVANCES IN 3D BIOPRINTING OF HUMAN ORGANS AND TISSUE  
ENGINEERING**

A Dissertation Submitted to  
Himachal Pradesh Technical University,  
Hamirpur



In the partial fulfilment for award of the Degree of  
**BACHELOR OF PHARMACY**

2023

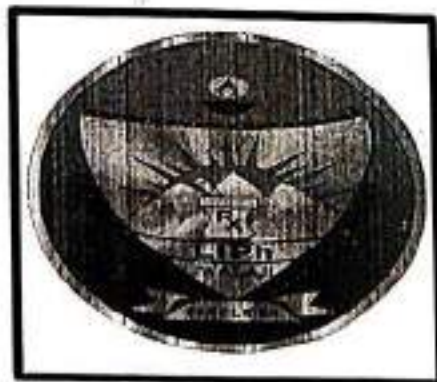
Submitted by

Mr. Shagun Choudhary

ROLL NO. 1931141081

UNDER THE GUIDENCE OF

MR. AJAY KUMAR



LAUREATE INSTITUTE OF PHARMACY, KATHOG,  
TEHSIL - JAWALAMUKHI, DISTT. - KANGRA (HP)-177101


## CERTIFICATE BY GUIDE



This is to certify that the work presented in the project entitled "A Review on current advances in 3D bioprinting of human organ and tissue engineering" for the Degree of Bachelor of pharmacy has been carried out by Shagun Choudhary (1931141081) himself under my supervision and guidance in the Department of Pharmaceutics, Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 16/06/23

Place: Kathog

  
Mr. Ajay Kumar

Assistant Professor of Pharmaceutics

Laureate Institute of Pharmacy,

Kathog, Teh. Jawalamukhi,

Distt. Kangra, HP - 177101

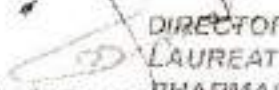
CERTIFICATE BY PRINCIPAL



This is to certify that the work presented in the project entitled "A Review on current advances in 3D bioprinting of human organ and tissue engineering" for the Degree of Bachelor of pharmacy has been carried out **Shagun Choudhary(1931141081)** himself under the supervision of **Mr. Ajay Kumar** Assistant Professor of Pharmaceutics in Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 16/06/23

Place: Kathog

  
DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
TEH. JAWALAMUKHI  
DIST. KANGRA (H.P.)  
**Prof. (Dr.) M. S. Ashawat**  
Director cum Principal  
Laureate Institute of Pharmacy  
Kathog, Teh. Jawalamukhi,  
Distt. Kangra, HP- 177101

**REVIEW ON**  
**MINITABLETS**  
A DISSERTATION SUBMITTED TO  
HIMACHAL PRADESH TECHNICAL UNIVERSITY,  
HAMIRPUR



IN THE PARTIAL FULFILMENT FOR AWARD OF THE DEGREE OF  
**BACHELOR OF PHARMACY**

2023

**SUBMITTED BY**

**MISS. SHALINI SHARMA**

ROLL NO.1931141082

UNDER THE GUIDENCE OF

**DR. SHAMMY JINDAL (DEPARTMENT OF PHARMACEUTICS)**



LAUREATE INSTITUTE OF PHARMACY, KATHOG,  
TEHSIL - JAWALAMUKHI, DISTT. - KANGRA (HP)-177101

## CERTIFICATE BY GUIDE

This is to certify that the work presented in the project entitled "REVIEW ON MINI TABLETS" for the Degree of Bachelor of pharmacy has been carried out by SHALINI SHARMA (1931141082) himself under my supervision and guidance in the Department of Pharmaceutical chemistry, Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.



Dr. Shammy Jindal

Associate Professor of  
Pharmaceutics.

Laureate Institute of Pharmacy,  
Kathog, Teh. Jawalamukhi,  
Distt. Kangra, HP - 177101

Date: 16/06/23

Place: Laureate Institute of Pharmacy  
Kathog (Jawalamukhi)

## CERTIFICATE BY PRINCIPAL



This is to certify that the work presented in the project entitled "REVIEW ON MINITABLETS" for the Degree of Bachelor of pharmacy has been carried out by **SHALINI SHARMA** himself under the supervision of **DR. SHAMMY JINDAL**, Associate Professor of Pharmaceutics in Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 16/06/2023

Place: Laureate Institute of Pharmacy  
Kathog (Jawalamukhi)

*(Signature)*  
DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
JAWALAMUKHI  
200-111  
Prof. (Dr.) M. S. Ashawat  
Director cum Principal  
Laureate Institute of Pharmacy,  
Kathog, Teh. Jawalamukhi,  
Distt. Kangra, HP- 177101.

**REVIEW ON  
STANDARDIZATION AND PHYTOCHEMICAL SCREENING OF CINCHONA**

**A Dissertation Submitted to  
Himachal Pradesh Technical University,  
Hamirpur**



**In the partial fulfilment for award of the Degree of  
BACHELOR OF PHARMACY**

**2023**

**Submitted by**

**Miss. SHIPALI SHARMA**

**ROLL NO. 1931141083**

**UNDER THE GUIDENCE OF**

**Dr. SANJAY KUMAR**



**LAUREATE INSTITUTE OF PHARMACY, KATHOG,  
TEHSIL - JAWALAMUKHI, DISTT. - KANGRA (HP)-177101**

**CERTIFICATE BY GUIDE**

This is to certify that the work presented in the project entitled "STANDARDIZATION AND PHYTOCHEMICAL SCREENING OF CINCHONA" for the Degree of Bachelor of pharmacy has been carried out by SHIPALI SHARMA(1931141083) himself under my supervision and guidance in the Department of Pharmacognosy, Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 14/06/23

Place: Laureate Institute of Pharmacy  
Kathog (Jawalamukhi)



**Dr. SANJAY KUMAR**

Assistant Professor of  
Pharmacognosy

Laureate Institute of Pharmacy,  
Kathog, Teh. Jawalamukhi,  
Distt. Kangra, HP - 177101

CERTIFICATE BY PRINCIPAL



This is to certify that the work presented in the project entitled "STANDARDIZATION AND PHYTOCHEMICAL SCREENING OF CINCHONA" for the Degree of Bachelor of pharmacy has been carried out by SHIPALI SHARMA (1931141083) himself under the supervision of Dr SANJAY KUMAR Assistant Professor of Pharmacognosy in Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 14/06/23

Place: Laureate Institute of Pharmacy  
Kathog (Jawalamukhi)

DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
TEH. JAWALAMUKHI  
DISTT. KANGRA (H.P.)

Prof. (Dr.) M. S. Ashawat

Director cum Principal

Laureate Institute of Pharmacy,

Kathog, Teh. Jawalamukhi,

Distt. Kangra, HP- 177101.

**THE REVIEW ON COVID-19 PANDAMIC:  
ITS CURRENT STATUS AND OUTBREAK IN HIMACHAL PRADESH**

**A Dissertation Submitted to  
Himachal Pradesh Technical University,  
Hamirpur**



**In the partial fulfilment for award of the Degree of  
BACHELOR OF PHARMACY**

**2023**

**Submitted by**

**Mrs. SHUBHDEEP SINGH**

**ROLL NO. 1931141085**

**UNDER THE GUIDENCE OF**

**Mrs. VANDANA BHATIA**



**LAUREATE INSTITUTE OF PHARMACY, KATHIOG,  
TEHSIL - JAWALAMUKHI, DISTT. - KANGRA (HP)-177101**

## DECLARATION

This is to certify that the project work entitled "THE REVIEW ON COVID-19 PANDAMIC" has not been submitted in parts or full to any other university by me. This is the original work undertaken by me under the supervision of Mrs. VANDANA BHATIA in the Department of Pharmacology, Laureate Institute of Pharmacy, Kathog. Such materials that had been obtained for the research work have been duly acknowledged in the project.

Date: 14-06-23

Place: Laureate Institute of Pharmacy  
Kathog, Teh. Jawalamukhi,  
Distt. Kangra, HP-177101

*Shubhdeep Singh*

SHUBHDEEP SINGH

(1931141085)

Laureate Institute of pharmacy

Kathog, Teh. Jawalamukhi.

Distt. Kangra, HP- 177101

## CERTIFICATE BY PRINCIPAL



This is to certify that the work presented in the project entitled "THE REVIEW ON COVID-19 PANDAMIC" for the Degree of Bachelor of pharmacy has been carried out by SHUBHDEEP SINGH (1931141085) herself under the supervision of Mrs. VANDANA BHATIA Assistant Professor of Pharmacology in Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 14-06-23

  
Prof. (Dr.) M.S. Ashawat

Place: Laureate Institute of  
Pharmacy, Kathog, Teh.  
Jawalamukhi, Distt. Kangra  
HP-177101

Director cum principal  
Laureate Institute of pharmacy,  
Kathog, Teh. Jawalamukhi,  
Distt. Kangra, HP- 177101.

## CERTIFICATE BY GUIDE

This is to certify that the work presented in the project entitled "THE REVIEW ON COVID-19 PANDAMIC" for the Degree of Bachelor of pharmacy has been carried out by SHUBHDEEP SINGH (1931141085) herself under my supervision and guidance in the Department of Pharmacology, Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 14-06-2023

Place: Laureate Institute of Pharmacy,  
Kathog, Teh, Jawalamukhi,  
Distt. Kangra, HP - 177101

*Vandana*  
14/6/23  
Mrs. VANDANA BHATIA

Assistant Professor of  
Pharmacology

Laureate Institute of Pharmacy,  
Kathog, Teh. Jawalamukhi,  
Distt. Kangra, HP - 177101

PROJECT REPORT ON  
**PLANT IN AQUATIC ECOSYSTEM: CURRENT TRENDS AND  
FUTURE DIRECTIONS**

A PROJECT SUBMITTED TO  
HIMACHAL PRADESH TECHNICAL UNIVERSITY,  
HAMIRPUR



IN THE PARTIAL FULFILMENT FOR AWARD OF THE DEGREE  
OF  
**BACHELOR OF PHARMACY**

2023

**MS. SIMRAN**

ROLL NO. 1931141086

UNDER THE GUIDENCE OF

**MRS. SHAVINDER KUMARI**

(ASST. PROFESSOR OF PHARMACOLOGY)



LAUREATE INSTITUTE OF PHARMACY, KATHOG TEH. JAWALAMUKHI,  
DISTT. KANGRA (HP) - 177101

## CERTIFICATE BY GUIDE

This is to certify that the work presented in the project entitled "PLANT IN AQUATIC ECOSYSTEM: CURRENT TRENDS AND FUTURE DIRECTIONS" for the Degree of Bachelor of pharmacy has been carried out by SIMRAN (1931141086) herself under my supervision and guidance in the Department of Pharmacology, Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 15/06/23

Place: Kathog

  
Mrs. SHAVINDER KUMARI

(Assistant professor of Pharmacology)

Laureate Institute of Pharmacy,

Kathog, Teh. Jwalamukhi

Distt. Kangras, (HP)-177101

CERTIFICATE BY PRINCIPAL



This is to certify that the work presented in the project entitled "PLANT IN AQUATIC ECOSYSTEM: CURRENT TRENDS AND FUTURE DIRECTIONS" for the Degree of Bachelor of Pharmacy has been carried out by SIMRAN herself under the supervision of Mrs. SHAVINDER KUMARI (Assistant Professor of Pharmacology), Laureate Institute of Pharmacy, Kathog. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 18/06/2023

Place: Kathog

DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
TEH. JAWALAMUKHI  
DIST. KANGRA

Prof. (Dr.) M.S. Ashawat

Director cum Principal

Laureate Institute of Pharmacy,

Kathog, Teh. Jawalamukhi,

Distt. Kangra, (HP)-177101

**REVIEW ON ALOPECIA**  
**A Dissertation Submitted to**  
**Himachal Pradesh Technical University,**  
**Hamirpur**



**In the partial fulfilment for award of the Degree of**  
**BACHELOR OF PHARMACY**

**2023**

**Submitted by**

**Miss. SIMRAN**

**ROLL NO. 1931141087**

**UNDER THE GUIDENCE OF**

**ASST.PROF.ARTI DEVI**




**LAUREATE INSTITUTE OF PHARMACY, KATHOG,**  
**TEHSIL - JAWALAMUKHI, DISTT. - KANGRA (HP)-177101**

## CERTIFICATE BY GUIDE

This is to certify that the work presented in the project entitled "Alopecia" for the Degree of Bachelor of pharmacy has been carried out by **Simran (1931141070)** herself under my supervision and guidance in the Department of Pharmaceutical analysis, Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 16/06/2023

Place: Kathog

  
ASST.PROF.ARTI DEVI

Associate professor of  
pharmaceutical analysis

Laureate Institute of Pharmacy,

Kathog, Teh. Jawalamukhi,

Distt. Kangra, HP - 177101

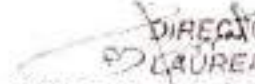
CERTIFICATE BY PRINCIPAL



This is to certify that the work presented in the project entitled "Alopecia" for the Degree of Bachelor of pharmacy has been carried out by **Simran (1931141087)** herself under the supervision of **ASST.PROF.ARTI DEVI**, Assistant Professor of Pharmaceutical analysis, in Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 16/06/2023

Place: Kathog

  
DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
Prof. (Dr.) M. S. Ashawat KATHOG  
TEH. JAWALAMUKHI  
Director cum Principal KANGRA (H.P.)

Laureate Institute of Pharmacy,  
Kathog, Teh. Jawalamukhi,  
Distt. Kangra, HP- 177101.

AREVIEW  
ARTICLE ON MALARIA:  
PATHOPHYSIOLOY  
AND TREATMENT

A Project Submitted to  
Himachal Pradesh Technical University, Hamirpur



In the partial fulfillment of the requirement for the degree of

**BACHELOR OF PHARMACY**

By

Sourabh Kumar

Roll No.1931141088 Under the guidance of

Mrs. SHANU PRIYA

Asst. Professor of Pharmaceutical Chemistry



**LAUREATE INSTITUTE OF PHARMACY KATHOG,  
TEHSIL- JAWALAMUKHI DISTT-KANGRA, (HP) PIN -177101**



Laureate Institute of Pharmacy

Recognized under section 2 (f) of the UGC Act 1956

Approved by H.P. Govt, AICTE, PCI & Affiliated to HP Technical University

---

## CERTIFICATE BY CANDIDATE

---

I hereby declare that work described in this project entitled "A REVIEW ARTICLE ON MALARIA : PATHOPHYSIOLOGY AND TREATMENT" which is being submitted by me in partial fulfillment for the award of Bachelor in Pharmacy to Himachal Pradesh Technical University, Hamirpur, is the result of reviews carried out by use under the guidance of Mrs. SHANU PRIYA Assistant Professor, Department of Pharmaceutical Chemistry. The work is original and has not been submitted for any degree/diploma of this or any university.

Date: 17/06/2023

Place: Laureate Institute of Pharmacy

Sourabh  
Signature of the Candidate

Mr. Sourabh Kumar

Roll no. 1931141088



Laureate Institute of Pharmacy

Recognized under section 2 (f) of the UGC Act 1956

Approved by H.P. Govt, AICTE, PCI & Affiliated to HP Technical University

## CERTIFICATE BY PRINCIPAL

This is to certify that the work contained in the Project entitled "A REVIEW ARTICLE ON MALARIA : PATHOPHYSIOLOGY AND TREATMENT" submitted to partial fulfillment of the requirement for the degree of bachelor of pharmacy to Himachal Pradesh Technical University, Hamirpur, embodies the research work carried out by Mr.Sourabh Kumar (Roll no. 1931141088) himself under the supervision and guidance of Mrs. SHANU PRIYA in the department of Pharmaceutical Chemistry , Laureate Institute of Pharmacy, Kathog Jawalamukhi (H.P).The work has not been submitted in part or full for the award of any other degree in any other university in my knowledge.


Date: 17/06/2023

Place: Laureate institute of pharmacy

Dr. M.S. Ashawat

Laureate Institute of Pharmacy

Kathog Jawalamukhi

  
Principal  
DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
TEH. JAWALAMUKHI  
DISTT KANGRA (H.P.)



# Laureate Institute of Pharmacy

Recognized under section 2 (f) of the UGC Act 1956

Approved by H.P. Govt, AICTE, PCI & Affiliated to HP Technical University

## CERTIFICATE BYGUIDE

This is to certify that the work contained in this dissertation entitled "A REVIEW ARTICLE ON MALARIA : PATHOPHYSIOLOGY AND TREATMENT" submitted to partial fulfillment of the requirement for the degree of bachelor of pharmacy to Himachal Pradesh Technical University, Hamirpur, embodies the research work carried out by Mr. Sourabh Kumar (Roll no. 1931141088) himself under my supervision and guidance in the department of Pharmaceutical Chemistry, Laureate Institute of Pharmacy, Kathog, Jawalamukhi (H.P). The work has not been submitted in part or full for the award of any other degree in any other university in my knowledge.

Date: 17/06/2023

Place: Laureate institute of Pharmacy

Signature of the Guide

Mrs. SHANU PRIYA

Asst. Professor Pharmaceutical Chemistry

Laureate Institute of Pharmacy

Kathog Jawalamukhi

**A REVIEW**  
**ON**  
**QUALITY CONTROL TESTS FOR PHARMACEUTICAL FORMULATION**  
A DISSERTATION SUBMITTED TO  
HIMACHAL PRADESH TECHNICAL UNIVERSITY,  
HAMIRPUR.



IN THE PARTIAL FULFILMENT FOR AWARD OF THE DEGREE OF  
**BACHELOR OF PHARMACY**

2023

**SUBMITTED BY**

**MR. SUSHANT THAKUR**

ROLL NO. 1931141089

UNDER THE GUIDENCE OF

**MR. AKSHAY THAKUR**




LAUREATE INSTITUTE OF PHARMACY, KATHOG,  
TEHSIL - JAWALA MUKHI, DISTT. - KANGRA (HP)-176031

CERTIFICATE BY PRINCIPAL

This is to certify that the work presented in the project entitled "QUALITY CONTROL TESTS FOR PHARMACEUTICAL FORMULATION" for the Degree of Bachelor of pharmacy has been carried out by **SUSHANT THAKUR (1981141089)** himself under the supervision of **MR. AKSHAY THAKUR**, Assistant Professor of Pharmaceutics in Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 16/06/23

Place: LI PH Kathog (H.P.)

  
Prof. (Dr.) M.S. Ashawat  
DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
TEH. JAWALAMUKHI  
DIST. KANGRA (H.P.)


Director cum Principal  
Laureate Institute of Pharmacy,  
Kathog, Teh. Jawalamukhi,  
Distt. Kangra, HP- 176031

## CERTIFICATE BY GUIDE

This is to certify that the work presented in the project entitled "**QUALITY CONTROL TESTS FOR PHARMACEUTICAL FORMULATION**" for the Degree of Bachelor of pharmacy has been carried out by **SUSHANT THAKUR (1931141089)** himself under my supervision and guidance in the Department of Pharmaceutical chemistry, Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 16/06/23

Place: LIPH Kathog (H.P.)

  
Mr. Akshay Thakur

Assistant Professor of  
Pharmaceutics

Laureate Institute of Pharmacy,  
Kathog, Teh. Jawalamukhi,  
Distt. Kangra, HP - 176031

# LIPOSOMES AS NOVEL VESICULAR CARRIER

A Project Submitted to  
Himachal Pradesh Technical University, Hamirpur



In the partial fulfillment of the requirement for the degree of

**BACHELOR OF PHARMACY**

BY

**Sweety Rajwal**

**Roll No. 1931141090**

*Under the guidance of*

**Mr. Keshav Dhiman**

**Asst. Professor**

**Department. of Pharmaceutics**



**Laureate Institute of Pharmacy**

**Kathog, Teh. Jawalamukhi Distt. Kangra, (H.P.) Pin code 176031**

## CERTIFICATE BY PRINCIPAL



It is certify that the project entitled "Liposome as a novel vasicular carrier" is a bonafide and genuine work carried out by Miss. Sweety Rajwal (Roll No.- 1931141090) under the guidance of Mr. Keshav Dhiman (Asst. Professor, Department of Pharmaceutics).

The work is original and has not been submitted for any degree/diploma of this or any university.

Date: 16-6-23

Place: Kasturji

Signature of Principal

Dr. M. S. Ashawat

Principal

Laureate Institute of Pharmacy

DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
JAWALAMUKHI  
DISTT. HANGRA (H.P.)

## CERTIFICATE BY GUIDE




It is certify that the project entitled "Liposome as a novel vasicular carrier" submitted by Miss. Sweety Rajwal (Roll No.-1931141090) Laureate Institute of Pharmacy, Kathog under my supervision and guidance.

The work is original and has not been submitted for any degree/diploma of this or any university.

Date: 16-6-23

Place: Kathog

  
Signature of the Guide

Mr. Keshav Dhiman

Asst. Professor

(Department of Pharmaceutics)

**REVIEW ON  
STANDARDIZATION AND PHYTOCHEMICAL SCREENING OF CINCHONA**

**A Dissertation Submitted to  
Himachal Pradesh Technical University,  
Hamirpur**



**In the partial fulfilment for award of the Degree of  
BACHELOR OF PHARMACY  
2023**

**Submitted by  
Ms. TAMANNA KUMARI  
ROLL NO. 1931141091  
UNDER THE GUIDENCE OF  
PROF. Dr. C.P.S VERMA**



**LAUREATE INSTITUTE OF PHARMACY, KATHOG,  
TEHSIL - JAWALAMUKHI, DISTT. - KANGRA (HP)-177101**

## DECLARATION

This is to certify that the project work entitled "STANDARDIZATION AND PHYTOCHEMICAL SCREENING OF CINCHONA" has not been submitted in part or full to any other university by me. This is the original work undertaken by me under the supervision of **PROF. Dr. C.P.S VERMA** in the Department of Pharmacognosy, Laureate Institute of Pharmacy, Kathog. Such materials that had been obtained for the research work have been duly acknowledged in the project.

Date: 14/06/2023

Place: Laureate Institute of Pharmacy  
Kathog (Jwalaji)

**TAMANNA KUMARI**

(1931141091)

Laureate institute of Pharmacy

Kathog, Teh. Jawalamukhi.

Distt- Kangra, HP-177101

CERTIFICATE BY PRINCIPAL



This is to certify that the work presented in the project entitled "STANDARDIZATION AND PHYTOCHEMICAL SCREENING OF CINCHONA" for the Degree of Bachelor of pharmacy has been carried out by TAMANNA KUMARI(1931141091) himself under the supervision of **PROF. Dr .C.P.S VERMA** Associate Professor of Pharmacognosy in Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 14/06/23

Place: LIPh Kathog (Jawalukhi)

*[Signature]*  
DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
TEH. JAWALAMUKHI  
DIST. KANGRA (H.P.)  
Director cum Principal  
Laureate Institute of Pharmacy  
Kathog, Teh. Jawalamukhi,  
Distt. Kangra, HP- 177101.

## CERTIFICATE BY GUIDE

This is to certify that the work presented in the project entitled "STANDARDIZATION AND PHYTOCHEMICAL SCREENING OF CINCHONA" for the Degree of Bachelor of pharmacy has been carried out by TAMANNA KUMARI (1931141091) himself under my supervision and guidance in the Department of Pharmacognosy, Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 14/06/23

Place: LIPIH Kathog (Jwalaji)



**Prof. Dr. C.P.S VERMA**

H.O.D. of Pharmacognosy

Laureate Institute of Pharmacy,

Kathog, Teh. Jawalamukhi,

Distt. Kangra, HP - 177101

# A REVIEW ON MOLECULAR DOCKING

## PROJECT REPORT

A Dissertation submitted to Himachal Pradesh Technical University, Hamirpur  
for the fulfillment the degree of

## BACHELOR OF PHARMACY



MR. TANISH DHIMAN

RollNo.1931141092



Mr. Ajay kumar

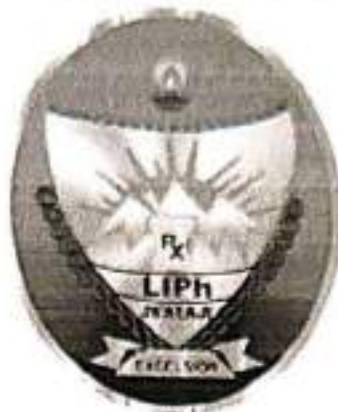
Assistant Professor of Department of Pharmaceutics

LAUREATE INSTITUTE OF PHARMACY

KATHOG TEHSIL DEHRA, DISTRICT. KANGRA (HP)

176031

## DECLARATION BY CANDIDATE



I hereby declare that work described in this dissertation in this dissertation entitled "Molecular Docking" which is being submitted by me in partial fulfillment for the award of Bachelor Of Pharmacy to the HIMACHAL PRADESH TECHNICAL UNIVERSITY, HAMIRPUR, is the result of investigations carried out by me under the guidance of Mr. Ajay Kumar

Date:

Place: *Kathog*

*Tanishh*  
Tanishh Dhiman

Enrolment No.1931141092

## CERTIFICATE BY GUIDE



It is to certify that the dissertation entitled "Molecular Docking" is a report of Project Work carried out by Mr. Tanish Dhiman Roll No.1931141092 in the B. Pharmacy, for the Award of Bachelor of Pharmacy from Laureate Institute of Pharmacy, Kathog.

Date:

Place: *Kathog*

**Mr. Ajay Kumar**

**Supervisor**  
Assistant professor of  
Pharmaceutics  
Laureate Institute of  
Pharmacy, Kathog

## CERTIFICATE BY PRINCIPAL



It is to certify that the dissertation entitled "Molecular Docking." is a bonafide Project Work carried out by Mr. Tanish Dhiman Roll No.1931141092 under the guidance of Mr. Ajay Kumar in the B. Pharmacy for the award of Bachelor of Pharmacy from Laureate Institute of Pharmacy, Kathog.

Date:

Place: *Kathog*

A handwritten signature in black ink, appearing to read 'Ashawat', is written over the printed name.

**Prof. Dr. M.S Ashawat**

Director cum Principal  
Laureate Institute of  
Pharmacy, Kathog (H.P)  
176031

## ACKNOWLEDGEMENT

Feeling the continued presence and blessing of my parents, Sh. Ashok Kumar Smt. Neelam Kumari to whom I owe my present qualification.

I am fortunate to have their love, affection, good wishes and moral support, which have been the backbone of my career although.

I would like to give my sincere regards to Director Dr. Ran Singh and General Secretary Dr. Meera Singh.

I would like to extend my regards to Principal Dr. M.S Ashawat, for providing all necessary facilities and valuable support in the entire project work.

It gives to me immense to convey all my respect and all whole hearted gratitude to my esteemed guide. Mr. Ajay Dhiman. Assistant Professor Department of Pharmaceutics, Laureate Institute of Pharmacy, Kathog, under whose constant help, motivation, suggestions and encouragement this work was completed.

We would like to thank all those who contributed to the development and review of this report.

Date:

Place: *Kathog*

Mr. Tanish Dhiman

Enrolment No.1931141092

**Murraya Koenigii and its potential health benefits**

**A PROJECT REPORT**

Submitted to

Himachal Pradesh Technical University, Hamirpur



In the partial fulfilment for award of the Degree of

**BACHELOR OF PHARMACY**

2023

**Submitted by**

**MR. TARUN MINHAS**

ROLL NO.1931141093

UNDER THE GUIDENCE OF

**Dr. Pravin Kumar (Ph.D., M.Pharm)**

Associate Professor and Head

Department of Pharmaceutics

Laureate Institute of Pharmacy



LAUREATE INSTITUTE OF PHARMACY, KATHOG,  
TEHSIL - JAWALAMUKHI, DISTT. - KANGRA (HP)-176031

## DECLARATION

This is to certify that the project work entitled "Murraya koenigii and its potential health benefits" has not been submitted in parts or full to any other university by me. This is the original work undertaken by me under the supervision of **DR. PRAVIN KUMAR** in the Department of Pharmaceutics, Laureate Institute of Pharmacy, Kathog.

Date: 17/06/2023

Place: Laureate Institute of  
Pharmacy Kathog



Tarun Minhas (1931141093)

Laureate institute of Pharmacy,

Kathog, Teh. Jawalamukhi,

Distt- Kangra, HP-176031

## CERTIFICATE BY GUIDE

This is to certify that the work presented in the project entitled "Murraya Koenigii and its potential health benefits" for the Degree of Bachelor of pharmacy has been carried out by **TARUN MINHAS (1931141093)** herself under my supervision and guidance in the Department of Pharmaceutics, Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 17/06/2023

Place: Laureate Institute of  
Pharmacy



Dr. Pravin Kumar

Associate Professor and Head  
Department of Pharmaceutics  
Laureate Institute of Pharmacy,  
Kathog, Teh. Jawalamukhi,  
Distt. Kangra, HP - 176031

## CERTIFICATE BY PRINCIPAL



This is to certify that the work presented in the project entitled "Murraya Koenigii and its potential health benefits" for the Degree of Bachelor of pharmacy has been carried out by **TARUN MINHAS** herself under the supervision of **DR. PRAVIN KUMAR**, Associate Professor of Pharmaceutics in Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 17/06/2023

Place: Laureate Institute of  
Pharmacy (Kathog)

  
Prof. (Dr.) M. S. Ashawat

Director cum Principal

Laureate Institute of Pharmacy,

Kathog, Teh. Jawalamukhi,

Distt. Kangra, HP- 176031.

## ACKNOWLEDGEMENT

A journey is easier when you travel together. Interdependence is certainly more valuable than independence. First of all, I would like to thank my family, and especially my parents, for their absolute confidence in me. I thank the almighty for showering infinite bounties and grace upon me and for being my constant companion.

The first one people I would like to thank my Guide **DR. PRAVIN KUMAR** the best advisor and guide I could have wished for. Her enthusiasm and integral view on research and her mission for providing 'only high-quality work and not less', has made a deep impression on me. I owe her lots of gratitude for having me shown this way of research.

I express my regards to **DIRECTOR CUM PRINCIPAL DR. M.S ASHAWAT** for their timely suggestions. I am thankful to our **MANAGING DIRECTOR (DR. RAN SINGH)** for providing proper resources and infrastructure to carry out the work of this stature.



**MR. TARUN MINHAS**

**REVIEW ON TREATMENT OF VITILIGO**  
A Dissertation Submitted to  
Himachal Pradesh Technical University,  
Hamirpur



In the partial fulfilment for award of the Degree of  
**BACHELOR OF PHARMACY**  
2023

Submitted by

**Miss. TEJASWANI BHARDWAJ**

**ROLL NO. 1931141094**

UNDER THE GUIDANCE OF

**Mr. TARUN SHARMA**

**Assistant professor of Pharmaceutics**



**LAUREATE INSTITUTE OF PHARMACY, KATHOG,  
TEHSIL - JAWALAMUKHI, DISTT. - KANGRA (HP)-176031**

CERTIFICATE BY PRINCIPAL



This is to certify that the work presented in the project entitled "REVIEW ON TREATMENT OF VITILIGO" for the Degree of Bachelor of pharmacy has been carried out Tejaswani Bhardwaj herself under the supervision of Mr. TARUN SHARMA, Assistant Professor of Pharmaceutics in Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 16/06/2023.

Place: Laureate Institute of Pharmacy Kathog [Jawalamukhi].

DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
JAWALAMUKHI  
DISTT. KANGRA (H.P.)

Prof. (Dr.) M. S. Ashwat  
Director cum Principal

Laureate Institute of Pharmacy,  
Kathog, Teh. Jawalamukhi,  
Distt. Kangra, HP- 176031

## CERTIFICATE BY GUIDE

This is to certify that the work presented in the project entitled "REVIEW ON TREATMENT OF VITILIGO" for the Degree of Bachelor of pharmacy has been carried out by Tejaswani Bhardwaj (1931141094) herself under my supervision and guidance in the Department of Pharmaceutics, Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 14/06/2025.

Place: Laureate Institute of Pharmacy  
Kathog [Jawalamukhi].



Mr. Tarun Sharma

Assistant Professor of  
Pharmaceutics.

Laureate Institute of Pharmacy,  
Kathog, Teh. Jawalamukhi,  
Distt. Kangra, HP - 176031

PROJECT REPORT ON  
PLANT IN AQUATIC ECOSYSTEM: CURRENT TRENDS AND  
FUTURE DIRECTIONS

A PROJECT SUBMITTED TO  
HIMACHAL PRADESH TECHNICAL UNIVERSITY,  
HAMIRPUR



IN THE PARTIAL FULFILMENT FOR AWARD OF THE DEGREE  
OF

**BACHELOR OF PHARMACY**

2023

**Mr.UDAY PARTAP SINGH JASWAL**

ROLL NO. 1931141095

UNDER THE GUIDENCE OF

**MRS. SHAVINDER KUMARI**

(ASST. PROFESSOR OF PHARMACOLOGY)



LAUREATE INSTITUTE OF PHARMACY, KATHOG TEH. JAWALAMUKHI,  
DISTT. KANGRA (HP) - 177101

**CERTIFICATE BY PRINCIPAL**



This is to certify that the work presented in the project entitled "PLANT IN AQUATIC ECOSYSTEM: CURRENT TRENDS AND FUTURE DIRECTIONS" for the Degree of Bachelor of Pharmacy has been carried out by **UDAY PARTAP SINGH JASWAL** herself under the supervision of **Mrs. SHAVINDER KUMARI (Assistant Professor of Pharmacology)**, Laureate Institute of Pharmacy, Kathog. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 13/06/2023

Place: Kathog

DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
TEH. JAWALAMUKHI  
DIST. KANGRA (H.P.)

Prof. (Dr.) **M.S. Ashawat**  
Director cum Principal

Laureate Institute of Pharmacy,

Kathog, Teh. Jawalamukhi,

Distt. Kangra, (HP)-177101

## CERTIFICATE BY GUIDE

This is to certify that the work presented in the project entitled "PLANT IN AQUATIC ECOSYSTEM: CURRENT TRENDS AND FUTURE DIRECTIONS" for the Degree of Bachelor of pharmacy has been carried out by UDAY PARTAP SINGH JASWAL (1931141095) herself under my supervision and guidance in the Department of Pharmacology, Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 13/06/2023



Mrs. SHAVINDER KUMARI

(Assistant professor of Pharmacology)

Place: Kathog

Laureate Institute of Pharmacy,

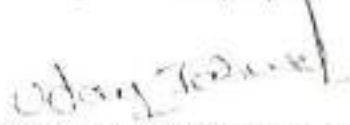
Kathog, Teh. Jwalamukhi

Distt.Kangras,(HP)-177101

## DECLARATION

This is to certify that the project work entitled "Review on **PLANT IN AQUATIC ECOSYSTEM: CURRENT TRENDS AND FUTURE DIRECTIONS**" has not been submitted in parts or full to any other university by me. This is the original work undertaken by me under the supervision of **Mrs. SHAVINDER KUMARI** in the Department of pharmacology, Laureate Institute of Pharmacy, Kathog. Such materials that had been obtained for the research work have been duly acknowledged in the project.

Date: 13/06/2023

  
UDAY PARTAP SINGH JASWAL

Laureate institute of Pharmacy,

Place: Kathog

Kathog, Teh. Jawalamukhi,

Distt.-Kangra, HP-177101

**PROJECT REPORT ON  
PLANT IN AQUATIC ECOSYSTEM: CURRENT TRENDS AND  
FUTURE DIRECTIONS**

**A PROJECT SUBMITTED TO  
HIMACHAL PRADESH TECHNICAL UNIVERSITY,  
HAMIRPUR**



**IN THE PARTIAL FULFILMENT FOR AWARD OF THE DEGREE  
OF**

**BACHELOR OF PHARMACY**

**2023**

**MS. VANSHIKA**

**ROLL NO. 1931141096**

**UNDER THE GUIDENCE OF**

**MRS. SHAVINDER KUMARI**

**(ASST. PROFESSOR OF PHARMACOLOGY)**



**LAUREATE INSTITUTE OF PHARMACY, KATHOG TEH. JAWALAMUKHI,  
DISTT. KANGRA (HP) - 177101**

CERTIFICATE BY PRINCIPAL



This is to certify that the work presented in the project entitled "PLANT IN AQUATIC ECOSYSTEM: CURRENT TRENDS AND FUTURE DIRECTIONS" for the Degree of Bachelor of Pharmacy has been carried out by VANSHIKA herself under the supervision of Mrs. SHAVINDER KUMARI (Assistant Professor of Pharmacology), Laureate Institute of Pharmacy, Kathog. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 16/06/2023

Place: Kathog

DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
TEH. JAWALAMUKHI  
DIST. KANGRA

Prof. (Dr.) M.S. Ashawat

Director cum Principal

Laureate Institute of Pharmacy,

Kathog, Teh. Jawalamukhi,  
Distt. Kangra, (HP)-177101

## CERTIFICATE BY GUIDE

This is to certify that the work presented in the project entitled "PLANT IN AQUATIC ECOSYSTEM: CURRENT TRENDS AND FUTURE DIRECTIONS" for the Degree of Bachelor of pharmacy has been carried out by VANSHIKA (1931141096) herself under my supervision and guidance in the Department of Pharmacology, Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 18/06/2023

Place: Kathog

  
Mrs. SHAVINDER KUMARI

(Assistant professor of Pharmacology)

Laureate Institute of Pharmacy,

Kathog, Teh. Jwalamukhi

Distt.Kangras,(HP)-177101

# A REVIEW ARTICLE ON DIABETES MELLITUS

A Project Submitted to  
Himachal Pradesh Technical University, Hamirpur



In the partial fulfillment of the requirement for the degree of

**BACHELOR OF PHARMACY**

2023

**VARUN BHARDWAJ**

Roll No. 1931141097

*Under the guidance of*

**Mr. AKSHAY THAKUR**

Asst. Professor

Dept. of Pharmaceutics



## CERTIFICATE BY CANDIDATE



I am hereby declare the work described in this project entitled "A Review Article on Diabetes Mellitus" which is being submitted by me in partial fulfillment for the award of Bachelor of Pharmacy in Himachal Pradesh Technical University, Hamirpur, is the result of review carried out by me under the guidance **Mr. AKSHAY THAKUR**(Asst. Professor, Department of Pharmaceutics).

The work is original and has not been submitted for any degree/diploma of this or any university.

Date: 14/06/2023

Place: Lawrence Institute of  
Pharmacy (Kathlog)

A handwritten signature in black ink, appearing to read 'Varun', is written over a horizontal line.

Signature of the Candidate

Mr. VARUN BHARDWAJ

Roll No. BP-1931141097

## CERTIFICATE BY PRINCIPAL



It is certify that the project entitled "A RESEARCH ON QUALITY OF LIFE IN DIABITIES MELLITUS IN INDIA" is a bonafide and genuine work carried out by Mr. VARUN BHARDWAJ(Roll No. BP-1931141097) under the guidance of Mr.AKSHAY THAKUR(Asst. Professor, Department of Pharmaceutics).

The work is original and has not been submitted for any degree/diploma of this or any university.

Date:

Place:



Signature of Principal

Dr. M. S. Ashawat

Principal

Laureate Institute Of Pharmacy

# CERTIFICATE BY GUIDE



It is certify that the project entitled "A RESEARCH ON QUALITY OF LIFE IN DIABETES MELLITUS IN INDIA" submitted by Mr. VARUN BHARDWAJ (Roll No. BP-1931141097) Laureate Institute of Pharmacy, Kathog under my supervision and guidance.

The work is original and has not been submitted for any degree/diploma of this or any university.

**Date:**

A handwritten signature in black ink, appearing to read 'Akshay Thakur', written over a horizontal line.

**Signature of the Guide**

**Place:**

**Mr. AKSHAY THAKUR**

**Asst. Professor**

**Department of Pharmaceutics**

**PROJECT REPORT ON  
PLANT IN AQUATIC ECOSYSTEM: CURRENT TRENDS AND FUTURE  
DIRECTIONS**

**A PROJECT SUBMITTED TO  
HIMACHAL PRADESH TECHNICAL UNIVERSITY,  
HAMIRPUR**



**IN THE PARTIAL FULFILMENT FOR AWARD OF THE DEGREE**

**OF**

**BACHELOR OF PHARMACY**

**2023**

**Mr. VISHAL**

**ROLL NO. 1931141099**

**UNDER THE GUIDENCE OF**

**MRS. SHAVINDER KUMARI**

**(ASST. PROFESSOR OF PHARMACOLOGY)**



**LAUREATE INSTITUTE OF PHARMACY, KATHOG  
TEH. JAWALAMUKHI, DISTT. KANGRA (HP) - 177101**

## DECLARATION

This is to certify that the project work entitled " PLANT IN AQUATIC ECOSYSTEM: CURRENT TRENDS AND FUTURE DIRECTIONS" has not been submitted in parts or full to any other university by me. This is the original work undertaken by me under the supervision Of Mrs. SHAVINDER KUMARI in the Department of pharmacology , Laureate Institute of Pharmacy, Kathog. Such materials that had been obtained for the research work have been duly acknowledged in the project.

Date: 16/06/23

Place: Kathog

*Vishal*

VISHAL

Laureate institute of Pharmacy,


Kathog, Teh. Jawalamukhi,

Distt.-Kangra, HP-177101

## CERTIFICATE BY GUIDE

This is to certify that the work presented in the project entitled "PLANT IN AQUATIC ECOSYSTEM: CURRENT TRENDS AND FUTURE DIRECTIONS" for the Degree of Bachelor of pharmacy has been carried out by VISHAL (1931141099) himself under my supervision and guidance in the Department of Pharmacology, Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 16/06/23

  
Mrs. SHAVINDER KUMARI

(Assistant professor of Pharmacology)

Place: Kathog

Laureate Institute of Pharmacy, Kathog,

Teh. Jawalamukhi, Distt. Kangra,

(HP)- 177101

**CERTIFICATE BY PRINCIPAL**



This is to certify that the work presented in the project entitled "PLANT IN AQUATIC ECOSYSTEM: CURRENT TRENDS AND FUTURE DIRECTIONS" for the Degree of Bachelor of Pharmacy has been carried out by VISHAL himself under the supervision of Mrs. SHAVINDER KUMARI (Assistant Professor of Pharmacology), Laureate Institute of Pharmacy, Kathog. The work has not been submitted in parts or full to any other university in my knowledge.

**Date:** 16/06/23

**Place:** Kathog

**DIRECTOR CUM PRINCIPAL**  
**LAUREATE INSTITUTE OF**  
**PHARMACY KATHOG**  
**TEH. JAWALAMUKHI**  
**DIST. KANGRA (H.P.)**

Laureate Institute of Pharmacy,

Kathog, Teh. Jawalamukhi,

Distt. Kangra, (HP)-177101

**Meta-analysis of the Therapeutic Potential of Edible Mushrooms: A Comprehensive  
Evaluation of Anti-Diabetic and Anti-Inflammatory Effects**

**A Dissertation Submitted to  
Himachal Pradesh Technical University,  
Hamirpur**



**In the partial fulfilment for award of the Degree of**

**BACHELOR OF PHARMACY**

**2023**

**Submitted by**

**MR. VISHAL JAMWAL**

**ROLL NO. 1931141100**

**UNDER THE GUIDENCE OF**

**MR. SHIV KUMAR KUSHAWAHA**



**LAUREATE INSTITUTE OF PHARMACY, KATHOG,  
TEHSIL - JAWALAMUKHI, DISTT. - KANGRA (HP)-177101**

## CERTIFICATE BY PRINCIPAL



This is to certify that the work presented in the project entitled "Meta-analysis of the Therapeutic Potential of Edible Mushrooms: A Comprehensive Evaluation of Anti-Diabetic and Anti-Inflammatory Effects" for the Degree of Bachelor of pharmacy has been carried out by **VISHAL JAMWAL (1931141100)** himself under the supervision of **MR. SHIV KUMAR KUSHAWAHA** Associate Professor and H.O.D OF Pharmacolgy in Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 16/06/2023

Place: LIPh, Kathog

Prof. (Dr.) M. S. Ashawat

Director cum Principal

Laureate Institute of Pharmacy,

Kathog, Teh. Jawalamukhi,

Distt. Kangra, HP- 177101.

DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
TEH. JAWALAMUKHI  
DISTT. KANGRA H.P.

## CERTIFICATE BY GUIDE



This is to certify that the work presented in the project entitled "Meta-analysis of the Therapeutic Potential of Edible Mushrooms: A Comprehensive Evaluation of Anti-Diabetic and Anti-Inflammatory Effects" for the Degree of Bachelor of pharmacy has been carried out by **VISHAL JAMWAL (1931141100)** himself under my supervision and guidance in the Department of Pharmacology, Laureate Institute of Pharmacy. The work has not been submitted in parts or full to any other university in my knowledge.

Date: 16/06/2023

Place: LIPK, Kathog

A handwritten signature in black ink, appearing to read 'S.K.' or similar, positioned above the printed name of the guide.

**M. SHIV KUMAR KUSHAWAHA**

Associate Professor and Head  
Department of Pharmacology  
Laureate Institute of Pharmacy,  
Kathog, Teh. Jawalamukhi,  
Distt. Kangra, HP - 177101

# ETHOSOMES AS NOVEL VESICULAR CARRIER

A Project Submitted to  
Himachal Pradesh Technical University, Hamirpur



In the partial fulfillment of the requirement for the degree of

**BACHELOR OF PHARMACY**

BY

**Satyam Sharma**

**Roll No. 20023114001**

*Under the guidance of*

**Mr. Keshav Dhiman**

**Asst. Professor**

**Department. of Pharmaceutics**



**Laureate Institute of Pharmacy**

Kathog, Teh. Jawala Mukhi Distt. Kangra, (H.P.) Pin code 176031

# CERTIFICATE BY CANDIDATE



I am hereby declare the work described in this project entitled “**Ethosome as a novel vesicular carrier**” which is being submitted by me in partial fulfillment for the award of Bachelor of Pharmacy in Himachal Pradesh Technical University, Hamirpur, is the result of review carried out by me under the guidance Mr. Keshav Dhiman (Asst. Professor Department of Pharmaceutics).

The work is original and has not been submitted for any degree/diploma of this or any university.

Date: 14-06-2023

Place: LIPH, Kathog

Signature of the Candidate

Mr. Satyam Sharma

Roll No. -20023114001

# CERTIFICATE BY GUIDE




It is certify that the project entitled “**Ethosome as a novel vasicular carrier**” submitted by **Mr. Satyam Sharma(20023114001)** Laureate Institute of Pharmacy, Kathog under my supervision and guidance.

The work is original and has not been submitted for any degree/diploma of this or any university.

Date: 14.06.2023

Place: LIPH, Kathog

  
Signature of the Guide  
Mr. Keshav Dhiman

Asst.Professor (Department of  
Pharmaceutics)

# CERTIFICATE BY PRINCIPAL




It is certify that the project entitled "A review on Ethosome" is a bonafide and genuine work carried out by Mr. Satyam Sharma(20023114001) under the guidance of Mr. Keshav Dhiman (Asst. Professor, Department of **Pharmaceutics**).

The work is original and has not been submitted for any degree/diploma of this or any university.

Date: 14-06-2023

Place: LIPh, Kathog

  
DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
Pharmacy KATHOG  
TEH. JAWALAMUKHI  
Distt. Kangra (H.P.)  
Dr. M. S. Ashwari  
Principal  
Laureate Institute of Pharmacy

# A REVIEW ON DIARRHEA IN PEDIATRICS

A Project Submitted to  
Himachal Pradesh Technical University, Hamirpur



In the partial fulfillment of the requirement for the degree of

**BACHELOR OF PHARMACY**

BY

**Varun Acharya**  
Roll No. 20023114002

*Under the guidance of*  
**Dr. Swati Rana**  
Asst. Professor  
Dept. of Pharmacology



**Laureate Institute of Pharmacy**

Káthog, Teh. Jawalamukhi Distt. Kangra, (H.P.) Pin code 177101


# CERTIFICATE BY GUIDE



It is certify that the project entitled "A REVIEW ON DIARRHEA IN PEDIATRICS" submitted by Mr. Varun Acharya (Roll No. -2002314002) Laureate Institute of Pharmacy, kathog under my supervision and guidance.

The work is original and has not been submitted for any degree/diploma of this or any university.

Date:

  
Signature of the Guide

Place:

Dr. Swapn Rana

Asst. Professor

Department of Pharmacology

## CERTIFICATE BY PRINCIPAL



This is to certify that the project entitled "A REVIEW ON DIARRHEA IN PEDIATRICS" is a bonafide and genuine work carried out by Mr. Varun Arshant (Roll No. 20023114002) under the guidance of Dr. Swati Rana (Asst. Professor, Department of Pharmacology).

The work is original and has not been submitted for any degree/diploma of this or any university.

Date: 16/06/22

Place: Kathog

Signature of Principal

Dr. M. S. Arshant

Director cum Principal


Laureate Institute of Pharmacy

DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
TEH. DAWALAMUKHI  
DIST. KANGRA (H.P.)

**LAUREATE INSTITUTE OF PHARMACY**  
**Kathog, Teh. Jawalamukhi, Distt. Kangra (H.P)**  
**M. Pharm. Project list (Session 2022-2023)**  
**Department of Pharmacology**

**List of students**

Sr. No.	Roll No.	Name	Project Entitled
1.	21013119001	Anshul Thakur	Neuroprotective evaluation of Methanolic Extract of <i>Azadirachta Indica L.</i> in AIC13 Induced Cognitive Impairments in Wistar Rats.
2.	21013119002	Ayush Sharma	Renoprotective Potential of <i>Saussurea Obvallata L.</i> In Chemically Induced Kidney Injury in Albino Rats.
3.	21013119003	Balwinder Singh	Neuroprotective Activity of Ethanolic Extract of <i>Pelargonium Inquinans L.</i> Leaf in AIC13 Induced Alzheimer's Disease in Albino Rats.
4.	21013119004	Jyoti Pathania	Neuroprotective Activity of <i>Carissa Caranda L.</i> Ethanolic Extract in Reserpine Induced Parkinson's Disease in Wistar Rats.
5.	21013119005	Kiran Bala	Ameliorate Effect of Ethanolic Extract and Extract-Based Topical Formulation of <i>Bombax Ceiba L.</i> And <i>Curcuma Longa</i> Combination in Testosterone Induced Acne Vulgaris on Rodent.
6.	21013119006	Manisha	Evaluation of Anti-Urolithiatic and Anti-Oxidant Potential of Ethanolic Extract of <i>Cuscuta Reflexa L.</i>

  
**DIRECTOR CUM PRINCIPAL**  
**LAUREATE INSTITUTE OF**  
**PHARMACY KATHOG**  
**TEH. JAWALAMUKHI**  
**DISTT. KANGRA (H.P.)**

7.	21013119008	Palak Sharma	Evaluation of Anti-Hemorrhoid Activities of <i>Cocos Nucifera L.</i> Husk Ash Extract on Croton Oil Induced Hemorrhoid Model in Rats.
8.	21013119009	Shad Ahmad	Neuroprotective Potential of Ethanolic Extract of <i>Hellenia Speciosa</i> (Whole Plant) in AIC13 Neurotoxicity in Laboratory Animals.
9.	21013119012	Simran Choudhary	Neuropharmacological Evaluation of <i>Amaranthus Viridis L.</i> (Whole Plant) Ethanolic Extract on Aluminium Chloride Induced Alzheimer's Disease in Wistar Rats.
10.	21013119013	Vikas	Evaluate the Nootropic, Antioxidant Potential Effect of Ethanolic Extract of <i>Ficus Religiose L.</i> (Pipal Fruit) on Chemically Induced Alzheimer's Disease in Albino Rats.

  
Principal

DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
JEH, JAWALAMUKHI  
DISTT. KANGRA (H.P.)

**NEUROPROTECTIVE EVALUATION OF METHANOLIC  
EXTRACT OF *AZADIRACHTA INDICA* IN AICB INDUCED  
COGNITIVE IMPAIRMENT IN RATS**

*A Dissertation Submitted to Himachal Pradesh Technical University, Hamirpur  
in the Partial Fulfilment for Requirement of the Degree*



**MASTER OF PHARMACY  
IN  
PHARMACOLOGY**

Submitted By:

Anshul Thakur  
Enrolment No.: 21013119001  
Session: 2021-2023

*Under the supervision of*


Mrs. Vandana Bhatia  
Assistant Professor  
Department of Pharmacology



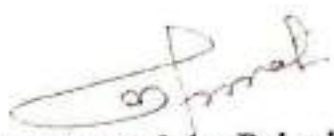
Department of Pharmacology  
Laureate Institute of Pharmacy, Kathog  
Tehsil - Jawalamukhi, Distt. - Kangra (HP)-176031

**Endorsement by the HOD, Principal/Head of the Institution**

is to certify that the Dissertation entitled "*Neuroprotective Evaluation of Ethanolic Extract of Azadirachta indica in AIC13 induced Cognitive Impairment in Mice*" is a bonafide and genuine research work done by *Miss. Anshul Thakur* under the supervision of *Mrs. Vandana Bhatia, Assistant Professor, Department of Pharmacology.*

  
Seal & Signature of the HOD

*Mr. Shiv Kumar Kushawaha*

  
Seal & Signature of the Principal

*Prof. (Dr.) Mahendra Singh Ashawat*

Date: *19/08/23*

Seal of the Institute

Place: *Kathua*

**INVESTIGATION OF NOOTROPIC AND ANTIOXIDANT  
POTENTIAL OF ETHANOLIC FRUIT EXTRACT OF *FICUS  
RELIGIOSA* AGAINST CHEMICALLY INDUCE ALZHEIMER  
IN RATS**

*A Dissertation Submitted to Himachal Pradesh Technical University,  
Hamirpur in the Partial Fulfilment of the requirement for the Degree of*



**MASTER OF PHARMACY**

**IN**

**PHARMACOLOGY**

Submitted By:

**VIKAS KUMAR**

Enrolment No.:21013119013

Session: 2021-2023

*Under the supervision of*

Supervisor

**Mr. Nishant Gautam**

Assistant professor

Department of Pharmacology



Department of Pharmacology

Laureate Institute of Pharmacy, Kathog

Tehsil- Jawalamukhi, Distt. - Kangra (HP)-176031

**ENDORSEMENT BY THE HOD, PRINCIPAL/HEAD OF THE  
INSTITUTION**

This is to certify that the Dissertation entitled "Investigation of Nootropic and Antioxidant Potential of Ethanolic Fruit Extract of *Ficus religiosa* Against Chemically Induce Alzheimer in Rats" is a bonafide and genuine research work done by Mr. Vikas Kumar under the supervision of Mr. Nishant Gautam Assistant Prof. of Pharmacology.



Seal & Signature of the HOD

Mr. Shiv Kumar Kushawaha

Prof. & HOD

Department of Pharmacology



DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG

Seal & Signature of the Principal

Prof. (Dr.) Mahendra Singh Ashawat

Director cum Principal

Laureate Institute of Pharmacy

Date: 9/08/2023

Place: Kathog

Seal of Institute

**RENOPROTECTIVE POTENTIAL OF SAUSSUREA OBVALLATA  
IN CHEMICALLY INDUCED ACUTE KIDNEY INJURY  
IN ABLINO RATS**

*Dissertation Submitted to Himachal Pradesh Technical University, Hamirpur  
in the Partial Fulfillment of the requirement for the Degree of*



**MASTER OF PHARMACY  
IN  
PHARMACOLOGY**

Submitted By:

**AYUSH SHARMA**

Enrolment No.:21013119002

Session: 2021-2023

*Under the supervision of*

Supervisor

**Mrs. Shavinder Kumari**

Assistant professor,

Department of Pharmacology



Department of Pharmacology  
Laureate Institute of Pharmacy, Kathog  
Tehsil- Jawalamukhi, Distt. - Kangra (HP)-176031

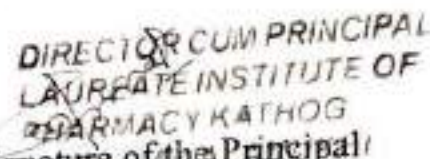
**ENDORSEMENT BY THE HOD, PRINCIPAL/  
HEAD OF THE INSTITUTION**

certify that the Dissertation entitled is a bonafide and genuine research work  
"Renoprotective potential of saussurea obvallata in chemically induced  
kidney injury in albino rats" Mr. Ayush Sharma under the supervision of  
Navinder Kumari Assistant Prof. of Pharmacology.




Signature of the HOD  
Dr. Kumar Kushawaha  
Director & HOD  
Department of Pharmacology

14/08/2023  
Kathog

  
Seal & Signature of the Principal  
Prof. (Dr.) Mahendra Singh Ashawat  
Director cum Principal  
Laureate Institute of Pharmacy

Seal of Institute



**NEUROPROTECTIVE ACTIVITY OF *CARISSA CARANDAS*  
*Lin.* (LEAVES) ON RESERPINE INDUCED PARKINSON'S  
DISEASE IN RATS**

*A Dissertation Submitted to Himachal Pradesh Technical University, Hamirpur  
in the Partial Fulfilment for Award of the-Degree*



**MASTER OF PHARMACY  
IN  
PHARMACOLOGY**

Submitted By:

Jyoti Pathania

Enrolment No.:21013119004

Session:2021-2023

*under the supervision of*

Supervisor

Mr. Shiv Kumar Kushawaha

Head of Department

Department of Pharmacology



Department of Pharmacology  
Laureate Institute of Pharmacy, Kathog  
Tehsil- Jawalamukhi, Distt. - Kangra (HP)-176031

**Endorsement by the HOD, Principal/Head of the Institution**

To certify that the Dissertation entitled "*Neuroprotective Activity of Carissa Carandas (Leaves) on Reserpine Induced Parkinson's Disease in Rats*" is a bonafide and genuine research work done by *Ms. Jyoti Pathania* under the supervision of *Mr. Shiv Kumar Kushawaha, Head of Department, Department of Pharmacology.*



**Signature of the HOD**

*Kumar Kushawaha*

DIRECTOR CUM PRINCIPAL  
LAURIPATE INSTITUTE OF  
PHARMACY KATHOG

**Seal & Signature of the Principal**

*Prof./Dr. Mahendra Singh Ashawat*

10/8/23

: Kothlog

Seal of Institute

**EVALUATION OF ANTIUROLITHIATIC AND  
ANTIOXIDANT POTENTIAL OF ETHANOLIC EXTRACT  
OF CUSCUTA REFLEXA**

*A dissertation submitted to Himachal Pradesh Technical University,  
Hamirpur in the partial fulfilment of the requirement for the Degree of*



**MASTER OF PHARMACY  
IN  
PHARMACOLOGY**



Submitted By:

Manisha

Enrolment no.: 21013119006

Session: 2021-2023

*Under the supervision of*

Mr. Nishant Goutam

Associate Professor of Pharmacology

Department of Pharmacology




Department of Pharmacology

Laureate institute of pharmacy, V.P.O Kathog

Tehsil- Jawalamukhi, Distt- Kangra (H.P)176031

**ENDORSEMENT BY THE HOD, PRINCIPAL/HEAD OF THE  
INSTITUTION**

to verify that the Dissertation entitled "*Evaluation of Antiuro lithiatic and  
oxidant Potential of Ethanolic Extract of Cuscuta Reflexa*" is a bonafide research  
done by *Miss. Manisha* under the guidance of *Mr. Nishant Goutam, Associate  
Professor of Pharmacology.*


  
Signature of the HOD

Kumar Kushawaha

Associate professor & HOD

Laureate Institute of Pharmacy,

Kathog, H.P.

  
Seal & Signature of the principal

Prof./Dr. M.S Ashawat

Director cum Principal,

Laureate Institute of Pharmacy,

Kathog, H.P.

12/08/2023

Kathog

Seal of the Institute

**NEUROPROTECTIVE POTENTIAL OF ETHANOLIC  
EXTRACT OF *HELLENIA SPECIOSA* (WHOLE PLANT)  
IN ALCL<sub>3</sub> INDUCED ALZHEIMER'S DISEASE  
IN LABORATORY ANIMALS**

*A dissertation submitted to Himachal Pradesh Technical University, Hamirpur  
in the partial fulfillment of the requirements for the degree of*



**MASTER OF PHARMACY  
IN  
PHARMACOLOGY**

Submitted By:

**Shad Ahmad**

Enrolment No.: 21013119009

**Session: 2021-2023**

*Under the supervision of*

**Mr. Shiv Kumar Kushawaha**  
Associate Professor and Head,  
Department of Pharmacology



**Department of Pharmacology  
Laureate Institute of Pharmacy, Kathog  
Tehsil-Jawalamukhi, Distt. - Kangra (HP)-176031**

**ENDORSEMENT BY THE HOD, PRINCIPAL/  
HEAD OF THE INSTITUTION**

This is to certify that the Dissertation entitled "*Neuroprotective Potential of Ethanolic Extract of Hellenia Speciosa (whole plant) in AlCl<sub>3</sub> Induced Alzheimer's Disease in Laboratory Animals*" is a bonafide and genuine research work done by *Mr. Shad Ahmad* under the supervision of *Mr. Shiv Kumar Kushawaha, Associate Professor & Head of department of Pharmacology.*



**Seal & Signature of the HOD**  
*Mr. Shiv Kumar Kushawaha*  
Associate professor & HOD  
Laureate Institute of Pharmacy,  
Kathog, H.P.



**Seal & Signature of the Principal**  
*Prof. Dr. Mahendra Singh Ashawat*  
Director cum principal,  
Laureate Institute of pharmacy,  
Kathog, H.P.

DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
J.E.H. JAWALAKIUKHI  
DISTT. KANGRA (H.P.)

**Date:** 26/8/2023

**Place:** Kathog

**Seal of Institute**

**NEUROPHARMACOLOGICAL EVALUATION OF  
AMARANTHUS VIRIDIS L. (WHOLE PLANT)  
ETHANOLIC EXTRACT ON ALUMINIUM  
CHLORIDE-INDUCED ALZHEIMER'S DISEASE  
IN WISTAR RATS**

*Thesis submitted to Himachal Pradesh Technical University, Hamirpur  
in the partial fulfillment of the requirements for the degree of*



**MASTER OF PHARMACY  
IN  
PHARMACOLOGY**

Submitted By:

**Simran Choudhary**

Enrolment No.: 21013119012

**Session: 2021-2023**

*Under the supervision of*

**Mr. Nishant Goutam**


Associate Professor, Department of Pharmacology



**Department of Pharmacology  
Laureate Institute of Pharmacy, Kathog  
Tehsil- Jawalamukhi, Distt. - Kangra (HP)-176031**

**ENDORSEMENT BY THE HOD, PRINCIPAL/HEAD OF THE  
INSTITUTION**

This is to certify that the Dissertation entitled "*Neuropharmacological Evaluation of Amaranthus viridis L. (Whole Plant) Ethanolic Extract on Aluminium chloride-induced Alzheimer's Disease in Wistar Rats*" is a bonafide and genuine research work done by *Ms. Simran Choudhary* under the supervision of *Mr. Nishant Goutam, Associate Professor, Department of Pharmacology.*

  
Seal & Signature of the HOD

*Mr. Shiv Kumar Kushawaha*  
Associate professor & HOD  
Laureate Institute of Pharmacy,  
Kathog, H.P.

Date: *26/08/2023*

Place: *Kathog*

  
Seal & Signature of the Principal

*Prof./Dr. Mahendra Singh Ashawat*

Director cum Principal,

Laureate Institute of pharmacy,  
Kathog, H.P.

DIRECTORY  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
TEH. PITHORGAH  
DIST. KANGRA

Seal of Institute

**Evaluation of Antihemorrhoids Activities of *Cocos nucifera L.*  
Husk Ash Extract on Croton Oil Induced Hemorrhoid  
Model in Albino Rats**

*A dissertation submitted to Himachal Pradesh Technical University, Hamirpur  
in the partial fulfilment of the requirement for the Degree of*



**MASTER OF PHARMACY  
IN  
PHARMACOLOGY**

Submitted By:

**PALAK SHARMA**

Enrolment no.: 21013119008

**Session: 2021-2023**

**Under the supervision of  
Supervisor**

Mr. Shiv Kumar Kushawaha

Associate Professor and Head, Department of Pharmacology



**Department of Pharmacology**

Laureate institute of pharmacy, V.P.O Kathog

Tehsil- Jawalamukhi, Distt- Kangra (H.P) 176031

**ENDORSEMENT BY THE HOD, PRINCIPAL/**

**HEAD OF THE INSTITUTION**

This is to verify that the Dissertation entitled "Evaluation of Antihemorrhoids Activities of *Cocos nucifera* Husk Ash Extract on Croton Oil Induced Hemorrhoid Model in Albino Rats" is a bonafide research work done by Miss. Palak Sharma under the guidance of Mr. Shiv Kumar Kushawaha, Associate professor & Head of department of Pharmacology.

Seal & Signature of the HOD

Mr. Shiv Kumar Kushawaha  
Associate professor & HOD  
Laureate Institute of Pharmacy,  
Kathog, H.P.

Seal & Signature of the principal

Prof./Dr. M.S Ashawat  
Director cum Principal,  
Laureate Institute of Pharmacy,  
Kathog, H.P.

Date: 10/08/23

Place: Kathog

**NEUROPROTECTIVE ACTIVITY OF *PELARGONIUM  
INQUINANS* AGAINST ALUMINIUM CHLORIDE-  
INDUCED ALZHEIMER'S DISEASE IN WISTAR RAT**

*A Dissertation Submitted to Himachal Pradesh Technical University, Hamirpur  
in the Partial Fulfillment for Award of the Degree*



**MASTER OF PHARMACY  
IN  
PHARMACOLOGY**

Submitted By:

**Balwinder Singh**  
Enrolment No.: 21013119003

**Session: 2021-2023**

*Under the supervision of*

**Mr. Shiv Kumar Kushawaha**  
Associate Professor & Head  
Department of Pharmacology




**Department of Pharmacology  
Laureate Institute of Pharmacy, Kathog  
Tehsil - Jawalamukhi, Distt. - Kangra (HP)-176031**

**ENDORSEMENT BY THE HOD, PRINCIPAL/  
HEAD OF THE INSTITUTION**

This is to certify that the Dissertation entitled "*Neuroprotective Activity of Pelargonium inquinans against Aluminium Chloride induced Alzheimer's Disease in Wistar Rats*" is a bonafide and genuine research work done by *Mr. Balwinder Singh* under the supervision of *Mr. Shiv Kumar Kushawaha, Associate Professor & Head, Department of Pharmacology.*



Seal & Signature of the HOD  
*Mr. Shiv Kumar Kushawaha*



DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
TEH. JAWALAMUKHI  
JALANDHAR (H.P.)

Seal & Signature of the Principal  
*Prof. (Dr.) Mahendra Singh*

Date: 08/08/23

Place: Kathog

Seal of the Institute

**LAUREATE INSTITUTE OF PHARMACY**  
**Kathog, Teh. Jawalamukhi, Distt. Kangra (H.P)**  
**M. Pharm. Project list (Session 2022-2023)**  
**Department of Pharmaceutics**

**List of students**

Sr. No.	Roll No.	Name	Project Entitled
1.	21013117001	Abhay Koundal	Development and evaluation of topical formulation containing Fexofenadine Hydrochloride
2.	21013117002	Akshay Kumar	Development and Evaluation of floating tablets containing piperine and amoxicillin for the treatment of peptic ulcer.
3.	21013117003	Akshay Saxena	Formulation and evaluation of liposomes of Piperine for treatment of vitiligo
4.	21013117004	Anjali	Development and evaluation of rutin ethosomes for the treatment of psoriasis
5.	21013117005	Anjali Kumari	Formulation and evaluation of liposomes loaded in situ gel for treatment of glaucoma
6.	21013117006	Ankush Dogra	To formulate and evaluate mucoadhesive in situ gel of mefenamic acid and tranexamic acid for the treatment of Menorrhagia
7.	21013117007	Parag Sharma	Formulation and evaluation of topical cream containing phytoconstituent for the treatment of Atopic Dermatitis
8.	21013117008	Prabal Braat Sharma	Design, formulation and evaluation of herbal hair gel for the treatment of Alopecia
9.	21013117009	Priya Kumari	Formulation and evaluation of liposomal in situ gel of piperine for the treatment of epilepsy
10.	21013117010	Rahul Kumar	Formulation and evaluation of microsponges of naringenin for the treatment of psoriasis
11.	21013117011	Ritik Chaudhary	Formulation and evaluation of liposomal in situ gel of silymarin for the treatment of parkinsonism
12.	210131170012	Ritika Saini	Formulation and evaluation of topical formulation of Doxipen and Acyclovir for the management of Herpes virus
13.	210131170013	Shamli	Formulation and evaluation of mucoadhesive in situ gel of linezolid and aceclofenac for the treatment of periodontitis
14.	210131170014	Vivek Sharma	Formulation and evaluation of microemulsion containing curcumin, piperine and walnut oil for the treatment of gastric adenocarcinoma
15.	210131170015	Yukti Mahajan	Development and evaluation of topical gel containing natural polysaccharide as polymer for treatment of rheumatoid arthritis

**DIRECTOR PRINCIPAL**  
**LAUREATE INSTITUTE OF**  
**PHARMACY KATHOG**  
**TEH. JAWALAMUKHI**  
**DISTT. KANGRA (H.P.)**

**FORMULATION AND EVALUATION OF MUCOADHESIVE  
IN SITU VAGINAL GEL OF MEFENAMIC ACID AND  
TRANEXAMIC ACID IN THE TREATMENT OF  
MENORRHAGIA.**

*Dissertation submitted to Himachal Pradesh Technical University, Hamirpur  
in the partial fulfillment of the requirements for the degree of*



**MASTER OF PHARMACY  
IN  
PHARMACEUTICS**



Submitted by:  
Ankush Dogra  
Roll No.:21013117006  
Session: 2021-2023

*Under the supervision of*

Supervisor  
Mr. Tarun Kumar Sharma  
Assistant Professor,  
Department of Pharmaceutics  
LIPH, Kathog

Co-supervisor  
Mrs. Archana Chaudhary  
Assistant Professor,  
Department of Pharmaceutics  
LIPH, Kathog



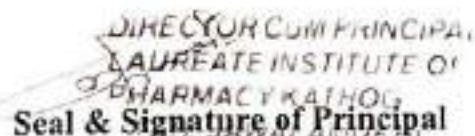
Department of Pharmaceutics  
Laureate Institute of Pharmacy, Kathog  
Tehsil-Jawalamukhi Distt-Kangra (H.P)-176031

**ENDORSEMENT BY THE HOD, PRINCIPAL/  
HEAD OF THE INSTITUTION**

This is to certify that the Dissertation entitled "Formulation and evaluation of mucoadhesive *in situ gel* of Mefenamic Acid and Tranexamic Acid in the treatment of Menorrhagia" is a bonafide research work done by *Ankush Dogra* under the guidance of *Mr. Tarun Kumar Sharma Assistant Professor in Pharmaceutics*.

  
Seal & Signature of the HOD

*Dr. Pravin Kumar*

  
Seal & Signature of Principal

*Dr. M.S. Ashawat*

Date: 27/07/2023

Place: Kothing

Seal of Institute

**FORMULATION AND EVALUATION OF CREAM OF  
DOXIPEN & ACYCLOVIR FOR THE COMBINATION  
THERAPY OF HERPES VIRUS INFECTION**

*A Dissertation Submitted to Himachal Pradesh Technical University, Hamirpur  
in the Partial Fulfillment for Award of the Degree*



**MASTER OF PHARMACY  
IN  
PHARMACEUTICS**

Submitted By:  
**RITIKA SAINI**  
Enrolment No.:21013117012

**Session: 2021-2023**

*Under the supervision of*

Supervisor  
**Dr. Pravin Kumar**  
Associate Professor and Head of  
Department of Pharmaceutics

Co-Supervisor  
**Ms. Dimple Kumari**  
Assistant Professor, Department  
of Pharmaceutics



**Department of Pharmaceutics**  
Laureate Institute of Pharmacy, Kathog  
Tehsil - Jawalamukhi, Distt. - Kangra (HP)-176031

## ENDORSEMENT BY THE PRINCIPAL



It is to certify that the Dissertation entitled "Formulation and Evaluation of Cream of Doxipen & Acyclovir for the Combination Therapy of Herpes Virus Infection" is a bonafide research work done by Ms. Ritika Saini under the guidance of Dr. Pravin Kumar (Associate Professor and Head, Department of Pharmaceutics).

Date: 28/09/23  
Place: Kathog

DIRECTOR CUM PRINCIPAL  
LEUREATE INSTITUTE  
OF PHARMACY KATHOG  
JAMSHEDPUR  
JHARKHAND  
Seal & Signature of the Principal  
Prof. (Dr.) M.S. Ashawat  
Director cum Principal

# FORMULATION AND EVALUATION OF LOMEFLOXACIN HCL LIPOSOMES LOADED *IN SITU* GEL FOR TREATMENT OF CONJUNCTIVITIS

*A Dissertation Submitted to Himachal Pradesh Technical University, Hamirpur  
in the Partial Fulfilment of the Requirement for the Degree of*



## MASTERS OF PHARMACY IN PHARMACEUTICS

Submitted by:  
**ANJALI KUMARI**  
Enrolment No.:21013117005

**Session: 2021-2023**

**Supervisor**  
**Mr. Devraj Sharma**  
Assistant Professor  
Department of Pharmaceutics

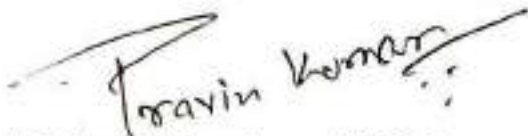
**Co-Supervisor**  
**Dr. Vinay Pandit**  
Deputy Registrar  
Sardar Vallabhbhai Patel  
University (Mandi)



**Department of Pharmaceutics**  
Laureate Institute of Pharmacy, Kathog  
Tehsil- Jawalamukhi, Distt- Kangra (H.P) -176031

**ENDORSEMENT BY THE HOD, PRINCIPAL/HEAD OF THE  
INSTITUTION**

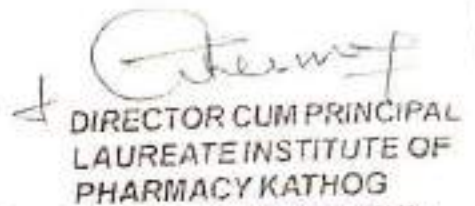
This is to certify that the Dissertation entitled "*Formulation and Evaluation of Lomefloxacin HCl Liposomes Loaded In Situ gel for Treatment of Conjunctivitis*" is a bonafide research work done by *Anjali* in partial fulfilment of the requirement for the degree of *Masters of Pharmacy*.



**Seal and Signature of HOD**

**Dr. Pravin Kumar**

*Associate Professor and Head  
Department of Pharmaceutics  
Laureate Institute of Pharmacy*



**Seal and Signature of Principal**  
**Dr. M.S. Ashawat**

*Laureate Institute of Pharmacy,  
Kathog*

**Date:** 29/9/23

**Place:** Kathog

**Seal of Institute**

# FORMULATION AND EVALUATION OF LIPOSOME LOADED GEL OF PIPERINE FOR TREATMENT OF VITILIGO

*A dissertation submitted to Himachal Pradesh Technical University, Hamirpur  
in the partial fulfillment of the requirements for the degree of*



## MASTER OF PHARMACY IN PHARMACEUTICS

Submitted By:

**AKSHAY SAXENA**

Enrolment No.: 21013117003

*Under the supervision of*

**Supervisor**

**MR. DEVRAJ SHARMA**

Assistant Professor

Dept. of Pharmaceutics

Laureate Institute of Pharmacy,

Kathog

**Co-supervisor**

**Ms. ARCHANA CHAUDHARY**

Assistant Professor

Dept. of Pharmaceutics

Laureate Institute of Pharmacy,

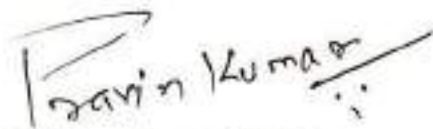
Kathog



**Department of Pharmaceutics  
Laureate Institute of Pharmacy, Kathog  
Tehsil- Jawalamukhi, Distt. - Kangra (HP)-176031**

**APPROVAL BY THE HOD, PRINCIPAL/HEAD OF THE  
INSTITUTION**

to certify that the Dissertation entitled "**Formulation and Evaluation of  
some loaded gel of Piperine for the Treatment of Vitiligo**" is a bonafide research  
done by **Akshay Saxena** in partial fulfilment of the requirement for the degree of  
Masters of Pharmacy.



**Seal and Signature of HOD**

**Dr. Pravin Kumar**

Associate Professor and Head  
Department of Pharmaceutics  
Laureate Institute of Pharmacy  
Kathog, H.P.



**Seal and Signature of Principal**

**Dr. M.S. Ashawat**

Director cum Principal  
Laureate Institute of Pharmacy  
Kathog, H.P.

Date:

Place:

Seal of Institute

# FORMULATION AND EVALUATION OF MUCOADHESIVE IN SITU GEL OF LINEZOLID AND ACECLOFENAC IN THE TREATMENT OF PERIODONTITIS

*A Dissertation submitted to Himachal Pradesh Technical University, Hamirpur  
in the partial fulfillment of the requirements for the degree of*



## MASTER OF PHARMACY IN PHARMACEUTICS

Submitted by:

Shamli

Enrollment No.: 21013117013

2021-2023

*Under the supervision of*

Supervisor

Mr. Tarun Kumar Sharma  
Assistant Professor,  
Department of Pharmaceutics  
LIPH, Kathog

Co-supervisor

Mrs. Archana Chaudhary  
Assistant Professor,  
Department of Pharmaceutics  
LIPH, Kathog



Department of Pharmaceutics  
Laureate Institute of Pharmacy, Kathog

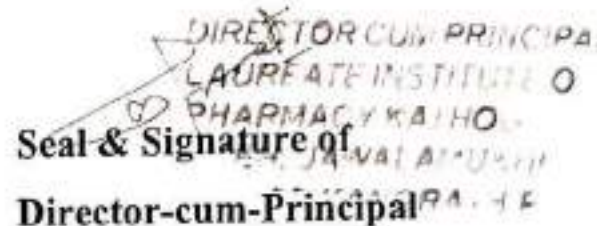
**ENDORSEMENT BY THE HOD, PRINCIPAL/  
HEAD OF THE INSTITUTION**

is to certify that the Dissertation entitled "*Formulation and evaluation of adhesive In situ gel of Linezolid and Aceclofenac sodium in the treatment of dentitis*" is a bonafide research work done by *Shamli* under the guidance of *Mr. Tarun ar Sharma, Assistant Professor, (Department of Pharmaceutics)*.



**al & Signature of the HOD**

*Pravin Kumar*



DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOGA  
JAWAHAR NAGAR  
KATHOGA

*Dr. M. S. Ashawat*

ite: 26-07-2023

ace: Kathog

Seal of Institute

# DEVELOPMENT AND EVALUATION OF THE TOPICAL PRODUCT CONTAINING FEXOFENADINE HYDROCHLORIDE

*A Dissertation Submitted to Himachal Pradesh Technical University, Hamirpur  
in the Partial Fulfilment of the Requirement for the Degree of*



## MASTER OF PHARMACY IN PHARMACEUTICS

Submitted by:

**ABHAY KOUNDAL**

Roll no: 21013117001

**Session: 2021-2023**

### *Supervisor*

Dr. M.S. Ashawat  
Prof. & Director Cum Principal

### *Co-Supervisor*

Ms. Dimple Kumari  
Asst. Prof. of Pharmaceutics




**Department of Pharmaceutics**  
Laureate Institute of Pharmacy, Kathog  
Tehsil- Jawalamukhi, Distt- Kangra (H.P) – 177105

**DORSEMENT BY THE PRINCIPAL**



I hereby certify that the Dissertation entitled "Development and evaluation of the product containing Fexofenadine hydrochloride" is a bonafide research work of Mr. Abhay Koundal under the guidance of Dr. M.S. Ashawat (Prof. & Director cum Principal Laureate Institute of Pharmacy, Kathog)

Date 11/09/2023  
Kathog

  
Seal & Signature of the Principal  
Prof. (Dr.) M.S. Ashawat  
Director cum Principal

**Formulation and Evaluation of Floating Drug Delivery System  
of Amoxicillin Trihydrate Containing Bioenhancer for the  
Treatment of H. pylori Induced Peptic Ulcer**

*A dissertation submitted to Himachal Pradesh Technical University, Hamirpur  
in the partial fulfillment of the requirements for the degree of*



**MASTER OF PHARMACY  
IN  
PHARMACEUTICS**

Submitted by:  
**AKSHAY KUMAR**  
Enrolment No.: 21013117002  
(2021-2023)

*Under the Supervision of*  
**Dr. Pravin Kumar**  
Associate Professor and Head,  
Department of Pharmaceutics



**Laureate Institute of Pharmacy, Kathog  
Tehsil- Jawalamukhi, Distt. - Kangra  
Himachal Pradesh - 176031**

**ENDORSEMENT BY THE HOD, PRINCIPAL/HEAD OF THE  
INSTITUTION**

This is to certify that the Dissertation entitled "*Formulation and Evaluation of Floating Drug Delivery System of Amoxicillin Trihydrate Containing Bioenhancer for the Treatment of H. Pylori Induced Peptic Ulcer*" is a bonafide research work done by *Akshay Kumar* in partial fulfilment of the requirement for the degree of *Masters of Pharmacy*.



**Seal and Signature of HOD**  
***Dr. Pravin Kumar***  
**Associate Professor and Head**  
**Department of Pharmaceutics**  
**Laureate Institute of Pharmacy**



**Seal and Signature of Principal**  
***Dr. M.S Ashawat***  
**Laureate Institute of Pharmacy**  
**Kathog**

**FORMULATION AND EVALUATION OF NARINGENIN  
LOADED MICROSPONGE GEL FOR THE  
MANAGEMENT OF PSORIASIS**

*A Dissertation submitted to Himachal Pradesh Technical University,  
Hamirpur in the partial Fulfillment of the Requirement for the degree of*



**MASTERS OF PHARMACY  
IN  
PHARMACEUTICS**

Submitted by:  
**RAHUL KUMAR**  
Roll no: 21013117010  
(2021-2023)

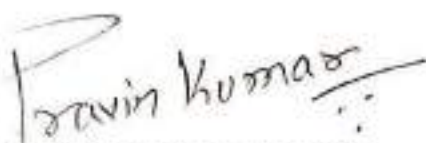
*Under the Supervision of*  
**Dr. Shammy Jindal**  
Associate Professor, Department of Pharmaceutics



**Laureate Institute of Pharmacy Kathog,**  
Tehsil. Jawalamukhi, Distt. Kangra  
Himachal Pradesh- 176031

**ENDORSEMENT BY THE HOD, PRINCIPAL/  
HEAD OF THE INSTITUTION**

This is to certify that the Dissertation entitled "*Formulation and Evaluation of Curcumin Loaded Microsponge Gel for the Management of Psoriasis*" is a bonafide research work done by *Rahul Kumar* in partial fulfilment of the requirement for the degree of *Masters of Pharmacy*.



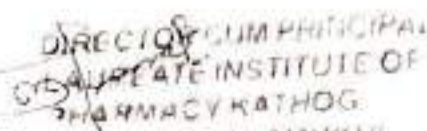
Seal and Signature of HOD

*Dr. Pravin Kumar*

*Associate Professor and Head*

*Department of Pharmaceutics*

*Laureate Institute of Pharmacy*



Seal and Signature of Principal

*Prof. (Dr). M.S. Ashawat*

*Laureate Institute of Pharmacy,*

*Kathog*

Date: 21/08/23

Place: Kathog

Seal of Institute

# Design, Formulation and Evaluation of Herbal Hair Gel for the Treatment of Alopecia

A Dissertation submitted to Himachal Pradesh Technical University,  
Hamirpur in the partial Fulfillment of the Requirement for the degree of



## MASTERS OF PHARMACY IN PHARMACEUTICS

Submitted by:

**PRABAL BRATT SHARMA**

Roll no: 21013117008

(2021-2023)

### Supervisor

Mr. Tarun K. Sharma

Assistant Professor

Department of Pharmaceutics

### Co-Supervisor

Dr. Vinay Pandit

Deputy Registrar

Sardar Vallabhbhai Patel

University (Mandi)



Laureate Institute of Pharmacy Kathog, Tehsil. Jawalamukhi,

Distt. Kangra Himachal Pradesh- 176031

**ENDORSEMENT BY THE HOD, PRINCIPAL/HEAD OF THE  
INSTITUTION**

It is to certify that the Dissertation entitled "Design, Formulation and Evaluation of Herbal hair gel for the Treatment of Alopecia" is a bonafide research work done by Mahesh Bratt Sharma in partial fulfilment of the requirement for the degree of Masters in Pharmacy.

*Mahesh Bratt Sharma*  
and Signature of HOD

Mahesh Bratt Sharma  
Associate Professor and Head  
Department of Pharmaceutics  
Laureate Institute of Pharmacy

*Prof. (Dr.) Mahendra Singh Ashawat*  
Seal and Signature of Principal

Prof. (Dr.) Mahendra Singh Ashawat  
Director cum Principal  
Laureate Institute of Pharmacy  
Kathog, Jawalamukhi (176031)

Date: 07-07-2023  
Place: Kathog

Seal of Institute

**FORMULATION AND EVALUATION OF MICROEMULSION  
CONTAINING CURCUMIN, PIPERINE AND WALNUT OIL FOR  
THE TREATMENT OF GASTRIC ADENOCARCINOMA**

*A Dissertation Submitted to Himachal Pradesh Technical University, Hamirpur  
in the Partial Fulfilment for Requirement of the Degree*



**MASTERS OF PHARMACY  
IN  
PHARMACEUTICS**

Submitted by:

**VIVEK SHARMA**

Roll no: 21013117014

**Session: 2021-2023**

**Supervisor**

Prof. (Dr.) M.S. Ashawat  
Director cum Principal  
Laureate Institute of Pharmacy  
Kathog, Kangra, H.P.

**Co-Supervisor**

Dr. Pravin Kumar  
Associate Professor and Head,  
Department of Pharmaceutics




**Department of Pharmaceutics**  
Laureate Institute of Pharmacy, Kathog  
Tehsil - Jawalamukhi, Distt. - Kangra (HP)-176031

## CERTIFICATE BY THE SUPERVISOR

This is certified that the Dissertation entitled "*Formulation and evaluation of microemulsion containing curcumin, piperine and walnut oil for the treatment of gastric adenocarcinoma*" is a bonafide research work done by *Mr. Vivek Sharma* in partial fulfilment of the requirement for the degree of *Masters of Pharmacy*.

Date: 06/09/2023

Place: Kathog

  
Signature of Guide

Prof. (Dr.) M.S. Ashawat

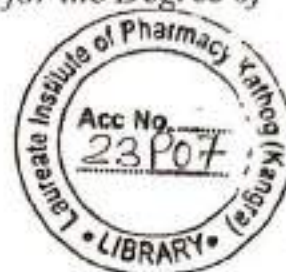
Director cum Principal

Laureate Institute of Pharmacy

Kathog, Kangra, H.P

# DEVELOPMENT AND EVALUATION OF NATURAL POLYSACCHARIDE GEL CONTAINING KETOPROFEN FOR TREATMENT OF RHEUMATOID ARTHRITIS

*A Dissertation Submitted to Himachal Pradesh Technical University,  
Hamirpur in the Partial Fulfilment of the requirement for the Degree of*



## MASTER OF PHARMACY IN PHARMACEUTICS

Submitted by:

**YUKTI MAHAJAN**

Enrollment No: 21013117015

Session-2021-2023

*Under the supervision of*

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Mr. Dev Raj Sharma

Assistant Professor

Department of Pharmaceutics

LIPH, Kathog

Co-supervisor

Mrs. Archana Chaudhary

Assistant Professor

Department of Pharmaceutics

LIPH, Kathog



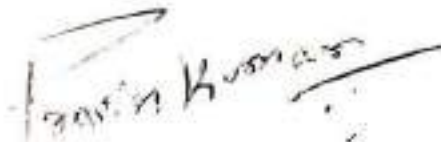
**DEPARTMENT OF PHARMACEUTICS**

Laureate Institute of Pharmacy, Kathog

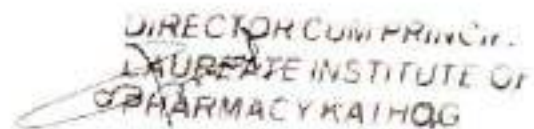
Tehsil- Jawalamukhi, Distt. - Kangra (HP)-176031



This is to certify that the Dissertation entitled "Development and Evaluation of natural Polysaccharide Gel Containing Ketoprofen for Treatment of Rheumatoid arthritis" is a bonafide research work done by Yukti Mahajan under the guidance of Dev Raj Sharma, Assistant Professor, Department of Pharmaceutics.

  
& Signature of the HOD

Pravin Kumar

  
Seal & Signature of the Principal,  
DIST. KANGRA (H.P.)

Dr. M.S. Ashawat

Date: 26-7-23

Place: Kathog

Seal of Institute

**DEVELOPMENT AND ASSESSMENT OF RUTIN ETHOSOMAL  
GEL FOR TREATMENT OF PSORIASIS.**

*A Dissertation Submitted to Himachal Pradesh Technical University, Hamirpur  
in the Partial Fulfilment of the Requirement for the Degree of*



**MASTER OF PHARMACY  
IN  
PHARMACEUTICS**

Submitted by:

**ANJALI**

Enrolment No.:21013117004

**Session: 2021-2023**

*Under the supervision of*

Supervisor

**Mr. AJAY KUMAR**

Assistant Professor



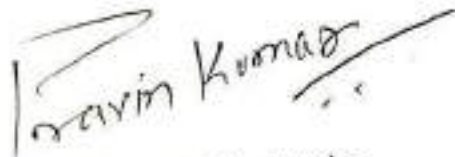
**Department of Pharmaceutics**

Laureate Institute of Pharmacy, Kathog

Tehsil- Jawalamukhi, Distt- Kangra (H.P) – 177105

**ENDORSEMENT BY THE HOD, PRINCIPAL/  
HEAD OF THE INSTITUTION**

I hereby verify that the Synopsis "Development and assessment of Rutin Ethosomal treatment of psoriasis" is a bonafide research work done by Anjali under the supervision of Mr. Ajay Kumar, Associate professor



Seal & Signature of the HOD  
Pravin Kumar  
Associate professor & HOD  
Laureate Institute of Pharmacy,  
Kathog, H.P.



Seal & Signature of the Principal  
Prof. (Dr.) M.S Ashawat  
Director cum Principal,  
Laureate Institute of Pharmacy,  
Kathog, H.P.

Date: 05/09/2023

Place: Kathog

**LAUREATE INSTITUTE OF PHARMACY**  
**Kathog, Teh. Jawalamukhi, Distt. Kangra (H.P)**  
**M. Pharm. Project list (Session 2022-2023)**  
**Department of PAQA**  
**List of students**

Sr. No.	Roll no.	Name	Project Entitled
1.	21013118001	Abhishek saini	Method Development and Validation for Simultaneous Estimation of Acyclovir and Doxipin Hydrochloride in Bulk Drug by using UV-Visible Spectrophotometer and RP-HPLC
2.	21013118002	Akshay	Method Development and Validation for Simultaneous Estimation of Ranolazine and Ivabradine in Bulk Drug by using UV-Visible Spectrophotometer and RP-HPLC
3.	21013118003	Aman sharma	Stability indicating robust UV-Visible spectrophotometer and RP-HPLC method development for simultaneous estimation of Azilsartan and Hydrochlorothiazide in bulk drug and tablet formulation
4.	21013118004	Anchal Gangotia	Efficient and Robust RP-HPLC and UV Method Development and Validation for Simultaneous Estimation of SITAGLIPTIN and GLIMIPRIDE in Bulk Drug
5.	21013118005	Ashish Dhiman	Method Development and Validation for Simultaneous Estimation of Vildagliptin and Valsartan in Bulk Drug by using UV-Visible Spectrophotometer and RP-HPLC
6.	21013118006	Attish Bhardwaj	Method Development and Validation for Simultaneous Estimation of Cilnidipine and Hydrochlorothiazide in Bulk Drug by using UV-Visible Spectrophotometer And RP-HPLC

  
**Principal**  
**DIRECTOR CUM PRINCIPAL**  
**LAUREATE INSTITUTE OF**  
**PHARMACY KATHOG**  
**(TEH. JAWALAMUKHI,**  
**DISTT. KANGRA (H.P.)**

7.	21013118007	Himanshu Sharma	Method Development and Validation for Simultaneous Estimation of Lornoxicam and Hydroxychloroquine sulphate in Bulk Drug by using UV-Visible Spectrophotometer And RP-HPLC
8.	21013118008	Prince Thakur	Efficient RP-HPLC And UV Method Development and Validation for Simultaneous Estimation of Emtricitabine And Dolutegravir Sodium In Bulk Drug
9.	21013118009	Ritik sharma	Stability indicating robust RP-HPLC method development of Vildagliptin and N-Acetyl-L-Cysteine in bulk drug and tablet formulation
10.	21013118010	Sidharath Pathania	Method Development and Validation for Simultaneous Estimation of Vildagliptin and Irbesartan in Bulk Drug by using UV-Visible Spectrophotometer And RP-HPLC
11.	21013118011	Sonia	Method Development and Validation for Simultaneous Estimation of cilnidipine and Candesartan Cilexetil in Bulk Drug by using UV-Visible Spectrophotometer And RP-HPLC

  
 Principal  
 LAUREATE INSTITUTE OF  
 PHARMACY KATHOG  
 TEH. JAWALAMUKHI  
 DISTT. KANGRA (H.P.)

**METHOD DEVELOPMENT AND VALIDATION FOR  
SIMULTANEOUS ESTIMATION OF LORNOXICAM  
AND HYDROXYCHLOROQUINE SULPHATE IN BULK  
DRUG BY USING UV-VISIBLE SPECTROPHOTO  
METER AND RP-HPLC**

*Dissertation Submitted to Himachal Pradesh Technical University, Hamirpur  
in the Partial Fulfilment for Award of the Degree*



23PA05  
#34

**MASTER OF PHARMACY  
IN  
PHARMACEUTICAL ANALYSIS AND QUALITY ASSURANCE**

Submitted By:

Himanshu Sharma  
Enrolment No.: 21013118007  
Session: 2021-2023

*under the supervision of*

Supervisor  
Dr. C.P.S Verma  
Prof./Head of Department,  
Department of Pharmacognosy

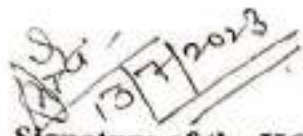
Co-Supervisor  
Mrs. Shanu Priya  
Assistant Professor,  
Department of Pharmaceutical  
chemistry



• Department of Pharmaceutical Analysis & Quality Assurance  
Laureate Institute of Pharmacy, Kathog  
Tehsil - Jawalamukhi, Distt. - Kangra (HP)-176031


**ENDORSEMENT BY THE HOD, PRINCIPAL/HEAD OF THE  
INSTITUTION**

to certify that the Dissertation entitled "*Method Development and Validation for  
meous Estimation of Lornoxicam and Hydroxychloroquine Sulphate in Bulk Drug  
g UV-Visible Spectrophotometer and RP-HPLC*" is a bonafide and genuine research  
done by *Mr. Himanshu Sharma* under the supervision of *Dr. C.P.S Verma*,  
lead of Department, Department of Pharmacognosy and co-supervision of *Mrs.  
Priya, Assistant Professor, Department of Pharmaceutical chemistry.*

  
13/7/2023

**Signature of the HOD**

*Dr. Amar Deep Ankalagi*



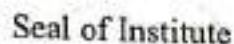
**Seal & Signature of the Principal**

*Prof./Dr. Mahendra Singh Ashawat*

18-July-2023

Kathlog

**Seal of Institute**



**EFFICIENT RP-HPLC & UV METHOD DEVELOPMENT AND  
VALIDATION FOR SIMULTANEOUS ESTIMATION OF  
AZILSARTAN MEDOXOMIL AND HYDROCHLOROTHIAZIDE IN  
BULK DRUG**

*A Dissertation Submitted to Himachal Pradesh Technical University, Hamirpur  
in the Partial Fulfilment of the requirements for the Degree of*



**MASTER OF PHARMACY  
IN  
PHARMACEUTICAL ANALYSIS AND QUALITY ASSURANCE**

Submitted By:

Aman Sharma

Enrolment No.: 21013128003

Session: 2021-2023

*Under the supervision of*

Supervisor

Dr. Amar Deep Ankalgi  
Prof./Head of Department,  
Department of Pharmaceutical Analysis  
& Quality Assurance

Co-Supervisor

Mrs. Upasana Thakur  
Assistant Professor,  
Department of Pharmaceutical  
Chemistry



Department of Pharmaceutical Analysis & Quality Assurance  
Laureate Institute of Pharmacy, Kathog  
Tehsil- Jawalamukhi, Distt. - Kangra (HP)-176031

**ENDORSEMENT BY THE HOD, PRINCIPAL/HEAD OF THE  
INSTITUTION**

is to certify that the Dissertation entitled "Efficient RP-HPLC & UV Method  
opment and Validation for Simultaneous estimation of Azilsartan Medoxomil and  
ochlorothiazide in Bulk drug" is a bonafide and genuine research work done by Mr.  
a Sharma under the supervision of Dr. Amar Deep Ankalgi, Prof./Head of  
artment, Department of Pharmaceutical Analysis & Quality Assurance and co-  
vision of Mrs. Upasana Thakur, Assistant Professor, Department of  
maceutical chemistry.



Signature of the HOD


Dr. Amar Deep Ankalgi

HOD

Department of Pharmaceutical  
Analysis & Quality Assurance

Date: 27-07-2023

Place: Kathog



DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
JAWALAMUKHI  
DISTT. KANGRA (H.P.)

Seal & Signature of the Principal  
Prof. (Dr.) Mahendra Singh Ashawat

Director cum Principal

Laureate Institute of Pharmacy,  
Kathog, Jawalamukhi (176031)



Seal of Institute

**METHOD DEVELOPMENT AND VALIDATION FOR  
SIMULTANEOUS ESTIMATION OF VILDAGLIPTIN AND  
LOSARTAN POTASSIUM IN BULK DRUG BY USING RP-  
HPLC**

*Thesis Submitted to Himachal Pradesh Technical University, Hamirpur  
in the Partial Fulfilment of the requirement for Degree of*



**MASTER OF PHARMACY  
IN  
PHARMACEUTICAL ANALYSIS AND QUALITY ASSURANCE**

Submitted By:

**Sidharath Pathania**  
Enrolment No.: 21013118010  
Session: 2021-2023

*Under the supervision of*

Supervisor  
**Dr. Amar Deep Ankalgi**  
Professor and Head, Pharmaceutical  
Analysis and Quality Assurance


Co-Supervisor  
**Mrs. Upasana Thakur**  
Assistant Professor, Pharmaceutical  
chemistry




Department of Pharmaceutical Analysis & Quality Assurance  
Laureate Institute of Pharmacy, Kathog  
Tehsil - Jawalamukhi, Distt. - Kangra (HP)-176031

**Endorsement by the HOD, Principal/Head of the Institution**

This is to certify that the Dissertation entitled "*Method Development and Validation for Simultaneous Estimation of Vildagliptin and Losartan Potassium in Bulk Drug by using RP-HPLC*" is a bonafide and genuine research work done by *Mr. Sidharath Pathania* under the supervision of *Dr. Amar Deep Ankalgi, Professor and head, Dept. of Pharmaceutical Analysis and Quality Assurance* and co-supervision of *Mrs. Úpasana Thakur, Assistant Professor, Pharmaceutical chemistry.*

  
Seal & Signature of the HOD

*Dr. Amar Deep Ankalgi*

  
Seal & Signature of the Principal

*Dr. Mahendra Singh Ashawat*

Date: *30-06-2023*

Place: *Kathug*

Seal of Institute



**METHOD DEVELOPMENT AND VALIDATION FOR  
SIMULTANEOUS ESTIMATION OF VILDAGLIPTIN  
AND VALSARTAN IN BULK DRUG BY  
USING RP-HPLC**

*Dissertation Submitted to Himachal Pradesh Technical University, Hamirpur  
in the Partial Fulfilment for Award of the Degree*



23/11/24  
100  
100

**MASTER OF PHARMACY  
IN  
PHARMACEUTICAL ANALYSIS AND QUALITY ASSURANCE**

Submitted By:

Ashish Dhiman

Enrolment No.: 21013118005

Session: 2021-2023

*under the supervision of*

Supervisor

Dr. Amar Deep Ankalgi  
Professor and Head, Pharmaceutical  
Analysis and Quality Assurance

Co-Supervisor

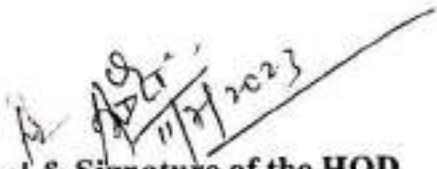
Mr. Nikhil Sharma  
Assistant Professor  
Pharmaceutical Chemistry



Department of Pharmaceutical Analysis & Quality Assurance  
Laureate Institute of Pharmacy, Kathog, Tehsil - Jawalamukhi,  
Distt. - Kangra (HP)-176031

**ENDORSEMENT BY THE HOD, PRINCIPAL/HEAD OF THE  
INSTITUTION**

It is to certify that the Dissertation entitled "*Method Development and Validation for Simultaneous Estimation of Vildagliptin and Valsartan in Bulk Drug by using RP-HPLC*" is a bonafide and genuine research work done by *Mr. Ashish Dhiman* under the supervision of *Dr. Amar Deep Ankalgi, Professor and Head, Dept. of Pharmaceutical Analysis and Quality Assurance* and co-supervision of *Mrs. Nikhil Sharma, Assistant Professor, Pharmaceutical chemistry.*

  
Seal & Signature of the HOD

  
Seal & Signature of the Principal

*Dr. Mahendra Singh Ashawat*

Date: 11-07-23

Place: Katlug

Seal of Institute

# EFFICIENT RP-HPLC & UV METHOD DEVELOPMENT AND VALIDATION FOR SIMULTANEOUS ESTIMATION OF EMTRICITABINE AND DOLUTEGRAVIR SODIUM IN BULK DRUG

*A dissertation submitted to Himachal Pradesh Technical University, Hamirpur in  
the partial fulfilment of the requirements for the degree of*



23PA02

## MASTER OF PHARMACY IN PHARMACEUTICAL ANALYSIS & QUALITY ASSURANCE

Submitted By:

Prince Thakur

Roll No. 21013118008

Session: 2021- 2023

*Under the supervision of*

**Supervisor**

Dr. Amar Deep Ankalgi  
Prof./Head of Department

Department of Pharmaceutical Analysis &  
Quality Assurance

**Co-Supervisor**

Ms. Astha Sharma  
Assistant Prof.

Department of Pharmaceutical  
Chemistry



Department of Pharmaceutical Analysis & Quality Assurance  
Laureate Institute of Pharmacy, Kathog  
Tehsil - Jawalamukhi, Distt. - Kangra (HP)-176031

**ENDORSEMENT BY THE HOD, PRINCIPAL/HEAD OF INSTITUTION**

This is to certify that the dissertation entitled "Efficient RP-HPLC & UV Method Development and Validation for Simultaneous Estimation of Emtricitabine and Dolutegravir Sodium in Bulk Drug" is a bonafide research work done by Prince Thakur under the guidance of Dr. Amar Deep Ankalgi, Professor & HOD, Ms. Astha Sharma Assistant Professor, Department of Pharmaceutical Analysis & Quality Assurance.

 *A.D.A.*  
Apt. 25/5/2023.

Seal & Signature of the HOD

Dr. Amar Deep Ankalgi

Professor & HOD

Department of pharmaceutical  
Analysis & Quality Assurance



Seal & Signature of Principal

Prof. (Dr.) M.S. Ashawat Director cum  
Principal

Laureate Institute of Pharmacy,  
Kathog, Jawalamukhi (176031)

Date: 25 May, 2023

Place: KATHOG.

Seal of Institute



**METHOD DEVELOPMENT AND VALIDATION FOR  
SIMULTANEOUS ESTIMATION OF ACYCLOVIR AND  
DOXEPIN HYDROCHLORIDE IN BULK DRUG BY USING  
UV-VISIBLE SPECTROPHOTOMETER AND RP-HPLC**

*A dissertation submitted to Himachal Pradesh Technical University, Hamirpur  
in the partial fulfilment of the requirement for the Degree of*



**MASTER OF PHARMACY  
IN  
PHARMACEUTICAL ANALYSIS AND QUALITY ASSURANCE**

Submitted By:

Abhishek Saini

Enrolment No.: 21013118001

Session: 2021-2023

*Under the supervision of*

Supervisor

Mrs. Arti Devi

Associate Professor, Department of  
Pharmaceutical Analysis &  
Quality Assurance

Co-Supervisor

Mr. Nikhil Sharma

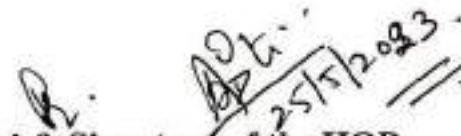
Assistant Professor, Department of  
Pharmaceutical chemistry




Department of Pharmaceutical Analysis & Quality Assurance  
Laureate Institute of Pharmacy, Kathog  
Tehsil - Jawalamukhi, Distt. - Kangra (HP)-176031

**Endorsement by the HOD, Principal/Head of the Institution**

This is to certify that the Dissertation entitled "*Method Development and Validation for Simultaneous Estimation of Acyclovir and Doxepin Hydrochloride in Bulk Drug by using UV-Visible Spectrophotometer and RP-HPLC*" is a bonafide and genuine research work done by *Mr. Abhishek Saini* under the supervision of *Mrs. Arji Devi, Associate Professor, Department of Pharmaceutical Analysis & Quality Assurance* and co-supervision of *Mr. Nikhil Sharma, Assistant Professor, Department of Pharmaceutical chemistry.*

  
Seal & Signature of the HOD

*Prof./Dr. Amar Deep Ankalagi*

  
Seal & Signature of the Principal

*Prof./Dr. Mahendra Singh Ashawat*

Date: *25 May 2023*

Place: *Kaithag, India*

Seal of Institute



**METHOD DEVELOPMENT AND VALIDATION FOR SIMULTANEOUS ESTIMATION OF SIFAGLEPTINE PHOSPHATE MONOHYDRATE AND GLIMEPERIDE IN BULK DRUG BY USING UV-VISIBLE SPECTROPHOTOMETER AND RP-HPLC**

*A Dissertation Submitted to Himachal Pradesh Technical University, Himmatnagar  
in the Partial Fulfillment for Award the Degree*



**MASTER OF PHARMACY  
IN  
PHARMACEUTICAL ANALYSIS AND QUALITY ASSURANCE**

Submitted by

**Anchal Gangotra**

Enrollment No. 21013118004

Session: 2021-2023

*Under the supervision of*

Supervisor

**Dr. Amardeep Arkalgi**

Head of Department,  
Pharmaceutical Analysis &  
Quality Assurance

Co-Supervisor

**Mrs. Arli Devi**

Associate Professor, Department of  
Pharmaceutical Analysis &  
Quality Assurance



Department of Pharmaceutical Analysis & Quality Assurance  
Laureate Institute of Pharmacy, Kathog  
Tahsil - Jawalamukhi, Distt. - Kangra (HP) - 176031

by the HOD, Principal/ Head of the Institution

the Dissertation entitled "Method Development and Validation for  
ation of Sitagliptine Phosphate monohydrate and Glimepride Bulk  
Visible Spectrophotometer and RP-HPLC" is a bonafide and genuine  
ow by Miss. Anchal Gangotia under the supervision of Dr. Amardeep  
sor & Head of Department of Pharmaceutical Analysis & Quality  
co-supervision of Mrs. Arti Devi, Associate Professor, Department of  
al Analysis & Quality Assurance.

Signature of the HOD

Amar Deep Ankalgi

DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
TEH. JAWALAMUKHI  
SHIMLA (H.P.)

Seal & Signature of the Principal  
Prof./Dr. Mahendra Singh Ashwat

11/7/2023  
Kathog

Seal of Institute



**METHOD DEVELOPMENT AND VALIDATION FOR  
SIMULTANEOUS ESTIMATION OF CILNIDIPINE AND  
NDESARTAN CILEXETIL IN BULK DRUG BY USING UV-  
VISIBLE SPECTROPHOTOMETER AND RP-HPLC**

*Dissertation Submitted to Himachal Pradesh Technical University, Hamirpur  
in the Partial Fulfilment for Award of the Degree*



**MASTER OF PHARMACY  
IN  
PHARMACEUTICAL ANALYSIS AND QUALITY ASSURANCE**

Submitted By:

Sonia

Enrolment No.: 21013118011

Session: 2021-2023

*Under the supervision of*

Supervisor  
Mrs. Arti Devi  
Associate Professor  
Department of Pharmaceutical  
Analysis & Quality Assurance

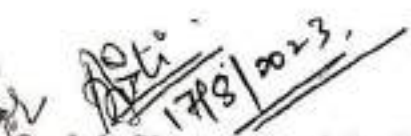
Co-Supervisor  
Ms. Astha Sharma  
Assistant Professor  
Department of Pharmaceutical Chemistry




Department of Pharmaceutical Analysis & Quality Assurance  
Laureate Institute of Pharmacy, Kathog  
Tehsil - Jawalamukhi, Distt. - Kangra (HP)-176031

**Endorsement by the HOD, Principal/Head of the Institution**

This is to certify that the Dissertation entitled "*Method Development and Validation for Simultaneous Estimation of Cilnidipine and Candesartan Cilexetil in Bulk Drug by using UV-Visible Spectrophotometer and RP-HPLC*" is a bonafide and genuine research work done by *Ms. Sonia* under the supervision of *Mrs. Arti Devi, Associate Professor, Department of Pharmaceutical Analysis & Quality Assurance* and co-supervision of *Ms. Astha Sharma, Assistant Professor, Department of Pharmaceutical chemistry.*

  
Seal & Signature of the HOD

Prof. (Dr.) Amar Deep Ankalgi

  
Seal & Signature of the Principal  
Prof. (Dr.) Mahendra Singh Ashawat

Date: 17/08/23

Place: Kathog, India

Seal of Institute

**METHOD DEVELOPMENT AND VALIDATION FOR  
SIMULTANEOUS ESTIMATION OF RANOLAZINE AND  
IVABRADINE IN BULK DRUG BY USING UV-VISIBLE  
SPECTROPHOTOMETER AND RP-HPLC**

*A Dissertation Submitted to Himachal Pradesh Technical University, Hamirpur  
in the Partial Fulfilment for Award of the Degree*



**MASTER OF PHARMACY  
IN  
PHARMACEUTICAL ANALYSIS AND QUALITY ASSURANCE**

Submitted By:

Akshay Dogra

Enrolment No. : 21013118002

Session : 2021-2023

*under the supervision of*

Supervisor

Mrs. Upasana Thakur

Assistant Professor, Department of  
Pharmaceutical Chemistry

Co-Supervisor

Mrs. Arti Devi

Associate Professor, Department of  
Pharmaceutical Analysis & Quality  
Assurance



Department of Pharmaceutical Analysis & Quality Assurance

Laureate Institute of Pharmacy, Kathog

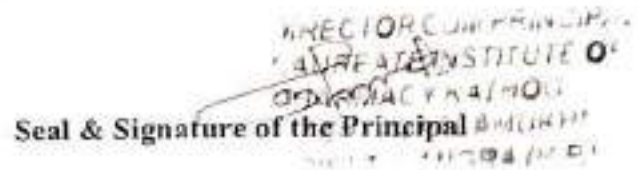
Tehsil - Jawalamukhi, Distt. - Kangra (HP)-176031

**ENDORSEMENT BY THE HOD, PRINCIPAL/HEAD OF THE  
INSTITUTION**

is to certify that the Dissertation entitled "*Method Development and Validation for Simultaneous Estimation of Ranolazine and Ivabradine in Bulk Drug by using UV-Visible Spectrophotometer and RP-HPLC*" is a bonafide and genuine research work done by *Mr. Akshay Dogra* the supervision of *Mrs. Upasana Thakur, Assistant Professor, Department of Pharmaceutical Chemistry* and under co-supervision of *Mrs. Anjali Devi, Associate Professor, Department of Pharmaceutical Analysis & Quality Assurance.*

  
Signature & Signature of the HOD

Prof. (Dr.) Amar Deep Ankalagi

  
Seal & Signature of the Principal

Prof. (Dr.) Mahendra Singh Ashawat

Date: 23-08-2023

Place: Kothog, Jwalasimkhi.

Seal of Institute

**METHOD DEVELOPMENT AND VALIDATION FOR  
SIMULTANEOUS ESTIMATION OF CILNIDIPINE AND  
HYDROCHLOROTHIAZIDE IN BULK DRUG BY USING UV-VISIBLE  
SPECTROPHOTOMETER AND RP-HPLC**

*Dissertation Submitted to Himachal Pradesh Technical University, Hamirpur  
in the Partial Fulfilment of the requirements for the Degree of*



**MASTER OF PHARMACY  
IN  
PHARMACEUTICAL ANALYSIS AND QUALITY ASSURANCE**

Submitted By:

Attish Bhardwaj

Enrolment No.:21013118006

Session:2021-2023

*Under the supervision of*

Supervisor

Dr. Amar Deep Ankalgi

Prof./Head of Department,

Department of Pharmaceutical Analysis  
& Quality Assurance

Co-Supervisor

Mrs. Upasana Thakur

Assistant Professor,

Department of Pharmaceutical  
Chemistry



Department of Pharmaceutical Analysis & Quality Assurance  
Laureate Institute of Pharmacy, Kathog  
Tehsil- Jawalamukhi, Distt. - Kangra (HP)-176031

**Endorsement by the HOD, Principal/Head of the Institution**

I hereby certify that the Dissertation entitled "Method Development & Validation for Simultaneous Estimation of Cilnidipine and Hydrochlorothiazide in Bulk Drug by using UV Spectrophotometer and RP-HPLC" is a bonafide and genuine research work done by Mr. Attish Bhardwaj under the supervision of Dr. Amar Deep Ankalgi, Head of Department, Department of Pharmaceutical Analysis & Quality Assurance and co-supervision of Mrs. Upasana Thakur, Assistant Professor, Department of Pharmaceutical Chemistry.



Signature of the HOD

Dr. Amar Deep Ankalgi

HOD

Department of Pharmaceutical

Analysis & Quality Assurance

27/07/2023

Kathog, India



Seal & Signature of the Principal

Prof. (Dr.) Mahendra Singh Ashawat

Director cum Principal

Laureate Institute of Pharmacy,

Kathog, Jawalamukhi (176031)

Seal of Institute





# Laureate Institute of Pharmacy

(Approved by PCI & AICTE, New Delhi and H.P. Govt.)  
Affiliated to Himachal Pradesh Technical University, Hamirpur  
V.P.O. Kathog, Tehsil Jawalamukhi, Distt. Kangra, H.P. (177101)

No. ....

Date .....

## REPORT

ON

Industrial Visit B. Pharm Fourth Year

Date:-27.MAY.2023



PLACE OF VISIT-PLOT NO.25,30,31 IND. AREA, NAGROTA BAGWAN,  
HIMACHAL PRADESH

AYUSH HERB,S AND PHARMACEUTICALS

*[Signature]*  
 DIRECTOR CUM PRINCIPAL  
 LAUREATE INSTITUTE OF  
 PHARMACY KATHOG  
 JAWALAMUKHI  
 KANGRA (H.P.)

V.P.O KATHOG, TEHSIL JAWALAMUKHI, DISTT. KNAGRA, H.P. 176031

WEBSITE: [WWW.LAUREATEINSTITUTE.IN](http://WWW.LAUREATEINSTITUTE.IN) OR E-MAIL: [CONTACTLAUREATE@GMAIL.COM](mailto:CONTACTLAUREATE@GMAIL.COM)



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# Laureate Institute of Pharmacy

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f. No. ....

Date .....

**DATE: 25.MAY.23**

## Notice


This is to inform all the students that the college is organizing an industrial visit 27.5.23 for final year students of B. Pharmacy. All the students are directed to attend the industrial visit without any failure

### Objective of Industrial Visit:

1. To create awareness about manufacturing process of industry.
2. To give industrial exposure
3. To understand the various processes of manufacturing of the common dosage form viz. Tablets, capsules, liquid orals.

**Departure Time: 09:30 A.M.**

**Approximate Arrived Time: 5:00 PM**

Principal   
**Dr. M.S. Ashawat**  
DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
TEH. JAWALAMUKHI  
DISTT. KANGRA (H.P.)

## A REPORT ON ONE DAY INDUSTRIAL VISIT

**Place of Visit-** Plot no.25, 30, 31 Ind. Area, Nagrota Bagwan, Himachal Pradesh, Ayush Herb's and Pharmaceuticals

**Date:**27.05.23

A batch of Laureate Institute of B. Pharmacy 4<sup>th</sup> Year students along with Faculty Mr. Ajay and Ms. Pratibha visited the Ayush Herbs and Pharmaceuticals at, Nagrota Bagwan, Kangra, H.P. Best wishes for the visit given by Dr. M.S Ashawat Principal of Laureate Institute of Pharmacy Kathog. This visit was mainly focused on to understand the procedure involved during the manufacturing of different dosage form and the various equipments used in the manufacturing process. Students were split into two groups Dr. Jitender Sodhi Owner of the company and Ms. Neha explained about the various facilities available inside the industry, their method of manufacturing and their storage. They also explained about the maintenance of the equipment and ethics consider during manufacturing and storage. Students visited the Quality control department, HPLC, GC and Production Department, Packaging department also. Total 66 number of students were present in the visit. All the students moved from the campus sharp at 9:30 AM and reached at Ayush Herb's and Pharmaceuticals at 11:30 AM. The visit was started from 12:00 PM and completed at 2:00 PM. After completion the journey of students, they take their lunch and return back to college at 5:00 pm.

### OUTCOMES OF THE VISIT:

Students will be able to understand about the procedure in Production area.

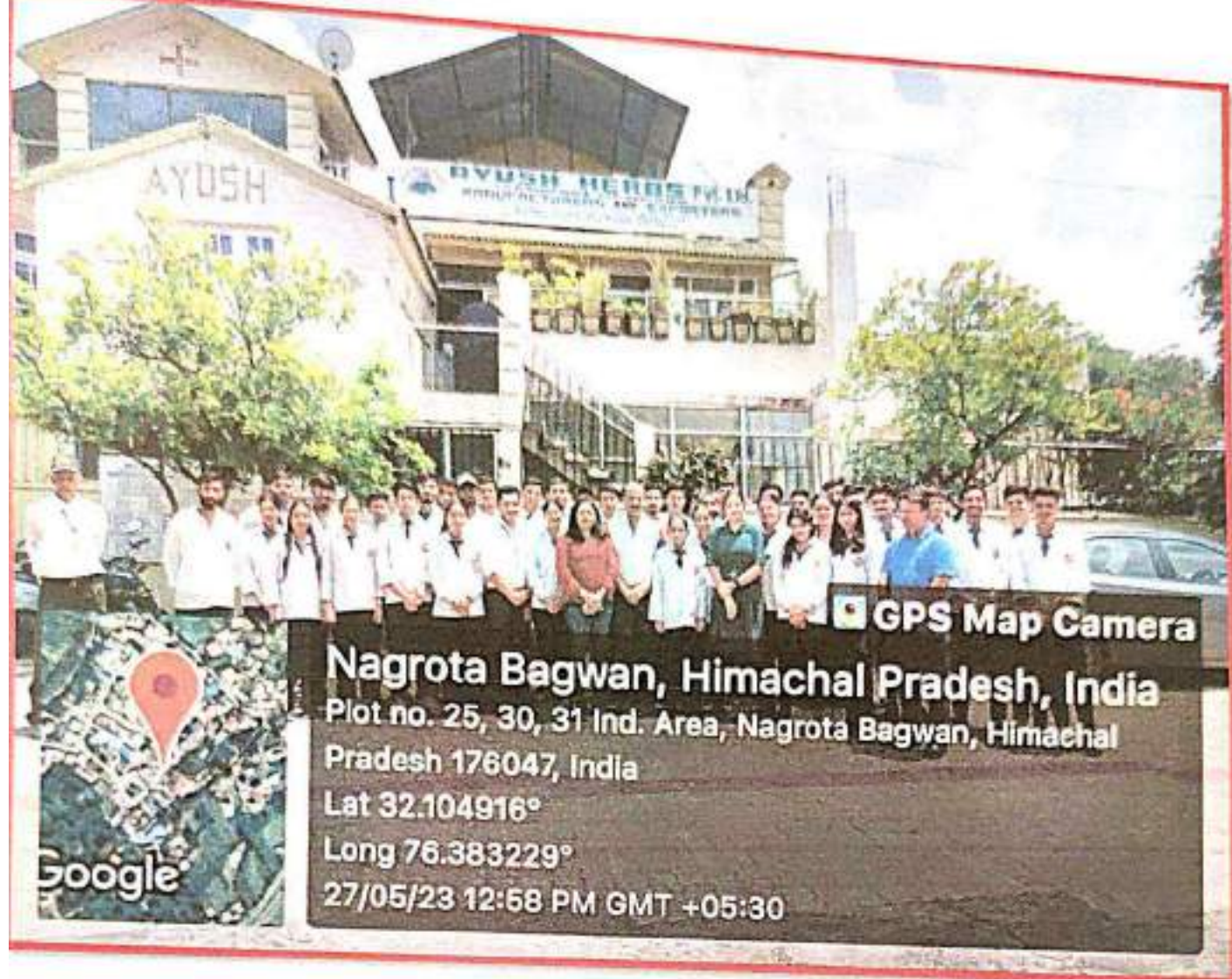
Students learn about various steps involved in the tablet, capsule manufacturing and packaging of tablet and capsule.

Understand about the working of HPLC and GC.

Students will be able to understand about the Soxhlet apparatus.

Understand the procedure of the different types of granulators, dryers and tablet compression machine.

  
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LAUREATE INSTITUTE OF  
PHARMACY KATHOG



*Sapnet*  
DIRECTOR/CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
TEH. JAWALAMUKHI  
DISTT. KANGRA (H.P.)

V.P.O KATHOG, TEHSIL JAWALAMUKHI, DISTT. KNAGRA, H.P. 176031  
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**LAUREATE INSTITUTE OF PHARMACY**  
**Kathog, Teh. Jawalamukhi, Distt. Kangra (H.P)**  
**Industrial Visit (Session 2022-2023)**  
**List of students**


Sr. No.	Roll. No.	Name of Student
1.	1931141001	Abhay
2.	1931141002	Abhay Kumar
3.	1931141003	Abhay Puri
4.	1931141004	Abhishek Chauhan
5.	1931141005	Abhishek Guleria
6.	1931141006	Ajay kumar
7.	1931141007	Akanksha
8.	1931141008	Akrit Verma
9.	1931141009	Amit kashyap
10.	1931141010	Amita Devi
11.	1931141011	Anchal Devi
12.	1931141012	Anjali
13.	1931141013	Anmol Sharma
14.	1931141014	Anshul Choudhary
15.	1931141015	Anshul Katoch
16.	1931141016	Anshul koundal
17.	1931141017	Anshul Saini
18.	1931141018	Arush Sharma
19.	1931141019	Arvind kumar
20.	1931141020	Aryan
21.	1931141021	Ashish Sharma
22.	1931141022	Ayush Bhardwaj
23.	1931141023	Ayush Gautam
24.	1931141024	Badal Singh
25.	1931141025	Deepak Sharma
26.	1931141026	Devi Singh
27.	1931141027	Dheeraj
28.	1931141028	Divyanshi
29.	1931141029	Ekansh Sharma
30.	1931141030	Gopal Kumar
31.	1931141031	Gourav
32.	1931141033	Gourav Banyal
33.	1931141034	Gourav Singh
34.	1931141035	Harshita

  
Principal  
DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
TEH. JAWALAMUKHI  
DISTT. KANGRA (H.P.)

35.	1931141036	Himani Sharma
36.	1931141037	Jahnvi Sharma
37.	1931141038	Kajal
38.	1931141039	Kamakshi
39.	1931141040	Kamini Thakur
40.	1931141041	Kanak Guleria
41.	1931141042	Kanika
42.	1931141043	Kashish
43.	1931141044	Khushboo
44.	1931141045	Kritika Rana
45.	1931141046	Manjeet Singh
46.	1931141047	Mehak Sharma
47.	1931141048	Minakshi
48.	1931141049	Mohit Kumar
49.	1931141050	Nancy Bhardwaj
50.	1931141051	Neeraj Kumari
51.	1931141052	Neha Bharti
52.	1931141053	Nikhil
53.	1931141054	Nikhil Rana
54.	1931141055	Nishad Malik
55.	1931141056	Pardyum Kaushal
56.	1931141057	Parvez Khan
57.	1931141058	Prajwal Metha
58.	1931141059	Pranshul Awasthi
59.	1931141060	Pradham Sharma
60.	1931141061	Priya Rana
61.	1931141062	Rahil Randhawa
62.	1931141063	Rahul Bhardwaj
63.	1931141064	Rahul Thakur
64.	1931141065	Ramesh Kumar
65.	1931141066	Richa Sharma
66.	1931141067	Riya Parmar

  
 DIRECTOR / PRINCIPAL  
 LAUREATE INSTITUTE OF  
 PHARMACY  
 75th Anniversary  
 2017

67.	1931141068	Rohan Thakur
68.	1931141069	Rohit Dhillon
69.	1931141070	Ruchika
70.	1931141071	Sagar Kumar
71.	1931141072	Sahil Chopra
72.	1931141073	Sahil choudhary
73.	1931141074	Sahil randhewa
74.	1931141075	Sahil Sharma
75.	1931141076	Saksham kaistha
76.	1931141077	Sakshi
77.	1931141078	Sanket Sharma
78.	1931141079	Saurav Chaudhary
79.	1931141080	Sehdev Chandel
80.	1931141081	Shagun Choudhary
81.	1931141082	Shalini Sharma
82.	1931141083	Shipali Sharma
83.	1931141085	Shubhdeep Singh
84.	1931141086	Simran
85.	1931141087	Simran
86.	1931141088	Sourabh Kumar
87.	1931141089	Sushant Thakur
88.	1931141090	Sweety Rajwal
89.	1931141091	Tamanna Kumari
90.	1931141092	Tanish kumar
91.	1931141093	Tarun
92.	1931141094	Tejaswani Bhardwaj
93.	1931141095	Uday Partap SinghJaswal
94.	1931141096	Vanshika
95.	1931141097	Varun Bhardwaj
96.	1931141099	Vishal
97.	1931141100	Vishal Jamwal
98.	20023114001	Satyam
99.	20023114002	Varun

  
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 DISTT. KANGRA (H.P.)



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# Laureate Institute of Pharmacy

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Affiliated to Himachal Pradesh Technical University, Hamirpur  
V.P.O. Kathog, Tehsil Jawalamukhi, Distt. Kangra, H.P. - 177101

## Report


## On

## Herbal Garden Visit B.Pharm 3<sup>rd</sup> Year

Date: 29/04/2023



Place of visit: Herbal Garden, Neri, Hamirpur, (Himachal Pradesh), Pin - 177001

  
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LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
TEH. JAWALAMUKHI  
KANGRA (H.P.)



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# LAUREATE INSTITUTE OF PHARMACY

(Approved by PCI & AICTE, New Delhi and H.P. Govt., Under Section 2(f) of UGC Act 1956)  
Affiliated to Himachal Pradesh Technical University, Hamirpur  
V.P.O Kathog, Tehsil Jawalamukhi, Distt. Kangra, H.P.(176031)

Ref. No. ....

Date:.....

To

The Herbal Garden In charge

Neri, Hamirpur

Subject - Visit to Neri herbal garden

Sir,

Laureate Institute of Pharmacy, (H.P. T. U. Off Campus Research Center), which was started in the year 2007 with a vision to nurture talent into all round excellence by providing an educational experience which is intellectually inspiring and technologically innovative and produces not just professionals but visionaries of tomorrow. This ISO certified and IAO accredited Institute is now running B. Pharmacy programme and Post Graduate courses (M. Pharmacy programme in Pharmaceutics, Pharmacology and Pharmaceutical analysis and quality assurance). The Institute is duly approved by PCI, AICTE and is affiliated to Himachal Pradesh Technical University, Hamirpur as well as recognised by University Grant Commission, New Delhi; under section 2(f) of UGC Act 1956. Sir, we request you to kindly allow our student to visit your herbal garden, Neri on 29<sup>th</sup> April, 2023. We will be very thankful to you.

Thanking you

  
Director cum Principal

**Prof. (Dr.) M. S. Ashawat**  
DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
TEH. JAWALAMUKHI  
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V.P.O. Kathog, Tehsil Jawalamukhi, Distt. Kangra, H.P. (177101)

Date: 27/04/2023

## NOTICE

This is to inform all the students that the college is organizing an Herbal Garden visit on 29<sup>th</sup> April 2023 for 3<sup>rd</sup> Year students of B. Pharm. All the students are directed to attend the herbal garden visit without any failure.

### **Objectives of Herbal Garden visit:**

1. To create awareness about medicinal plant.
2. To witness and understand the nature of various medicinal plants.
3. To learn about taxonomic knowledge and identification of the local plants.

**Departure Time: 9:00 A.M**

**Approximate Arrival Time: 3:30 P.M.**

  
Principal

**Prof. (Dr.) M.S Ashawat**  
DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
TEN, JAWALAMUKHI  
DISTT. KANGRA (H.P.)

## A REPORT ON ONE DAY HERBAL GARDEN VISIT

Place of visit: Herbal Garden, Neri, Hamirpur, (Himachal Pradesh), Pin – 177001


Date: 29<sup>th</sup> April, 2023

The students of B. Pharm<sup>3<sup>rd</sup></sup> Year of Laureate Institute of Pharmacy were taken to field visit of herbal garden along with their teachers Ms. Rinu Rana and Mr. Ajay Kumar. A group of 106 students visited Herbal Garden Neri, Hamirpur, (H.P.). All the students reached the campus at 9:00 am. The Director cum Principal of Laureate Institute of Pharmacy, Dr. M. S. Ashawat gave best wishes for the visit. This visit was mainly focused on to understanding the nature of various medicinal plants discussed in theory and practical courses.

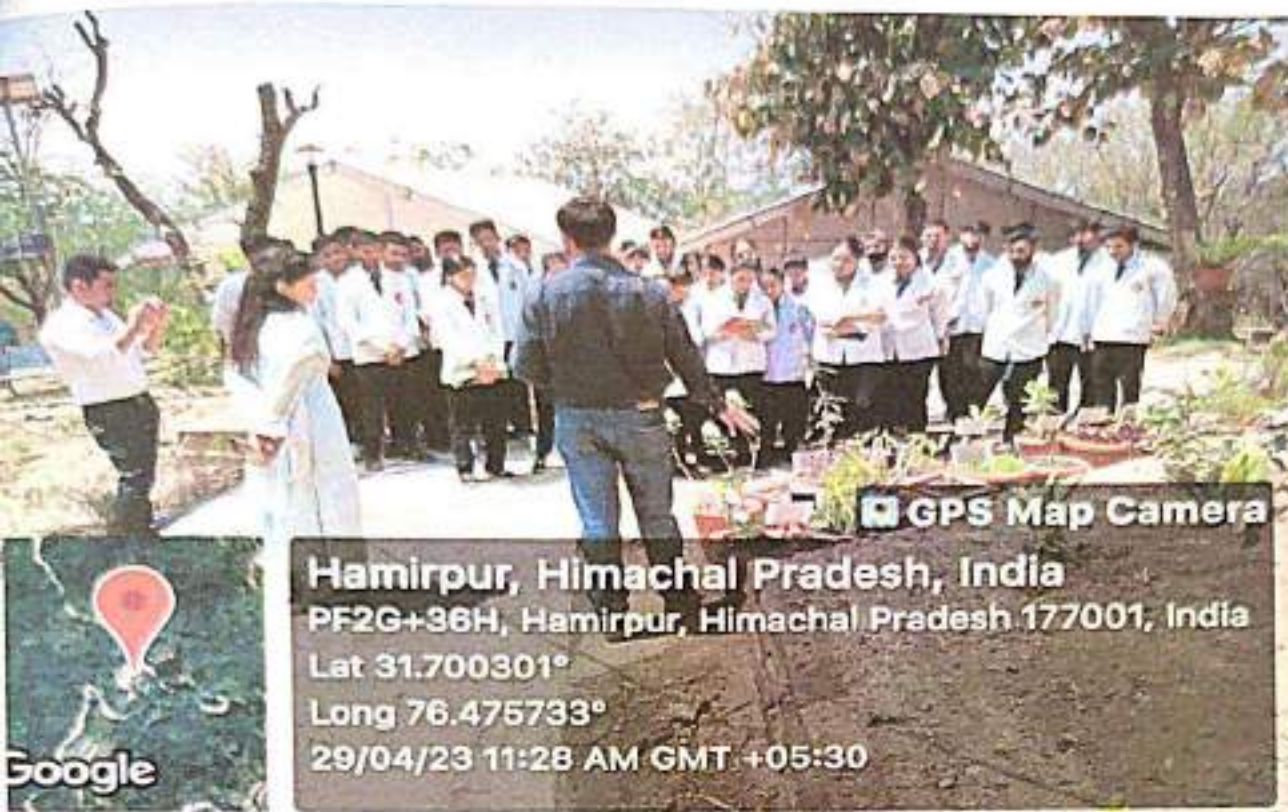
The students reached at herbal garden by 10:45 am. The visit started at 11:00 am. Dr. Kamal Bhardwaj, In charge of herbal garden, Neri, Hamirpur explained about medicinal plants and their uses. The herbal garden provides valuable information on various plants and act as outer laboratory for students and scientific researchers. Students saw various medicinal plants like Nagkesar, Mandukparni, Insulin, Henna, Kurchi tree, Shatavari, Stevia, Karanj, Kaner, Liquorice, Banafsha, Aak, Kalijiri, Bhinraj, Lajwanti, Magpipali, Psoralea, Muskdana Bahera, Jamun, bael, Falsa, Withania, Punarnava, Ashoka, Arjuna, Sandalwood, Peppermint, Amla, Mango, Datura, Vasaka, Aloe, Cardamom, Rauwolfia, Vinca, Tulsi, lemongrass, Neem, Rosemary, etc. The visit was completed by 2:00 pm. After the visit completion, all students were reached at collage campus by 3.30 pm.

### Outcomes of Visit

- To educate and encourage the students about various herbal plants and their medicinal uses.
- About 80% of the population worldwide relies on herbal product. So, to create awareness about the role of medicinal plant.
- Student understands about aloe, sandalwoods are used to heal wounds, sores and boils.
- Learn about ginger and clove for their expectorant property.
- Students learn about taxonomic knowledge and identification of the local plants.
- In addition, they promote relaxation; maintain a healthy mind in the surrounding environment.

  
DIRECTOR CUM PRINCIPAL  
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## PICTURES OF VISIT



  
DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
TEH. JAWALAMUKHI  
DISTT. KANGRA (H.P.)



 **GPS Map Camera**

**Jaskot, Himachal Pradesh, India**  
Unnamed Road, Jaskot, Himachal Pradesh 177048, India  
Lat 31.699975°  
Long 76.47567°  
29/04/23 11:58 AM GMT +05:30






GPS Map Camera



Jaskot, Himachal Pradesh, India  
Unnamed Road, Jaskot, Himachal Pradesh 177048, India  
Lat 31.700088°  
Long 76.475781°  
29/04/23 11:50 AM GMT +05:30



  
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PHARMACY KATHOG  
TEH. JAWALAMUKHI  
DISTT. KANGRA (H.P.)



GPS Map Camera

Jaskot, Himachal Pradesh, India

Unnamed Road, Jaskot, Himachal Pradesh 177048, India

Lat 31.700565°

Long 76.476488°

29/04/23 01:52 PM GMT +05:30



Google


*Preet*  
DIRECTOR OUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
TEH. JAWALAMUKHI  
DISTT. KANGRA (H.P.)

**LAUREATE INSTITUTE OF PHARMACY**  
**Kathog, Teh. Jawalamukhi, Distt. Kangra (H.P)**  
**Field visit (Session 2022-2023)**  
**List of students**

Sr. No.	Roll No.	Name of student
1.	20013114002	Aayush
2.	20013114003	Abhay Koundal
3.	20013114004	Abhay Sharma
4.	20013114005	Abhay Thakur
5.	20013114006	Abhinandan
6.	20013114007	Abhinav Kaushal
7.	20013114008	Abhishek Bhardwaj
8.	20013114009	Abhishek Dhiman
9.	20013114011	Abhishek Dogra
10.	20013114012	Abhishek Kumar
11.	20013114013	Adit Choudhary
12.	20013114014	Aditya Guleria
13.	20013114015	Aditya Sharma
14.	20013114016	Akhil Choudhary
15.	20013114017	Akhil Guleria
16.	20013114019	Akshay Koundal
17.	20013114021	Aman Labra
18.	20013114022	Aman Sood
19.	20013114023	Anchit Bahri
20.	20013114024	Aniket Sharma
21.	20013114026	Anmol Koundal
22.	20013114028	Anshul Sharma
23.	20013114029	Anuket
24.	20013114030	Anvi Sharma
25.	20013114031	Arju
26.	20013114033	Aryan Jamwal
27.	20013114034	Ashima Sharma
28.	20013114035	Ashu Samkaria
29.	20013114037	Bhart Bhardwaj
30.	20013114038	Bhupesh Goswami
31.	20013114039	Darpan Sood

  
Principal  
DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
TEH. JAWALAMUKHI  
DISTT. KANGRA (H.P)

32.	20013114040	Deepak Sharma
33.	20013114041	Deepanshi
34.	20013114042	Diksha
35.	20013114044	Divya
36.	20013114045	Divyanshi Sharma
37.	20013114046	Gourav Rana
38.	20013114047	Gourav Thakur
39.	20013114048	Ishan Sharma
40.	20013114049	Jaideep Chawla
41.	20013114050	Kajal
42.	20013114051	Kajal
43.	20013114052	Kajal Thakur
44.	20013114053	Kanish Rana
45.	20013114054	Karan Pathania
46.	20013114055	Kartik Sharma
47.	20013114056	Kashish
48.	20013114057	Kashish Rana
49.	20013114058	Kavita Pathania
50.	21023114001	Anjali
51.	21023114003	Ankush Rana
52.	21023114004	Diksha
53.	21023114007	Sachin
54.	20013114059	Keshav Kumar Sharma
55.	20013114060	Komal
56.	20013114061	Monika
57.	20013114062	Navneet Kaur
58.	20013114063	Navneet Thakur
59.	20013114064	Neha Rana
60.	20013114065	Nikhil Thakur
61.	20013114066	Nishant Chauhan
62.	20013114067	Nitish Sharma
63.	20013114068	Parth Choudhary
64.	20013114069	Prikshit Bhardwaj
65.	20013114070	Priti Sharma
66.	20013114071	Priyanshu Parihar
67.	20013114072	Rahul Kumar
68.	20013114073	Rahul Thakur
69.	20013114074	Rajan Sharma

  
 Principal  
 DIRECTOR CUM PRINCIPAL  
 LAUREATE INSTITUTE OF  
 PHARMACY KATHOG  
 TEH. JAWALAMUKHI  
 DISTT. KANGRA (H.P.)

70.	20013114075	Rajat
71.	20013114076	Rakshit Verma
72.	20013114077	Ridham
73.	20013114078	Rishant Dogra
74.	20013114080	Ritika Devi
75.	20013114081	Ritish Attri
76.	20013114082	Riya Rana
77.	20013114083	Robin Sharma
78.	20013114085	Sagar Mehta
79.	20013114086	Sahil
80.	20013114087	Sakshi
81.	20013114088	Sakshi Jaryal
82.	20013114089	Sakshi
83.	20013114090	Sakshi Sharma
84.	20013114091	Sameer Saini
85.	20013114092	Sanchit Thakur
86.	20013114093	Sanket Thakur
87.	20013114094	Sanyam
88.	20013114095	Saurabh Sharma
89.	20013114096	Shakshi Rana
90.	20013114097	Shalini
91.	20013114098	Shivam
92.	20013114099	Shivansh Thakur
93.	20013114101	Simran Rana
94.	20013114102	Sneha Sharma
95.	20013114103	Sumit Sharma
96.	20013114104	Tanik Dadhwal
97.	20013114105	Tanika
98.	20013114107	Tanu Bala
99.	20013114108	Tanuja Dhiman
100.	20013114109	Tushar Vaid
101.	20013114110	Urvashi Garg
102.	20013114111	Varun Sharma
103.	20013114112	Yamini Walia
104.	20013114113	Yatin Sharma
105.	21023114005	Divyansh
106.	21023114006	Nihal Sen

  
 PRINCIPAL  
 DIRECTOR  
 LAUREATE INSTITUTE OF  
 PHARMACY KATHOG  
 TEH. JAWALAMUKHI  
 (H.P.)



Telofax : 01970-223000  
Ph. : 92184-28040, 92184-05087

# Laureate Institute of Pharmacy

(Approved by PCI & AICTE, New Delhi and H.P. Govt.)  
Affiliated to Himachal Pradesh Technical University, Hamirpur  
V.P.O, Kathog, Tehsil Jawalamukhi, Distt. Kangra, H.P. (177101)

Ref. No. \_\_\_\_\_

Date \_\_\_\_\_

## Report On Hospital Visit B.Pharm 2<sup>nd</sup> Year Date: 22/03/2023



Place of visit: Civil Hospital, Dehra, (Himachal Pradesh), Pin - 177101

V.P.O Kathog, Tehsil Jawalamukhi, Distt. Kangra, H.P. – 176031

Web: [www.laureateinstitute.in](http://www.laureateinstitute.in) E.mail: [contactlaureate@gmail.com](mailto:contactlaureate@gmail.com)

*Signature*  
LAUREATE INSTITUTE OF  
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TEHSIL JAWALAMUKHI  
DISTT. KANGRA (H.P.)



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Affiliated to Himachal Pradesh Technical University, Hamirpur  
(A.P.O. Kathog, Tehsil Jawalamukhi, Distt. Kangra, H.P. 177101)

Ref. No. \_\_\_\_\_

Date \_\_\_\_\_

Date: 05/03/2023

## Notice

This is to inform all the students that the college is organizing an Hospital visit on 22 March 2023 for 2<sup>nd</sup> Year students of B.Pharm. All the students are directed to attend the hospital visit without any failure.


### Objectives of Hospital visit:

1. To understand organization of hospital.
2. To understand proper storage of drugs.
3. Exploring the Bio Potential Instrumentation subject with the practical examples.
4. To understand counseling services.
5. To know about injection technique.
6. To know things practically through interaction, working methods.

Departure Time: 10:40 A.M

Approximate Arrival Time: 01:40 P.M.

Principal

  
Prof (Dr.) M.S. Kshawat  
DIRECTOR (COMPLIANCE)  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
TEH. JAWALAMUKHI  
DISTT. KANGRA (H.P.)



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V.P.O. Kathog, Tehsil Jawalamukhi, Distt. Kangra, H.P. (177101)

Ref. No. \_\_\_\_\_

Date \_\_\_\_\_

## A REPORT ON HOSPITAL VISIT

Place of visit: Civil Hospital, Dehra, (Himachal Pradesh), Pin - 177101


Date: 25/03/2023

A batch of Laureate Institute of Pharmacy 2<sup>nd</sup> Year students, along with faculty and Mr. Akshay Thakur visited Civil hospital, Dehra, (Hp). Best wishes for the visit given by Dr. M.S. Ashawat Principal of Laureate Institute of Pharmacy Kathog. This visit was mainly focused on the facilities available in the hospital, technique of injection and about the equipments discussed in theory, and practical courses.

Mr. Ankaj kumar (Pharmacist) explained about hospital organization, storage of medicine and injection techniques. The visit was started from the General Medical store in the OPD section, In OPD section, we saw the Instrument like Electrocardiogram (ECG) machine, Sphygometer. After that we visited Operation Theatre (O.T.) which contain following instruments:- Supply line of O<sub>2</sub>, Sterile Instruments Emergency Oxygen Supply, Operating Table. We also visited different wards of hospital. In pharmacy, dispensing and labeling of medicine were explained. Total 80 no. of students present in this visit. All the students move from the campus sharp at 10:40 A.M. and reached Civil hospital Dehra at about 11.00 A.M. The visit of all students started from 11.05 A.M and completed at 12.30 P.M. After the completion of journey, all the students reached back at college by 1.30 P.M.

### Outcomes of Visit

- Students will able to understand the uses and method of handling various medical/surgical aids and devices.
- The students can assist the other healthcare providers in monitoring drug therapy and address drug related problems in future.
- They will know the basic interpretation of common laboratory results used in clinical diagnosis.

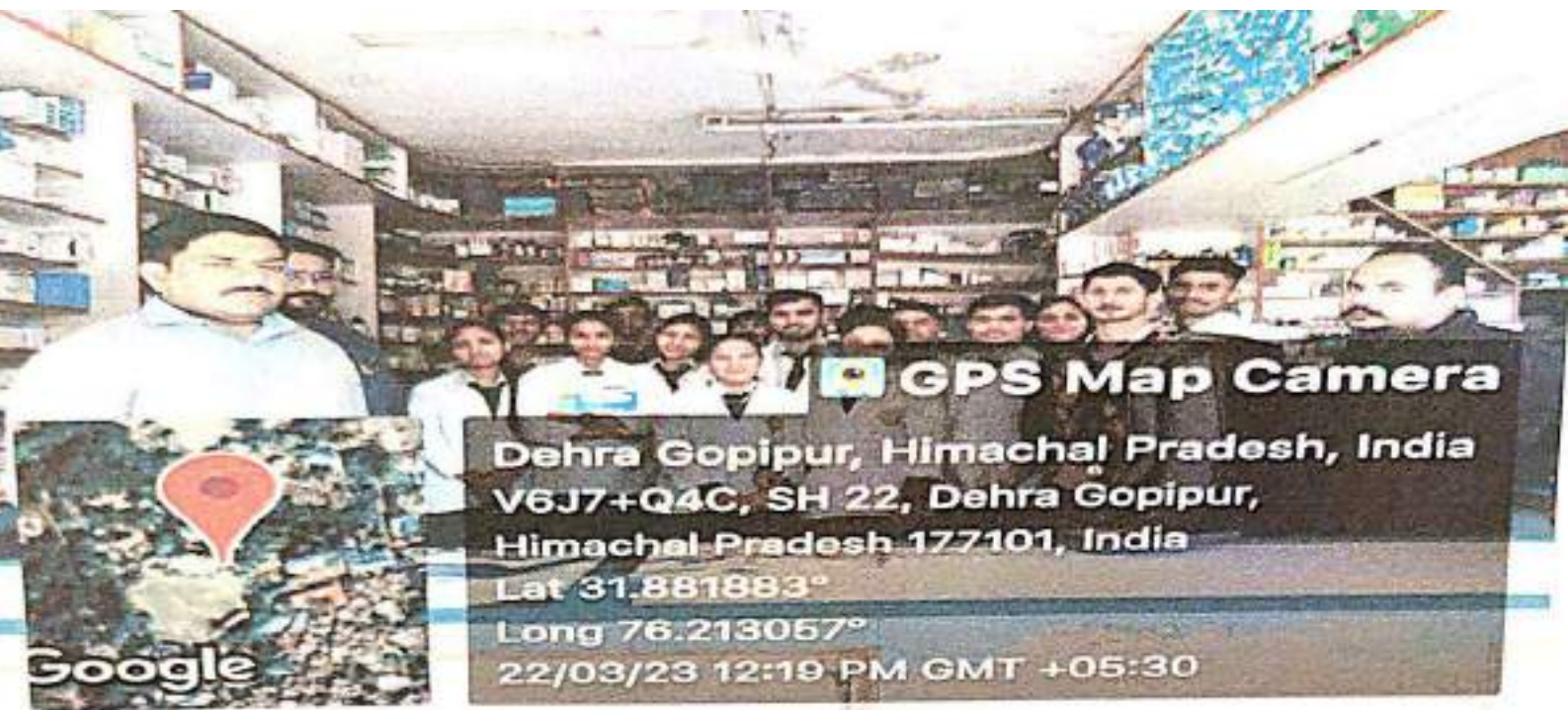
  
DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
TEH. JAWALAMUKHI  
DISTT. KANGRA (H.P.)

- Interpret common lab investigation reports for optimizing drug therapy.
- They can explain about the basic concept of hospital pharmacy administration.

**Pictures of visit:**



*(Signature)*  
DIRECTOR & DEAN  
LAUREATE INSTITUTE OF  
PHARMACY  
T-6, JAWALAJI  
BAGH, BAHNI, HP



*Opmat*  
DIRECTOR CUM PRINCIPAL  
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PHARMACY KATHOG  
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DISTT. KANGRA (H.P.)

**LAUREATE INSTITUTE OF PHARMACY**  
**Kathog, Teh. Jawalamukhi, Distt. Kangra (H.P)**  
**Hospital Visit (Session 2022-2023)**  
**List of students**

Sr. No.	Roll No.	Name of student
1.	21013114001	Aakanksha
2.	21013114002	Aashish Bhardwaj
3.	21013114003	Abhay sharma
4.	21013114004	Abhinav dhadwal
5.	21013114005	Abhishek
6.	21013114007	Abhishek
7.	21013114009	Aditya chouhan
8.	21013114010	Aditya rattan
9.	21013114011	Aditya sharma
10.	21013114012	Akanksha verma
11.	21013114013	Akriti thakur
12.	21013114014	Akshat
13.	21013114015	Akshat sharma
14.	21013114016	Akshit sharma
15.	21013114017	Akshita thakur
16.	21013114018	Aman aneja
17.	21013114019	Amit Chauhan
18.	21013114020	Anchal
19.	21013114021	Aneesh chawla
20.	21013114022	Anjali kumari
21.	21013114023	Ankit patiyal
22.	21013114024	Ankita
23.	21013114025	Anmol
24.	21013114026	Anmol sharma
25.	21013114027	Ansh Malhotra
26.	21013114028	Anshul dhiman
27.	21013114029	Anuj sharma
28.	21013114030	Aprajita sharma
29.	21013114031	Arpit Kaushal
30.	21013114035	Ashish
31.	21013114036	Ashutosh sharma
32.	21013114037	Ayush
33.	21013114038	Ayush pathania
34.	21013114041	Deepesh dhanotia
35.	21013114042	Divyaansh dhiman
36.	21013114043	Divyaansh sharma

*Principal*  
Principal  
DIRECTOR CUM PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
TEH. JAWALAMUKHI  
DISTT. KANGRA (H.P.)

**LAUREATE INSTITUTE OF PHARMACY**  
**Kathog, Teh. Jawalamukhi, Distt. Kangra (H.P)**  
**Hospital Visit (Session 2022-2023)**  
**List of students**

Sr. No.	Roll No.	Name of student
37.	21013114044	Dushyant sharma
38.	21013114045	Gaurav bhardwaj
39.	21013114046	Harshit jammial
40.	21013114047	Isha
41.	21013114048	Ishan sharma
42.	21013114050	Jatin thakur
43.	21013114051	Kanika
44.	21013114052	Kanika thakur
45.	21013114056	Kashish prashar
46.	21013114057	Kinshuk rana
47.	21013114058	Komal
48.	21013114059	Kunal singh
49.	21013114060	Lakshay
50.	21013114061	Manish
51.	22023114009	Shalini sharma
52.	22023114010	Shreya
53.	22023114011	Suchika khatta
54.	21012914053	Saksham sharma
55.	21013214011	Ankita
56.	21013114062	Manish kumar
57.	21013114063	Megha rana
58.	21013114064	Mitaksh
59.	21013114065	Mridula thakur
60.	21013114066	Muskan rana
61.	21013114067	Naman katnouria
62.	21013114068	Nikhil bariyan
63.	21013114069	Nikhil kumar
64.	21013114070	Paras dogra
65.	21013114071	Parul thakur
66.	21013114072	Pranav dhiman
67.	21013114073	Prince samyal
68.	21013114074	Priti
69.	21013114075	Priyanka devi
70.	21013114078	Rahul sharma
71.	21013114080	Ranjan dhiman
72.	21013114081	Rejul pathania

Principal  
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**LAUREATE INSTITUTE OF PHARMACY**  
**Kathog, Teh. Jawalamukhi, Distt. Kangra (H.P)**  
**Hospital Visit (Session 2022-2023)**  
**List of students**

Sr. No.	Roll No.	Name of student
73.	21013114082	Rijul
74.	21013114083	Rinki guleria
75.	21013114084	Rishabh modgil
76.	21013114085	Ruderansh
77.	21013114086	Rukshant sharma
78.	21013114087	Sagar dhiman
79.	21013114088	Sahil
80.	21013114090	Sajal sharma
81.	21013114091	Sanraph soodan
82.	21013114092	Sapan thakur
83.	21013114093	Sayam
84.	21013114094	Shagun thakur
85.	21013114095	Shipra
86.	21013114096	Shivakshi jaswal
87.	21013114097	Shivam katia
88.	21013114098	Shruti
89.	21013114099	Shubham nayak
90.	21013114100	Shweta bhatia
91.	21013114101	Simran sambyal
92.	21013114102	Sourabh
93.	21013114103	Sourav bharti
94.	21013114106	Tanvi sharma
95.	21013114107	Uday kumar
96.	21013114108	Vansh
97.	21013114109	Vanshika bhardwaj
98.	21013114110	Varun sharma
99.	21013114111	Vineet singh
100.	21013114112	Vishal chaudhary
101.	21013114113	Vishal parmar
102.	21013114114	Vishav sharma
103.	21013114115	Vivek
104.	22023114001	Abhinav bhatia
105.	22023114002	Akanksha
106.	22023114003	Akshika chouhan
107.	22023114004	Arvind kumar
108.	22023114005	Chetna
109.	22023114008	Sakshi

  
Principal

HEAD OF THE PRINCIPAL  
LAUREATE INSTITUTE OF  
PHARMACY KATHOG  
TEH. JAWALAMUKHI  
DISTT. KANGRA (H.P)