

HNB GARHWAL UNIVERSITY

Department of Home Science

School of Sciences

SYLLABUS

(w.e.f. July 2015)

Master of Arts

(Two Year Course – Semester System)

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Admission of the Master's Program in Home Science shall be through entrance examination conducted by the University and the program shall be based on credit system in which credit defines the quantum of content/ syllabus prescribed for a course system and determines the number of hours of instruction per week.

The student shall be eligible for admission to a Master's Degree Program in Home Science after she has successfully completed a three year undergraduate degree or earned prescribed number of credits through the examinations conducted by University as equivalent to an undergraduate degree.

Core courses prescribed for every Semester shall be mandatory for all students registered for the Master's Program in Home Science and shall carry minimum 54 credits. Besides this there shall be Elective courses offered in semester III and IV and shall carry a minimum of 18 credits. A self-study course would comprise of maximum 09 credits of which one minimum 03 credits shall be mandatory which shall not be included while calculating grades.

In order to qualify for a two year master's degree, a student must acquire a minimum of 72 credits including a minimum of 18 credits in electives and one qualifying self-study course of minimum 03 credits. In the fourth semester, student has to study three electives. Dissertation is an optional elective. Therefore student has the option of either choosing three theory papers as electives or choosing two theory papers and Dissertation. The dissertation is to be allotted in the beginning of Third Semester and would be submitted during the examination of the Fourth Semester. Minimum

eligibility for Dissertation is 70% aggregate in last examination. University norms laid down in the ordinances of the PG Syllabus must be followed for evaluation of dissertation.

COURSE OUTLINE

First Semester (July to November)	Name of Course	Course Number	Credits	Marks
	Advanced Food Science – I	SOS/HSC/C001	03	100
	Theories of Child Development	SOS/HSC/C002	03	100
	Advanced Clothing Construction	SOS/HSC/C003	03	100
	Extension in Home Science	SOS/HSC/C004	03	100
	Research Methods	SOS/HSC/C005	03	100
	Practical	SOS/HSC/C006	03	100
		Core Credits	18	600

Second Semester (December to April)	Name of Course	Course Number	Credits	Marks
	Advanced Food Science – II	SOS/HSC/C007	03	100
	Life Span Development	SOS/HSC/C008	03	100
	Fabric Construction	SOS/HSC/C009	03	100
	Advanced Home Management	SOS/HSC/C010	03	100
	Statistics	SOS/HSC/C011	03	100
	Practical	SOS/HSC/C012	03	100
	Adolescence	SOS/HSC/SS01	03	100
	Computers	SOS/HSC/SS02	03	100
		Core Credits	18	600

Third Semester (July to November)	Name of Course	Course Number	Credits	Marks
	Community Nutrition	SOS/HSC/C0013	03	100
	Dyeing and Printing	SOS/HSC/C0014	03	100
	Practical	SOS/HSC/C015	03	100
	Electives (Any three of the following):			
	Advanced Food and Nutrition	SOS/HSC/E01	03	100
	Organization and Management of Early Childhood Education Center	SOS/HSC/E02	03	100
	Consumer Education	SOS/HSC/E03	03	100
	Early Childhood Education	SOS/HSC/E04	03	100
	Traditional Indian Embroidery and Textiles	SOS/HSC/E05	03	100
	Rural Sociology	SOS/HSC/SS03	03	100
	Child Welfare in India	SOS/HSC/SS04	03	100
	Core Credits (09)+Elective Credits (09)	Total Credits	18	600

Fourth Semester (December to April)	Name of Course	Course Number	Credits	Marks
	Food Safety and Preservation	SOS/HSC/C0016	03	100
	Children with Special Needs	SOS/HSC/C0017	03	100
	Practical	SOS/HSC/C018	03	100
	Electives (Any three of the following):			
	Guidance and Counseling	SOS/HSC/E06	03	100
	Psychological Testing and Measurement	SOS/HSC/E07	03	100
	Consumer Economics	SOS/HSC/E08	03	100
	Apparel Designing	SOS/HSC/E09	03	100
	Dissertation/Project	SOS/HSC/E10	03	100
	Marriage and Family	SOS/HSC/SS05	03	100
	Gender in Extension	SOS/HSC/SS06	03	100
	Core Credits (09)+Elective Credits (09)	Total Credits	18	600

Grand Total: Core Credits 54 + Elective Credits 18 = 72 Credits

Max. Marks for each paper: 100 (two Sessional Tests of 20 marks each + 60 marks Term-End Examination)

Sessional Tests: Mid-Term Test, Assignments, Classroom Seminars and Laboratory Work

The two-year Master's Programme will have the following components, viz.

(i) Core Course (C): Minimum 54 Credits

(ii) Electives (E): Minimum 18 Credits

(iii) Self study (SS): Maximum 09 credits (one minimum 03 Credits course shall be mandatory but not to be included while calculating the grades)

* 01 Credit = 01 hour of lecture/instructions per week

01 Credit course = 15 hours of lectures per semester

** 03hours of practical work shall be considered equivalent to 01 hour of lecture.

SEMESTER - I: (06 Core Courses)

First Semester	Name of Course	Course Number	Credits	Marks
	Advanced Food Science – I	SOS/HSC/C001	03	100
	Theories of Human Development	SOS/HSC/C002	03	100
	Advanced Clothing Construction	SOS/HSC/C003	03	100
	Extension Education and Communication in Home Science	SOS/HSC/C004	03	100
	Research Methodology in Home Science	SOS/HSC/C005	03	100
	Practical	SOS/HSC/C006	03	100

Introduction to principles of design in relation to apparel designing

Unit 2

Introduction to elements of art in relation to apparel designing

Colour in relation to apparel designing – definition, dimensions, principles and schemes

Unit 3

Fit – Definition, Recognizing correct fit using structural lines, balance and ease to evaluate fit.

Common problems encountered and remedies for fitting defects.

Unit 4

Fashion: Definition and principles

Sources of fashion

Factors favouring and retarding fashion

Some terms related to fashion industry

Paper VIII (Elective): SOS/HSC/E10: Dissertation

(Credits: 03; Marks: 100)

Paper IX (Self Study): SOS/HSC/S03: Marriage and Family

(Credits: 03; Marks: 100)

Unit I

Family – Definition, functions and types (with reference to family life cycle), characteristics of family, structure of family

Unit II

Marriage – Meaning, marriage as an institution, goals of marriage, Selection of life partner, Changes in marriage and their causes

Unit III

Marital adjustment – factors contributing to difficulties in marital adjustment, adjustment to life partner, sexual adjustment, economic adjustment, adjustment to in-laws, adjustment to parenthood

Unit IV

Marriage guidance and counseling – Meaning of counseling, factors causing tension in married life, importance of marriage guidance and counseling, areas in marriage requiring guidance

References:

Manav Vikas – Shashiprabha Jain, Shiva Prakashan, Indore

Manav Vikas Parichay – Shashiprabha Jain, Shiva Prakashan, Indore

Paper X (Self Study): SOS/HSC/S06: Gender in Extension

(Credits: 03; Marks: 100)

Unit -1

Attendance sheet of the student

Name of Department: **Business Management**

Name of Program: **Master of Business Administration)**

Name of Course: **Project Report-Dissertation.**

Academic Session: **2021-22**

S.No	Name of student	Roll No
1	Diksha Negi	20134706001
2	Geetanjali Mamgain	20134706002
3	Himani Rawat	20134706003
4	Madhuri Uniyal	20134706004
5	Monika Panwar	20134706005
6	Nandita Ghosh	20134706006
7	Nidhi Barthwal	20134706007
8	Pareshwari	20134706008
9	Parijot Kaur	20134706009
10	Pooja Gupta	20134706010
11	Pooja Tariyal	20134706011
12	Poonam Pal	20134706012
13	Priyanka Kaperwan	20134706013
14	Riya Vats	20134706014
15	Sakshi	20134706015
16	Shikha Negi	20134706016
17	Shweta Jugran	20134706017
18	Srishti Mall	20134706018
19	Sweta	20134706019
20	Vanshika Negi	20134706020
21	Abhay Raturi	20134706021
22	Abhinav Uniyal	20134706022
23	Anuj Kotiyal	20134706023
24	Ayush Bhandari	20134706024
25	Devesh Kumar	20134706025
26	Gaurav Singh Mandrawal	20134706026
27	Harikrishnan P	20134706027
28	Harish Singh	20134706028
29	Himanshu Chauhan	20134706029
30	Himanshu Yogi	20134706030
31	Hitesh Singh Pundir	20134706031
32	Krishna Kishor	20134706032
33	Mohd. Azim Hussain	20134706033

34	Mohit Bisht	20134706034
35	Paritosh Bajpai	20134706035
36	Priyank Kukreti	20134706036
37	Rohit Taneja	20134706037
38	Sagar Painuli	20134706039
39	Sarjeet Kumar	20134706040
40	Saurabh Negi	20134706041
41	Saurabh Singh Dhanai	20134706042
42	Shubham Rawat	20134706043
43	Siddhant Pal	20134706044
44	Umar Farooq	20134706045
45	Vikash Joshi	20134706046
46	Vivek Kala	20134706047
47	Richa Thapliyal	20134706048
48	Akshay Semwal	20134706049



(Signature with stamp)

Attendance of the students Verified by HOD

बसुभागावकल, व्यापार प्रबन्ध वि. /
 Head, Deptt. of Business Management
 इ. नं० ब० गढ़वाल विश्वविद्यालय
 N.B. Garhwal University
 गढ़वाल, उत्तराखण्ड
 Garhwal, Uttarakhand



Shop No-G4 Ground floor; Malhan falcon Plaza
Plot-no-04 Pocket 07;Sector-12,Dwaraka ,New Delhi - 110075
Ph. No-001-47039530,9720479727
Fax-011--470395300
info@milejourney.com
Web-www.milejourney.com

This is to certify that **Mr. Shahil Bhatt** son of **Mr. Kushla Nand Bhatt** work as tour Executive Tour in our company from 01 Oct to 15 Nov 2020 to without entire satisfaction. During his working period we found him sincere, honest & hard working dedicated employee with professional attitude and very good job knowledge. He is admiable in nature & character is well.

We have no objection to allow him for better position and have no liabilities in our Company.

We wish him a succesful & smooth life,we confirm all informatiion is true as per our record.

Sincerely

Govind Singh
Director
Mile Journey

CERTIFICATE



CN TRAVELS

Approved by Ministry of Tourism, Government of India
Approved Domestic Tour Operator, Government of Assam


Certificate of Internship

Presented to

PRANJAL DIXIT

This Certificate of Internship is awarded to **Mr. Pranjali Dixit** student of **HNB Garhwal University, Uttarakhand** on successful completion of 60 days **Internship at CN Travels from 24th May to 23rd Jul 2021 with 86% score**. The internship includes, Front office management and reservation, Air Ticket Booking on Portal, Fare pricing, Tour packages designing, costing and itinerary preparation, Passport and Visa assistance with documentation, basics of foreign Exchange and Digital media marketing

We wish you all the success in your life.


CHANDAN NATH
Director



netta



CERTIFICATE



CN TRAVELS

Approved by Ministry of Tourism, Government of India
Approved Domestic Tour Operator, Government of Assam

Certificate of Internship

Presented to

YOGESH RATURI

This Certificate of Internship is awarded to **Mr. Yogesh Raturi** student of **HNB Garhwal University, Uttarakhand** on successful completion of 60 days **Internship at CN Travels from 24th May to 23rd Jul 2021 with 82% score.** The internship includes, Front office management and reservation, Air Ticket Booking on Portal, Fare pricing, Tour packages designing, costing and itinerary preparation, Passport and Visa assistance with documentation, basics of foreign Exchange and Digital media marketing.

We wish you all the success in your life.


CHANDAN NATH
Director



Marigold RESIDENCY

This is certifying that Mr. **Sudarshan Singh** has done his internship in tourism sector at Marigold Hospitality Services PVT LTD, Mumbai from 05 October 2020 to 15 November 2020.

He has worked as a advisor with experienced Hospitality Department. As a part of tourism industry, he converts travel queries and designed banner and mailer by understanding the work of travel guidance.

During the internship he worked on Hospitality queries with a self - motivated attitude to learn new things. His performance exceeded expectations and was able to convert the queries on time.

We wish him all the best for his future travel and Hospitality life.

**Marigold Hospitality
Services PVT LTD
Next to sangeed plaza
Off marolmoroshi road
Mumbai 400 059
Email info@marigoldresidency.com**

Date-15 Nov 2020

Marigold RESIDENCY
MARIGOLD HOSPITALITY SERVICES PVT. LTD.
NEXT TO SANGEET PLAZA,
OFF MAROL MAROSHI ROAD,
ANDHERI (E), MUMBAI - 400 059.
HELLO: 29200311/2/3
FAX: 29200310
Email: info@marigoldresidency.com

marigold hospitality services pvt ltd
near international airport.
next to sangeet plaza.
off marol maroshi road,
marol fire brigade, andheri (east).
Mumbai-400 059.
tel +91-22-29200311/2/3
fax. +91-22-29200310
email: info@marigoldresidency.in
www.marigoldresidency.in

Date: 07 November 2020

TO WHOMSOEVER IT MAY CONCERN

This is certifying that Mr. **Shubham Pundir** has done his internship in tourism sector at **Auli Tourism Company**, Joshimath from 01 October 2020 to 07 November 2020.

He has worked as a travel advisor with experienced travel team leader. As a part of tourism industry, he converts travel queries and designed banner and mailer by understanding the work of travel guidance.

During the internship he worked on travel queries with a self – motivated attitude to learn new things. His performance exceeded expectations and was able to convert the queries on time.

We wish him all the best for his future travel life.

Team Leader

Signature _____

Auli Tourism

11/22, Ropeway Road

Joshimath, Chamoli, Uttarakhand- 246443

+91-8171899028



Chandan Nath

Director, CTS

Emigration and FOREX Consultant

IATA Certified Professional

GALILEO Certified Professional Trainer for CRS

AMADEUS Certified Professional Trainer for CRS



11, 20/01/21
11/01/21

CN TRAVELS

Approved by Ministry of Tourism, Government of India
Approved Domestic Tour Operator, Government of Assam


Certificate of Internship

Presented to

MONICA ASWAL

This Certificate of Internship is awarded to Ms. Monica Aswal student of HNB Garhwal University, Uttarakhand on successful completion of 60 days Internship at CN Travels from 24th May to 23rd Jul 2021 with 73% score. The internship includes, Front office management and reservation, Air Ticket Booking on Portal, Fare pricing, Tour packages designing, costing and itinerary preparation, Passport and Visa assistance with documentation, basics of foreign Exchange and Digital media marketing

We wish you all the success in your life.


CHANDAN NATH
Director, CTS





Shop No-G4 Ground floor; Malhan falcon Plaza
Plot-no-04 Pocket 07;Sector-12,Dwaraka ,New Delhi - 110075
Ph. No-001-47039530,9720479727
Fax-011--470395300
info@milejourney.com
Web-www.milejourney.com

This is to certify that **Mr. Jaspal Singh** son of **Mr. Balwant Singh** work as tour Executive Tour in our company from 01 Oct to 15 Nov 2020 to without entire satisfaction. During his working period we found him sincere, honest & hard working dedicated employee with professional attitude and very good job knowledge. He is admiable in nature & character is well.

We have no objection to allow him for better position and have no liabilities in our Company.

We wish him a succesful & smooth life, we confirm all information is true as per our record.

Sincerely

Govind Singh
Director
Mile Journey

Certificate of Internship



CN TRAVELS

Approved by Ministry of Tourism, Government of India
Approved Domestic Tour Operator, Government of Assam

Certificate of Internship

Presented to

ASHUTOSH NEGI

This Certificate of Internship is awarded to **Mr. Ashutosh Negi** student of **HNB Garhwal University, Uttarakhand** on successful completion of 60 days **Internship at CN Travels from 24th May to 23rd Jul 2021 with 76% score**. The internship includes, Front office management and reservation, Air Ticket Booking on Portal, Fare pricing, Tour packages designing, costing and itinerary preparation, Passport and Visa assistance with documentation, basics of foreign Exchange and Digital media marketing.

We wish you all the success in your life.


CHANDAN NATH



CERTIFICATE



CN TRAVELS

Approved by Ministry of Tourism, Government of India
Approved Domestic Tour Operator, Government of Assam


Certificate of Internship

Presented to

SUDHANSHU DANGWAL

This Certificate of Internship is awarded to **Mr. Sudhanshu Dangwal**, student of **HNB Garhwal University, Uttarakhand** on successful completion of 60 days **Internship at CN Travels from 24th May to 23rd Jul 2021 with 83% score**. The internship includes, Front office management and reservation, Air Ticket Booking on Portal, Fare pricing, Tour packages designing, costing and itinerary preparation, Passport and Visa assistance with documentation, basics of foreign Exchange and Digital media marketing.

We wish you all the success in your life.


CHANDAN NATH
Director



netta



CERTIFICATE OF TRAINING AT INTERSHALA

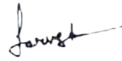
INTERNSHALA TRAININGS

Certificate of Training

Kaivalya Jakhmola

from HNB Garhwal University, has successfully completed a eight weeks online training on **Human Resource Management**. The training consisted of Introduction to HRM, Manpower Planning and Job Analysis, Recruitment and Selection, Remuneration and Compensation Management, Training and Development, Performance Management System, Labour Laws and Statutory Compliances, Disciplinary Procedure, Employee Engagement and HR Branding, Human Resource Information System (HRIS), Introduction to HR Analytics, Communication and Business Acumen and The Final Project modules.

We wish Kaivalya all the best for the future endeavours.



Sarvesh Agarwal
FOUNDER & CEO, INTERNSHALA

Certificate No: 48120016-07EE-00106186-256F91CFEE79

For more details and verification, please visit <https://trainings.internshalaindia.com/certificate/>

CERTIFICATE



CN TRAVELS

Approved by Ministry of Tourism, Government of India
Approved Domestic Tour Operator, Government of Assam


Certificate of Internship

Presented to

MAYANK THAPLIYAL

This Certificate of Internship is awarded to **Mr. Mayank Thapliyal** student of **HNB Garhwal University, Uttarakhand** on successful completion of 60 days **Internship at CN Travels from 24th May to 23rd Jul 2021 with 79% score**. The internship includes, Front office management and reservation, Air Ticket Booking on Portal, Fare pricing, Tour packages designing, costing and itinerary preparation, Passport and Visa assistance with documentation, basics of foreign Exchange and Digital media marketing

We wish you all the success in your life.


CHANDAN NATH
Founder Head



PREPARATION AND EVALUATION OF β -CYCLODEXTRIN
MICROPARTICLES OF DAPAGLIFLOZIN

A THESIS SUBMITTED TO



H.N.B GARHWAL UNIVERSITY (A CENTRAL UNIVERSITY)

SRINAGAR (GARHWAL), UTTARAKHAND

In partial fulfilment for the requirement of Degree of

MASTER OF PHARMACY

(PHARMACEUTICS)

BY

SAMRITI BHARDWAJ

(Enrollment No. G201342137)

Under the guidance of

DR. AJAY SEMALTY

Ajay Semalty
14/11/22

DEPARTMENT OF PHARMACEUTICAL SCIENCES

H.N.B GARHWAL UNIVERSITY (A CENTRAL UNIVERSITY)

SRINAGAR (GARHWAL), UTTARAKHAND

2022

**DEVELOPMENT AND CHARACTERIZATION OF
HERBAL NANOPARTICLES THROUGH BOTTOM-UP
AND TOP-DOWN METHOD**



THESIS

SUBMITTED TO

**H.N.B GARHWAL UNIVERSITY (CENTRAL) UNIVERSITY,
SRINAGAR GARHWAL, UTTARAKHAND**

In Partial Fulfilment for the Requirement of Degree of

**MASTER OF PHARMACY
(PHARMACEUTICS)**

By

BHUPENDRA SINGH

(Enrollment no. G151341244)

Under the Guidance of

Dr. Ajay Semalty

Ajay Semalty
14/6/22

**DEPARTMENT OF PHARMACEUTICAL SCIENCES
H.N.B GARHWAL UNIVERSITY (CENTRAL) UNIVERSITY,
SRINAGAR GARHWAL, UTTARAKHAND**

2021

**EFFECTIVE HERBAL FORMULATIONS FOR
ALOPECIA: FORMULATION AND
CHARACTERIZATION**



THESIS

SUBMITTED TO

**H.N.B. GARHWAL UNIVERSITY (CENTRAL) UNIVERSITY
SRINAGAR GARHWAL, UTTARAKHAND**

In Partial Fulfilment for the Requirement of Degree of

MASTER OF PHARMACY

(PHARMACEUTICS)

By

Akshay Bhama

(Enrollment no. G191341955)

Under the Guidance of

Dr. Ajay Semalty

Ajay Semalty
14/08/22

DEPARTMENT OF PHARMACEUTICAL SCIENCES

**H.N.B. GARHWAL UNIVERSITY (CENTRAL) UNIVERSITY
SRINAGAR GARHWAL, UTTARAKHAND**

2021

**CHARACTERIZATION OF NANOPARTICLE
PREPARATION METHODS & THEIR EVALUATION
PARAMETERS**



THESIS SUBMITTED TO

**HEMVATI NANDAN BAHUGUNA GARHWAL UNIVERSITY
(A CENTRAL UNIVERSITY)
SRINAGAR (GARHWAL), UTTARAKHAND**

FOR THE AWARD OF DEGREE OF

MASTER OF PHARMACY (PHARMACEUTICS)

BY

VIKAS NEGI

(Enrollment No. G181342587)

**UNDER THE GUIDANCE OF
DR. AJAY SEMALTY**

Assistant Professor

Department of Pharmaceutical Sciences

**Hemvati Nandan Bahuguna Garhwal University
(A Central University) Srinagar (Garhwal), Uttarakhand**

2020

Ashish
21-10-2021

Ajay Semalty
15/10/21

**COLON TARGETING DRUG DELIVERY SYSTEM FOR
COLORECTAL CANCER - A REVIEW**



THESIS SUBMITTED TO
HEMVATI NANDAN BAHUGUNA GARHWAL UNIVERSITY
(A CENTRAL UNIVERSITY)
SRINAGAR (GARHWAL), UTTARAKHAND

FOR THE AWARD OF DEGREE OF
MASTER OF PHARMACY(PHARMACEUTICS)

BY
Soban Lal
(Enrollment No. G1451050)

UNDER THE GUIDANCE OF
Dr. AJAY SEMALTY

21-10-2021

Ajay Semalty
25/09/21

DEPARTMENT OF PHARMACEUTICAL SCIENCES
HEMVATI NANDAN BAHUGUNA GARHWAL UNIVERSITY
(A CENTRAL UNIVERSITY)
SRINAGAR (GARHWAL)
UTTARAKHAND

2020

**DRUG-CYCLODEXTRIN COMPLEXES: CURRENT STATUS AND
RECENT ADVANCEMENTS**



THESIS SUBMITTED TO

**HEMVATI NANDAN BAHUGUNA GARHWAL UNIVERSITY
(A CENTRAL UNIVERSITY)
SRINAGAR (GARHWAL),
UTTARAKHAND**

FOR THE AWARD OF DEGREE OF

**MASTER OF PHARMACY
(PHARMACEUTICS)**

BY
**Vikas Singh Panwar
(Enrollment No. G1451056)**

UNDER THE GUIDANCE OF
Dr. AJAY SEMALTY

Panwar
21-10-2021

Ajay Semalty
25/09/21

**DEPARTMENT OF PHARMACEUTICAL SCIENCES
HEMVATI NANDAN BAHUGUNA GARHWAL UNIVERSITY
(A CENTRAL UNIVERSITY)
SRINAGAR (GARHWAL),
UTTARAKHAND**

2020

**DEVELOPMENT AND CHARACTERIZATION OF
SYNTHETIC NANOPARTICLES FOR IMPROVED DRUG
DELIVERY**

THESIS

**SUBMITTED TO
HNB GARHWAL UNIVERSITY, (A CENTRAL UNIVERSITY)
SRINAGAR (GARHWAL)**

**FOR THE AWARD OF DEGREE OF
MASTER OF PHARMACY
IN
(PHARMACEUTICS)**

**BY
SUKIRTI DOBRIYAL
(Enrollment No. G120070300)**

**UNDER THE SUPERVISION OF
Dr. AJAY SEMALTY**



Ajay Semalty
09/10/19

**DEPARTMENT OF PHARMACEUTICAL SCIENCES
HEMVATI NANDAN BAHUGUNA GARHWAL UNIVERSITY
SRINAGAR (GARHWAL), UNIVERSITY**

2019

CYCLODEXTRIN COMPLEXATION FOR IMPROVED DRUG DELIVERY (EFFECTS OF HYDROPHILIC EXCIPIENTS)



Thesis Submitted to

**H.N.B. GARHWAL(CENTRAL) UNIVERSITY
SRINAGAR (GARHWAL), UTTARAKHAND**

In partial fulfillment for the requirement of degree of

**MASTER OF PHARMACY
(PHARMACEUTICS)**

BY

**Himanshi Kaushik
Enrollment No.- G171340169**

Under the guidance of

DR. AJAY SEMALTY
Assistant professor

**DEPARTMENT OF PHARMACEUTICAL SCIENCES
HEMVATI NANDAN BAHUGUNA GARHWAL UNIVERSITY
(A CENTRAL UNIVERSITY)
SRINAGAR (GARHWAL), UTTARAKHAND (INDIA)**

Ajay Semalty
11/10/19

2019

**FORMULATION AND CHARACTERIZATION OF FLOATING
MICROSPHERES OF METFORMIN HYDROCHLORIDE**

Thesis

Submitted for the Award of

MASTER OF PHARMACY

Degree in

PHARMACEUTICS

By

HIMANSHU MISHRA

Enrolment No. – G1245936

UNDER THE SUPERVISION OF

Dr. AJAY SEMALTY

ASSISTANT PROFESSOR



Ajay Semalty
30/9/18

**DEPARTMENT OF PHARMACEUTICAL SCIENCES
HEMVATI NANDAN BAHUGUNA GARHWAL UNIVERSITY
(A CENTRAL UNIVERSITY)
CHAURAS CAMPUS, SRINAGAR GARHWAL-246174
UTTARAKHAND (INDIA)**

2018

**PREPARATION AND EVALUATION OF HAIR GROWTH
FORMULATION FOR ALOPECIA**



**THESIS SUBMITTED TO
HEMVATI NANDAN BAHUGUNA GARHWAL (CENTRAL) UNIVERSITY
SRINAGAR (GARHWAL), UTTARAKHAND**

**FOR THE AWARD OF DEGREE OF
MASTER OF PHARMACY
(Pharmaceutics)**

**BY
RUPALI KOTIYAL
(ENROLMENT No: 1050031)**

**UNDER THE GUIDANCE OF
DR. AJAY SEMALTY**

Ajay Semalty
26/10/16

**DEPARTMENT OF PHARMACEUTICAL SCIENCES
HEMVATI NANDAN BAHUGUNA GARHWAL (CENTRAL) UNIVERSITY
SRINAGAR (GARHWAL), UTTARAKHAND**

2016

**FORMULATION AND CHARACTERIZATION OF
POLYELECTROLYTE COMPLEXES OF ALGINATE PSYLLIUM
HUSK GEL FOR GASTRO-RETENTIVE DELIVERY OF
METFORMIN HYDROCHLORIDE**



**THESIS
SUBMITTED TO**

**HEMVATI NANDAN BAHUGUNA GARHWAL UNIVERSITY
(A Central University)
SRINAGAR (GARHWAL), UTTARAKHAND**

In partial fulfilment for the requirement of Degree of

**MASTER OF PHARMACY
(PHARMACEUTICS)**

By

MONIKA

(Enrollment No. G0847435)

**UNDER THE GUIDANCE OF
DR. AJAY SEMALTY**

Ajay Semalty
28/3/16

**DEPARTMENT OF PHARMACEUTICAL SCIENCES
HEMVATI NANDAN BAHUGUNA GARHWAL UNIVERSITY
SRINAGAR (GARHWAL), UTTARAKHAND**

2015

**Formulation and Characterization of Floating
Microparticles of Metformin Hydrochloride
Using Some Herbal Carriers**



THESIS SUBMITTED TO

**H.N.B. GARHWAL (CENTRAL) UNIVERSITY
SRINAGAR (GARHWAL), UTTARAKHAND**

In partial fulfilment for the requirement of Degree of

**MASTER OF PHARMACY
(PHARMACEUTICS)**

By

MUKESH PANDEY

(Enrollment No. G0918324)

Under the guidance of

DR. AJAY SEMALTY

Assistant Professor

Ajay Semalty
15/11/14

**DEPARTMENT OF PHARMACEUTICAL SCIENCES
H.N.B. GARHWAL (CENTRAL) UNIVERSITY
SRINAGAR (GARHWAL), UTTARAKHAND**

2014

Formulation and Characterization of Chitosan Microparticles using β -Cyclodextrin Complexes of Glimepiride



THESIS SUBMITTED TO

**H.N.B. GARHWAL (CENTRAL) UNIVERSITY
SRINAGAR (GARHWAL), UTTARAKHAND**

In partial fulfillment for the requirement of Degree of

**MASTER OF PHARMACY
(PHARMACEUTICS)**

By

LOKESH ADHIKARI

(Enrollment No. G1214502)

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Assistant Professor

Ajay Semalty
12/05/14

**DEPARTMENT OF PHARMACEUTICAL SCIENCES
H.N.B. GARHWAL (CENTRAL) UNIVERSITY
SRINAGAR (GARHWAL), UTTARAKHAND**

2014

**PREPARATION AND EVALUATION OF
CHITOSAN MICROSPHERES OF SOME
DRUGS AND TO STUDY THE EFFECT OF
CROSSLINKING AGENT**

A Thesis Submitted to



H.N.B Garhwal University (A Central University)

Srinagar (Garhwal)

For the Award of Degree of

Master of Pharmacy (Pharmaceutics)

By

Ravindra Aswal

(Enrollment No. G01161154)

Under the supervision of

Dr. Ajay Semalty

Ajay Semalty
22/08/13

Department of Pharmaceutical Sciences

H.N.B Garhwal University (A Central University)

Srinagar (Garhwal)

(2013)

Preparation and Evaluation of *In situ* Gel of Some Drugs

A Thesis Submitted to



H.N.B. Garhwal University (A Central University)

Srinagar (Garhwal)

For The Award of Degree of
Master of Pharmacy in Pharmaceutics

By

Reeta Negi

(Enroll No. G0611040)

Under the Supervision of

Dr Ajay Semalty

Ajay Semalty
76/07/12

Department of Pharmaceutical Sciences
H.N.B. Garhwal University (A Central University)
Srinagar (Garhwal)
(2012)

**PREPARATION AND EVALUATION OF
CHITOSAN MICROPARTICLES OF SOME
DRUGS**

A Thesis Submitted to



H.N.B Garhwal University (A Central University)

Srinagar (Garhwal)

For the Award of Degree of

Master of Pharmacy (Pharmaceutics)

By

Nisha Dabral

(Enrolment No. G0720866)

Under the supervision of

Dr. Ajay Semalty

Ajay Semalty
29/07/12

Department of Pharmaceutical Sciences

H.N.B Garhwal University (A Central University)

Srinagar (Garhwal)

(2012)

Preparation and Characterization of Herbal Formulations for Anti Obesity Activity

A Thesis Submitted to



*H.N.B. Garhwal University (A Central University)
Srinagar (Garhwal)*

For The Award of Degree of
Master of Pharmacy in Pharmaceutics

By

Rahul Kumar

(Enroll No. GO 969603)

Under the Supervision of

Dr Ajay Semalty

Ajay Semalty
07/12/11

**Department of Pharmaceutical Sciences
H.N.B. Garhwal University (A Central University)
Srinagar (Garhwal)
(2011)**

Development and Evaluation of Floating Microspheres

A Thesis Submitted to



*H.N.B. Garhwal University (A Central University)
Srinagar (Garhwal)*

For The Award of Degree of
Master of Pharmacy in Pharmaceutics

By

Ashtami Semwal

(Enroll No. GO 33880)

Under the Supervision of

Dr Ajay Semalty

Ajay Semalty
27/12/11

**Department of Pharmaceutical Sciences
H.N.B. Garhwal University (A Central University)
Srinagar (Garhwal)
(2011)**

Formulation and Evaluation of Nifedipine Sustained Release tablets

A Dissertation submitted to



H.N.B. GARHWAL UNIVERSITY

In partial fulfillment for the award of degree of

MASTER OF PHARMACY

IN

PHARMACEUTICS

(2008-2010)

SUBMITTED BY:

Bhawesh Kumar

(Enroll. no. G0817241)

Under the supervision and guidance of

Co- Supervisor:

Mr. Manoj Sharma
General Manager
Sharon Bio-Med. LTD.
Dehradun (U.K.)

Ajay Semalty
7/9/10
Supervisor:

Dr. Ajay Semalty
Assistant professor
Department of Pharmaceutical Sciences
Chauras Campus
H.N.B. Garhwal University, Srinagar

**Preparation and Characterization of Transdermal Drug
Delivery System of Diltiazem Hydrochloride for Improving
Bioavailability**

*A Thesis Submitted to
H.N.B. Garhwal University, Srinagar (Garhwal)
(A Central University)*



**For The Award of Degree of
Master of Pharmacy in Pharmaceutics**

By

INDRA MOHAN ARYA

(Enroll No: G0515232)

Under the Supervision of

Dr. Ajay Semalty

Ajay Semalty
07/09/10

**Department of Pharmaceutical Sciences
H.N.B. Garhwal University, Srinagar (Garhwal)
(2010)**

**Preparation and Characterization of
Pharmacosomes of Some Drugs for Improving the
Bioavailability**

Thesis Submitted to

H.N.B. Garhwal University Srinagar (Garhwal)

For The Award of Degree of

Master of Pharmacy

in

Pharmaceutics

By



Balwant Singh Rawat
(Enroll No: - G0753301)

Under the Supervision of

Ajay Semalty

Ajay Semalty
06/08/09

**Department of Pharmaceutical Sciences
H.N.B. Garhwal University Srinagar (Garhwal)**

2009

**Development and Evaluation of Mucoadhesive
Buccal Films of Enalapril Maleate**

Thesis Submitted to

H.N.B. Garhwal University Srinagar (Garhwal)

For the Award of Degree of

Master of Pharmacy

in

Pharmaceutics



By

**Ujjwal Nautiyal
(G022893)**

Under the Supervision of

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Ajay Semalty
07/08/09

**Department of Pharmaceutical Sciences
H.N.B. Garhwal University Srinagar (Garhwal)**

2009

DEPARTMENT OF PHARMACEUTICAL SCIENCES
HEMVATI NANDAN BAHUGUNA GARHWAL UNIVERSITY
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SRINAGAR (GARHWAL), UTTRAKHAND-246 174



Dr. Ajay Semalty
Email: semaltyajay@gmail.com


Ref:

Dated: 31.07.2018

Certificate

This is to certify that the dissertation entitled "GENOMIC AND PHYTOCHEMICAL CHARACTERIZATION OF TWO SPECIES OF GENUS GAULTHERIA (FAMILY: ERICACEAE)", contains the original work completed by Miss Zoya Malik, M.Sc. (4th Sem.), Biotechnology and is being submitted by her in the partial fulfilment of the M.Sc. degree in Biotechnology.
She did her dissertation work under my co- supervision. I wish her good luck for her future endeavours.

Co- Supervisor


(Dr. Ajay Semalty)

**“TO STUDY THE EFFECT OF ALCOHOL ON DOSE
DUMPING OF SOME DRUG OF IR AND SR DOSAGE
FORMS”**



**THESIS
SUBMITTED TO**

**HEMVATI NANDAN BAHUGUNA GARHWAL
UNIVERSITY
(A CENTRAL UNIVERSITY)
SRINAGAR (GARHWAL), UTTARAKHAND**

FOR THE AWARD OF DEGREE OF

**MASTER OF PHARMACY
(PHARMACEUTICS)**

**BY
SHUBHAM SINGH BHANDARI
(Enrollment No. G1245976)**

**UNDER THE GUIDANCE OF
Dr. AJAY SEMALTY**

(Assistant Professor)

**DEPARTMENT OF PHARMACEUTICAL SCIENCES
HEMVATI NANDAN BAHUGUNA GARHWAL
UNIVERSITY
SRINAGAR (GARHWAL), UTTARAKHAND**

2018



Dr. Ajay Semalty
Assistant Professor
(M. Pharm., MBA, Ph. D.)

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SUPERVISOR'S CERTIFICATE

This is to certify that the dissertation entitled “**Exploring the herbal alternative for antihyperlipidemic activity**” embodies the original work carried out by **Mr. Akash Mishra (Enrollment No. G1050004)** has completed the requirement of minimum stipulated period of M. Pharm. work. In my opinion the thesis fulfils the requirement of M. Pharm. Degree of Department of Pharmaceutical Sciences, H.N.B. Garhwal (Central) University, Srinagar (Garhwal), Uttarakhand.

This work has not been submitted in part or full for the award of any degree or diploma of this or any other University.

Dr. Ajay Semalty

Department of Pharmaceutical Sciences, Chauras Campus
H.N.B. Garhwal University, Srinagar (Garhwal), Uttarakhand



Ref. No. Pharm./08/.....

Date: 06/08/09

SUPERVISOR'S CERTIFICATE

I feel pleasure in forwarding the thesis entitled **“Preparation and Characterization of Polyherbal Formulation for Hair Growth Activity”** of Mr. Ashutosh Badola for the award of Master of Pharmacy (Pharmaceutics) of H. N. B. Garhwal University, Srinagar (Garhwal), Uttarakhand.

This is to certify that the thesis embodies the work conducted by the candidate himself under my supervision for the requisite period in the Department of Pharmaceutical Sciences, H.N.B. Garhwal University, Srinagar (Garhwal), Uttarakhand and is on the lines of the synopsis approved.

Further to certify that the thesis did not form a basis of the award of any previous degree to him or the best of my knowledge to anybody else.

Mona Semalty
06/08/09
(Mrs. Mona Semalty)

DEPARTMENT OF PHARMACEUTICAL SCIENCES

H. N. B. Garhwal (Central) University, Srinagar Garhwal
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Ref. No. Pharmacy./09/.....

Date: 06/08/09

SUPERVISOR'S CERTIFICATE

I feel pleasure in forwarding the thesis entitled "*Development of Alginate Microspheres of some drugs and effect of polymer coating & cross linking agent*" of **Mr. Nitin Kunwar** for the award of Master of Pharmacy (Pharmaceutics) of H. N. B. Garhwal University, Srinagar (Garhwal), Uttarakhand.

This is to certify that the thesis embodies the work conducted by the candidate himself under my supervision for the requisite period in the Department of Pharmaceutical Sciences, H.N.B. Garhwal University, Srinagar (Garhwal), Uttarakhand and is on the lines of the synopsis approved.

Further to certify that the thesis did not form a basis of the award of any previous degree to him or the best of my knowledge to anybody else.


(Mona Semalty)

DEPARTMENT OF PHARMACEUTICAL SCIENCES

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Phone: 01370-267395, Fax: 252174, 252247



Date: ... 07.08.09


CERTIFICATE

We feel pleasure in forwarding the thesis entitled, "*Preparation & Characterization of Floating Microspheres of Ofloxacin Hydrochloride*" of Miss **Shikha Yadav** for the award of Master of Pharmacy (Pharmaceutics) of H.N.B Garhwal University, Srinagar (Garhwal), Uttarakhand.

This is to certify that the thesis embodies the work conducted by the candidate himself under our supervision for the requisite period in the Department of Pharmaceutical Sciences, H.N.B. Garhwal University, Srinagar (Garhwal), Uttarakhand and is on the lines of the approved synopsis.

Further to certify that the thesis did not form a basis of the award of any previous degree to him or the best of our knowledge to anybody else.


(Mona Semalty)


(L. Mohanty)

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Ref.No. Pharm. /2010/.....

Date: 27/8/10

SUPERVISOR'S CERTIFICATE

I feel pleasure in forwarding the thesis entitled "**Development and Evaluation of Microcapsules of Verapamil Hydrochloride**" of Miss Deepika Verma for the award degree of Master of Pharmacy in Pharmaceutics of H. N. B. Garhwal University, Srinagar (Garhwal), Uttarakhand.

This is to certify that the thesis embodies the work conducted by the candidate herself under my supervision for the requisite period in the Department of Pharmaceutical Sciences, H. N. B. Garhwal University, Srinagar (Garhwal), Uttarakhand and is on the lines of the synopsis approved.

Further to certify that the thesis did not form a basis of the award of any previous degree to her or the best of my knowledge to anybody else.


(Dr. Mona Semalty)

Department of Pharmaceutical Science

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Date... 29/08/10

CERTIFICATE

We fell pleasure in forwarding the thesis entitled, "*Comparative Release Study of Xanthium Gum and Guar Gum Multi-layered Matrix Tablets of Aceclofenac*" of Miss **Tulsi Bisht** for the award of Master of Pharmacy (Pharmaceutics) of H.N.B Garhwal University, Srinagar (Garhwal), Uttrakhand.

This is to certify that the thesis embodies the work conducted by the candidate herself under our supervision for the requisite period in the Department of Pharmaceutical Sciences, H.N.B Garhwal University, Srinagar (Garhwal), Uttrakhand and is on the lines of the approved synopsis.

Further to certify that the thesis did not form a basis of the award of any previous degree to her or the best of our knowledge to anybody else.


(Dr. Mona Semalty)

DEPARTMENT OF PHARMACEUTICAL SCIENCES

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Ref. No. Pharm. / /

Date: 18/11/2011

SUPERVISOR'S CERTIFICATE

I feel pleasure in forwarding the thesis entitled **“Preparation and evaluation of herbal formulations for hair growth activity”** of **Mr. Tejprakash Sevak** for the award of Master of Pharmacy (Pharmaceutics) of H. N. B. Garhwal University (A Central University), Srinagar garhwal, Uttarakhand.

This is to certify that the thesis embodies the work conducted by the candidate himself under my supervision for the requisite period in the Department of Pharmaceutical Sciences, H. N. B. Garhwal University (A Central University), Srinagar Garhwal, Uttarakhand and is on the lines of synopsis approved.

Further to certify that the thesis did not form a basis of the award of any previous degree to him or the best of my knowledge to anybody else.


(Dr Mona Semalty)



Dr. Mona Semalty
Assistant Professor
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SUPERVISOR'S CERTIFICATE

I feel pleasure in forwarding the thesis entitled **“Development and Evaluation of Phospholipid Complex of Synthetic Drug”** of Miss **Prateeksha Badoni** for the award degree of Master of Pharmacy in Pharmaceutics of H.N.B. Garhwal University (A Central University), Srinagar Garhwal (Uttarakhand). This is to certify that the thesis embodies the work conducted by the candidate herself under my supervision for the requisite period in the Department of Pharmaceutical Sciences, H. N. B. Garhwal University (A Central University), Srinagar Garhwal (Uttarakhand) and is on the lines of the synopsis approved.

Further to certify that the thesis did not form a basis of the award of any previous degree to her or the best of my knowledge to anybody else.

Mona Semalty
20/12/2011
(Dr Mona Semalty)



Dr. Mona Semalty
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SUPERVISOR'S CERTIFICATE

I feel pleasure in forwarding the thesis entitled **“Preparation and Evaluation of Inclusion complex of phytoconstituents with beta-cyclodextrin”** of **Miss Manju Singh** for the award degree of Master of Pharmacy in Pharmaceutics of H.N.B. Garhwal University (A Central University), Srinagar Garhwal (Uttarakhand). This is to certify that the thesis embodies the work conducted by the candidate herself under my supervision for the requisite period in the Department of Pharmaceutical Sciences, H. N. B. Garhwal University (A Central University), Srinagar Garhwal (Uttarakhand) and is on the lines of the synopsis approved.

Further to certify that the thesis did not form a basis of the award of any previous degree to her or the best of my knowledge to anybody else.


(Mona Semalty)



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SUPERVISOR'S CERTIFICATE

I feel pleasure in forwarding the thesis entitled “**Development and Evaluation of Cyclodextrin Inclusion Complex of Some Drugs**” of Miss. **Mitali Panchpuri** for the award degree of Master of Pharmacy in Pharmaceutics of H.N.B. Garhwal University (A Central University), Srinagar Garhwal (Uttarakhand). This is to certify that the thesis embodies the work conducted by the candidate herself under my supervision for the requisite period in the Department of Pharmaceutical Sciences, H. N. B. Garhwal University (A Central University), Srinagar Garhwal (Uttarakhand) and is on the lines of the synopsis approved.

Further to certify that the thesis did not form a basis of the award of any previous degree to her or the best of my knowledge to anybody else.

M. Semalty
23/07/2012
(Dr Mona Semalty)



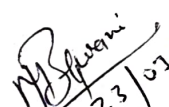
Dr. Mona Semalty
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SUPERVISOR'S CERTIFICATE

I feel pleasure in forwarding the thesis entitled “**Development and Evaluation of Ocular Inserts of Some Drugs**” of Miss. **Aradhana Raturi** for the award degree of Master of Pharmacy in Pharmaceutics of H.N.B. Garhwal University (A Central University), Srinagar Garhwal (Uttarakhand). This is to certify that the thesis embodies the work conducted by the candidate herself under my supervision for the requisite period in the Department of Pharmaceutical Sciences, H. N. B. Garhwal University (A Central University), Srinagar Garhwal (Uttarakhand) and is on the lines of the synopsis approved.

Further to certify that the thesis did not form a basis of the award of any previous degree to her or the best of my knowledge to anybody else.


23/07/2012
(Dr Mona Semalty)



Dr. Mona Semalty
Assistant Professor
(M. Pharm., MBA, D. Phil.)

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SUPERVISOR'S CERTIFICATE

I feel pleasure in forwarding the thesis entitled "**Formulation and evaluation of solid dispersion of Nimesulide using different carrier system**" of **Mr. Amit Purohit** for the award degree of Master of Pharmacy in Pharmaceutics of H.N.B. Garhwal University (A Central University), Srinagar Garhwal (Uttarakhand). This is to certify that the thesis embodies the work conducted by the candidate herself under my supervision for the requisite period in the Department of Pharmaceutical Sciences, H. N. B. Garhwal University (A Central University), Srinagar (Uttarakhand) and is on the lines of the synopsis approved.

Further to certify that the thesis did not form a basis of the award of any previous degree to her or the best of my knowledge to anybody else.

M. Semalty
20/08/2013
(Dr. Mona Semalty)

DEPARTMENT OF PHARMACEUTICAL SCIENCES

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Date: 17/11/2014

SUPERVISOR'S CERTIFICATE

This is to certify that the dissertation entitled **“Preparation and Characterization of β -Cyclodextrin Complexes of Acyclovir and to Study the Effect of Different Excipients for Improving the Efficiency of Complexes.”** embodies the original work carried out by **Miss. Madhuri Maher (Enrollment No. G1214503)** has completed the requirement of minimum stipulated period of M. Pharm. work. In my opinion the thesis fulfils the requirement of M. Pharm. Degree of Department of Pharmaceutical Sciences, HNB Garhwal (Central) University.

This work has not been submitted in part or full for the award of any degree or diploma of this or any other University.


Dr. Mona Semalty

Assistant Professor

Department of Pharmaceutical Sciences, Chauras Campus,
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Date: 28/03/16

SUPERVISOR'S CERTIFICATE

This is to certify that the dissertation entitled “**Preparation and Characterization of Colon Specific Microparticulate Drug Delivery System of Model Drug Diclofenac Sodium**” embodies the original work carried out by **Miss Anita (Enrollment No. G0918255)** has completed the requirement of minimum stipulated period of M. Pharm. work. In my opinion the thesis fulfils the requirement of M. Pharm. Degree of Department of Pharmaceutical Sciences, H.N.B. Garhwal University, Srinagar (Garhwal), Uttarakhand.

This work has not been submitted in part or full for the award of any degree or diploma of this or any other University.

M. Bejwan
28/03/2016
Dr. Mona Semalty

Department of Pharmaceutical Sciences, Chauras Campus
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Dr. Mona Semalty

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CERTIFICATE BY SUPERVISOR

This is to certify that the dissertation entitiled “**Formulation and development of alternative for antiobesity activity**” embodies the original work carried out by **Miss. Anita Kumari, Enrollment No. 1050006** has completed the requirement of minimum stipulated period of M. Pharm. work in my opinion; the thesis fulfils the requirement of M. Pharm. degree of Department of Pharmaceutical Sciences, HNB Garhwal (Central) University.

This work has not been submitted in part or full for the award of any degree or diploma of this or any other University.

M. Belwani
26/10/2016
Dr. Mona Semalty

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Dr. Mona Semalty

Assistant Professor

(M.Pharm, MBA, D.Phil)

CERTIFICATE BY SUPERVISOR

This is to certify that the dissertation entitiled “**Herbal formulations for hair growth: Preparation and characterization**” embodies the original work carried out by **Miss. Divya Semwal, Enrollment No. G1050012** has completed the requirement of minimum stipulated period of M. Pharm. work in my opinion; the thesis fulfils the requirement of M. Pharm. degree of Department of Pharmaceutical Sciences, HNB Garhwal (Central) University.

This work has not been submitted in part or full for the award of any degree or diploma of this or any other University.


Dr. Mona Semalty

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Dr. Mona Semalty
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CERTIFICATE BY SUPERVISOR

This is to certify that the dissertation entiteled "Effect of food on dose dumping" embodies the original work carried out by Ms. Neeti Kumari, Enrollment No. G161341020 has completed the requirement of minimum stipulated period of M. Pharm. work in my opinion; the thesis fulfils the requirement of M. Pharm. Degree of Department of pharmaceutical sciences, HNB Garhwal (Central) University.

This work has not been submitted in part or full for the award of any degree or diploma of this or any other University.


(Dr. Mona Semalty)


15-10-18
Head
Department of Pharmaceutical Science
H. N. B. Garhwal University
Srinagar (Garhwal) Uttarakhand



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Dr. Mona Semalty
Assistant Professor
(M. Pharm., MBA, D. Phil.)

Date: 14.10.2019

CERTIFICATE BY SUPERVISOR

This is to certify that the dissertation entiteled “**Development and Characterization of Nanoparticles of some Herbal Drugs for Improved Drug Delivery**” embodies the original work carried out by **Nitin Kumar, Enrollment No. G1344446**. He has completed the requirement of minimum stipulated period of M.Pharm. work. The thesis fulfils the requirement of M. Pharm. Degree of Department of Pharmaceutical sciences, H.N.B. Garhwal (Central) University.

This work has not been submitted in part or full for the award of any degree or diploma of this or any other University.


(Dr. Mona Semalty)



Dr. Mona Semalty
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Date: 14.10.2019

CERTIFICATE BY SUPERVISOR

This is to certify that the dissertation entiteled **“Preparation and Characterization of Cyclodextrin Complexes of Doxycycline Hyclate for Improved Drug Delivery”** embodies the original work carried out by **Priyanka Rani, Enrollment No. G171340171**. She has completed the requirement of minimum stipulated period of M.Pharm. work. The thesis fulfils the requirement of M. Pharm. Degree of Department of Pharmaceutical sciences, H.N.B. Garhwal (Central) University.

This work has not been submitted in part or full for the award of any degree or diploma of this or any other University.

M. Semalty
14.10.19
(Dr. Mona Semalty)




Dr. Mona Semalty
Assistant Professor
(M. Pharm., MBA, D. Phil.)

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Date:

CERTIFICATE BY SUPERVISOR

This is to certify that the dissertation entitled “**CHEMICAL PERMEATION ENHANCERS FOR IMPROVED BUCCAL DRUG DELIVERY**” embodies the original work carried out by **Navita Dimri, Enrollment No. G1575555**. She has completed the requirement of minimum stipulated period of M. Pharm. work. The thesis fulfils the requirement of M. Pharm. Degree of Department of Pharmaceutical sciences, H.N.B. Garhwal University (A Central University) Srinagar (Garhwal) Uttarakhand.

This work has not been submitted in part or full for the award of any degree or diploma of this or any other University.


(Dr. Mona Semalty)



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CERTIFICATE BY SUPERVISOR

This is to certify that the dissertation entitled “A review on transdermal drug delivery system based on - Microneedles” embodies the original work carried out by **Kanchan Tariyal, Enrollment no. G1344423**. She has completed the requirement of minimum stipulated period of M. Pharm. work. The thesis fulfils the requirement of M. Pharm., Degree of Department of Pharmaceutical sciences, H.N.B. Garhwal University (a central university).

This work has not been submitted in part or full for the award of any degree or diploma of this or any other University.


(Dr. Mona Semalty)



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CERTIFICATE BY SUPERVISOR

This is to certify that the dissertation entitled “**CYCLODEXTRIN BASED NANOPARTICLES TO ENHANCE DRUG SOLUBILITY AND DRUG DELIVERY**” embodies the original work carried out by **Devashish Pandey**, Enrollment No. **G1451011**. He has completed the requirement of minimum stipulated period of M Pharm. work. The thesis fulfils the requirement of M. Pharm. Degree of Department of Pharmaceutical sciences, H.N.B. Garhwal (Central) University.

This work has not been submitted in part or full for the award of any degree or diploma of this or any other University.

Mona Semalty
05/06/2021

(Dr. Mona Semalty)



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Date: 15/6/22

SUPERVISOR'S CERTIFICATE

This is to Certify that the Dissertation entitled “**Development of Cyclodextrin Nanoparticles of Some Drug for Improving Biopharmaceutical Properties**” embodies the original work conducted by **Mr. Gaurav Singh Rawat (Enrollment No. G151341247)** has Completed the requirement of Minimum Stipulated Period of M. Pharm. Work. The thesis fulfils the requirement of M. Pharm. degree of Department of Pharmaceuticals Sciences, H.N.B Garhwal (Central) University, Srinagar (Garhwal).

This Work has not been submitted in part or Full for the award of any degree or diploma of this or any other University.

M. Semalty
15/6/22

Dr. Mona Semalty



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Email: monasemalty@gmail.com

Date: 14/10/22

SUPERVISOR'S CERTIFICATE

This is to certify that the dissertation entitled “**Preparation and Evaluation of In- Situ Gel of a Model Drug (Ciprofloxacin)**” embodies the original work conducted by **Ms. Shalini (Enrollment No. G201342138)**. She has completed the requirement of minimum stipulated period of M. Pharmacy Degree of Department of Pharmaceutical Sciences, H.N.B Garhwal (Central) University, Srinagar Garhwal.

This work has not been submitted in part or full for the award of any degree or diploma of this or any other university.


Dr. Mona Semalty

**DEPARTMENT OF PHARMACEUTICAL SCIENCES
H.N.B. GARHWAL UNIVERSITY, CHAURAS CAMPUS-
249161**

Phone No: 01370-267395, FAX: 01346-252174, 252247




Date:

SUPERVISOR'S CERTIFICATE

This is to certify that the dissertation entitiled "**Formulation and Evaluation of Zinc and Silver Metal Complex with Aspirin and Salicylic Acid**" embodies the original work carried out by **Ms. Shivani Bahuguna, Enrollment No. G1245974** has completed the requirement of minimum stipulated period of M. Pharm work. In my opinion the thesis fulfils the requirement of M. Pharm. Degree of Department of Pharmaceutical Sciences, HNB Garhwal (Central) University.

This work has not been submitted in part or full for the award of any degree or diploma of this or any other University.


(Dr. Mona Semalty)


15-10-18
Head
Department of Pharmaceutical Science
H. N. B. Garhwal University
Srinagar (Garhwal) Uttarakhand

The Scheduling Algorithms On The Cloud Computing Based Environment

A Dissertation submitted in partial fulfillment of the requirement
for the Award of degree
of

Master of Technology (Computer Science and Engineering)

Submitted by

(Ashish)

(Roll No.17134360002)

Supervisor (s):

Prof. M.M.S. Rauthan



(Department of Computer Science and Engineering)

HEMVATI NANDAN BAHUGUNA GARHWAL UNIVERSITY
(A Central University)
Srinagar (Garhwal)

(2017-19)

CERTIFICATE

This is to certify that Thesis Report entitled “**The Scheduling Algorithms On The Cloud Computing Based Environment**” which is submitted by **Ashish** in partial fulfillment of the requirement for the award of **Master of Technology (Computer science and Engineering)** degree from Hemvati Nandan Bahuguna Garhwal University (A Central University) Srinagar (Garhwal), is a record of the candidate own work carried out by him under my supervision. The matter embodied in this project work is original and has not been submitted for the award of any other degree.

Date: 14.07.2021



**Signature of Supervisor
Prof. M.M.S. Rauthan
Professor and HOD,
Dept. of Computer Science
and Engineering**

IMPLEMENTING ENERGY-EFFICIENT ROUTING PROTOCOL IN WSN



Submitted

In

Partial fulfillment of the requirements for the award of the degree

Of

Master of Technology (Computer Science & Engineering)

Submitted By:

PRADEEP RANA
(Roll No. 17134360003)

Supervisor:

Prof. M.M.S RAUTHAN

**DEPARTMENT OF COMPUTER SCIENCE AND
ENGINEERING
(SCHOOL OF ENGINEERING AND TECHNOLOGY)
Hemvati Nandan Bahuguna Garhwal University
(A Central University)
Srinagar Garhwal, Uttarakhand**

CERTIFICATE

This is to certify that Thesis Report entitled “Implementing energy-efficient routing protocol in WSN” which is submitted by Pradeep Rana in partial fulfillment of the requirement for the award of Master of Technology (Computer science & Engineering) degree from H.N.B Garhwal University Srinagar (Garhwal), Uttarakhand is a record of the candidate own work carried out by him under my supervision. The matter embodied in this project work is original and has not been submitted for the award of any other degree.

Date: 14.01.2021


Signature of Supervisor

Prof. M.M.S. Rauthan

Professor and HOD,

Dept. of computer science & engineering

Wormhole Attack Detection in Wireless Sensor Networks

A Dissertation

Submitted in partial fulfillment of the requirements
of the degree of

Master of Technology (Computer Science & Engineering)

Submitted by

PRATYUSH PANWAR

(Roll No. 17134360004)

Supervisor (s):

Dr M. M. S. Rauthan, Professor and Head of Department, Computer Science and Engineering,

Hemvati Nandan Bahuguna Garhwal University

Mr Rohan Varma, Computer Science and Engineering,

Hemvati Nandan Bahuguna Garhwal University



Department of Computer Science and Engineering
(School Of Engineering and Technology)

Hemvati Nandan Bahuguna Garhwal University

(A Central University)

2017-2019

Certificate

This is ~~to~~ certified that Dissertation report entitled "Wormhole Attack Detection in Wireless Sensor Networks" which is submitted by Pratyush Panwar in partial fulfillment of the requirement for the award of Master of Technology (Department of Computer science and Engineering) degree from Hemvati Nandan Bahuguna Garhwal University (A Central University) Uttarakhand, is a record of the candidate's own work carried out by him under my supervision. The matter embodied in this project work is original and has not been submitted for the award of any other degree.

Date: 12-01-2021

Signature of Supervisor:


Dr. M.M.S. Rauthan

Professor

(Dept. of Computer Science &
Engineering)

H.N.B.G.U

A THESIS

Prediction of students grades using neural network and genetic algorithm for educational data set

Submitted In

partial fulfillment of requirements for the award of the degree

Of

Master Of Technology (Computer Science & Engineering)

Submitted By:

Ravindra Rawat

(Roll no.17134360005)

Supervisor:

Dr. Narender Kumar

Assistant Professor



Department of Computer Science and Engineering

(School of Engineering and Technology)

Hemvati Nandan Bahuguna Garhwal (Central)University

CERTIFICATE

This is to certified that Thesis Report entitled “Prediction of students grades using neural network and genetic algorithm for educational data set” which is submitted by Ravindra Rawat in partial fulfillment of the requirement for the award of Master of Technology(Computer science & Engineering) degree from H.N.B Garhwal University Srinagar(Garhwal), Uttarakhand is a record of the candidate own work carried out by him under my supervision. The matter embodied in this project work is original and has not been submitted for the award of any other degree.

07/01/2021

Date:



Signature of Supervisor:

Dr. Narender kumar

Assistant Professor

(Dept. of Computer Science & Engineering)

VM SCHEDULING ANALYSIS USING ROUND ROBINS



A Dissertation

Submitted

In

Partial fulfillment of requirements for the award of the degree

Of

Master of Technology (Computer Science & Engineering)

Submitted By

SAGAR SAMRAT SHAH

(Roll no.17134360006)

Supervisor

PROF. M.M.S RAUTHAN

**DEPARTMENT OF COMPUTER SCIENCE AND
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(SCHOOL OF ENGINEERING AND TECHNOLOGY)

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(A Central University)

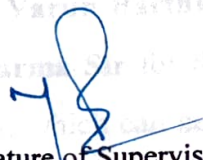
Srinagar Garhwal, Uttarakhand

(2017-19)

CERTIFICATE

This is to certify that Thesis Report entitled "Vm Scheduling Analysis Using Round Robins" which is submitted by Sagar Samrat Shah in partial fulfillment of the requirement for the award of Master of Technology (Computer science & Engineering) degree from H.N.B Garhwal University Srinagar (Garhwal), Uttarakhand, is a record of the candidate's own work carried out by him under my supervision. The matter embodied in this project work is original and has not been submitted for the award of any other degree.

Date: 14.01.2021


Signature of Supervisor:
Prof. M.M.S. Rauthan
Professor and HOD,
Dept. of Computer Science
& Engineering

***Performance Analysis of Energy Efficient Routing
Protocols (LEACH, enhance LEACH and EAMMH)
in WSN***

A THESIS

Submitted in partial fulfilment of the requirements for the award of the
degree of

MASTER OF TECHNOLOGY IN COMPUTER SCIENCE & ENGINEERING

Submitted by

Karishma Dobhal

Roll No- 18134360001

Supervisor (S) :

Professor Manmohan Singh Rauthan

Department Of Computer Science & Engineering

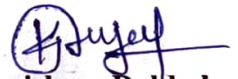


**Department Of Computer Science & Engineering
School of Engineering and Technology
Hemvati Nandan Bahuguna Garhwal University
(A Central University) Srinagar Garhwal, Uttrakhand
Session 2018-2020**

SELF-CERTIFICATE

This is to certify that the Thesis report entitled "*Performance Analysis of Energy Efficient Routing Protocols (LEACH, enhance LEACH and EAMMH) in WSN*" is done by me **Karishma Dobhal** (M. Tech) is an authentic work carried out for the partial fulfillment of the requirements for the award of the degree of Master of Technology in Computer Science in the *Department of Computer Science and Engineering, H.N.B. Garhwal University, Srinagar Garhwal, Uttrakhand* under the guidance of **Prof. Manmohan Singh Rauthan**. The matter embodied in this thesis work is original and has not been submitted earlier for award of any other degree to the best of my knowledge and belief.

Date: 16/08/2021



Karishma Dobhal

Enrolment No- 1500523

Roll No -18134360001

Signature of Supervisor



**FEATURE SELECTION AND FEATURE EXTRACTION METHODS FOR
GENE EXPRESSION CLASSIFICATION USING LINEAR, RBF KERNEL
METHODS OF SUPPORT VECTOR MACHINE (SVM)**

A THESIS

Submitted in partial fulfilment of the requirements for the degree of
MASTER OF TECHNOLOGY IN COMPUTER SCIENCE & ENGINEERING

by

Neeraj

Roll No. **18134360002**

Under the supervision of
Dr. Narender Kumar,
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Srinagar (Garhwal),(Uttarakhand), INDIA

(2018-2020)



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(A Central University)
Srinagar (Garhwal), Uttarakhand- 246174

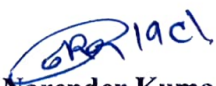
Dr. Narender Kumar (Ph.D.)
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☎ +91 9411775966

Date: .01./07/2021

SUPERVISOR'S CERTIFICATE

I am pleased to certify that the M. Tech. dissertation entitled “**Feature Selection and Feature Extraction Methods for Gene Expression Classification using Linear, RBF Kernel Methods of Support Vector Machine**” being submitted by **NEERAJ** (M. Tech. Roll No.: 18134360002) in the partial fulfilment of the requirements for the award of the degree of *M. Tech. in Computer Science* in the *Department of Computer Science and Engineering, H. N. B. Garhwal University (A Central University), Srinagar Garhwal, Uttarakhand*, is a record of candidate's own work, carried out by her under my supervision and guidance. The matter embodied in this dissertation is original and has not been submitted anywhere else for award of any other degree.


Dr. Narender Kumar
(Assistant Professor)
Department of Computer Science and Engineering

Currently on lien as-
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Department of Computer Science
Doon University, Dehradun,
Uttarakhand

WOMEN CRIME DATA ANALYSIS USING K-MEANS CLUSTERING
A THESIS

Submitted in partial fulfillment of the requirements for the degree of

MASTER OF TECHNOLOGY IN COMPUTER SCIENCE & ENGINEERING

by

Nisha Pokhriyal

Roll No. 18134360003

Under the supervision of
Dr. Narender Kumar,
Assistant Professor

Department of Computer Science & Engineering,
H. N. B. Garhwal University,
(A Central University),
Uttarakhand, 246174



Department of Computer Science Engineering
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Srinagar (Garhwal),(Uttarakhand), INDIA
(2018-2020)



हे० नं० ब० गढ़वाल विश्वविद्यालय, श्रीनगर गढ़वाल

H. N. B. GARHWAL UNIVERSITY

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(A Central University)

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Date: 12/07/2021

SUPERVISOR'S CERTIFICATE

I am pleased to certify that the M. Tech. dissertation entitled "**Women Crime Data Analysis Using K-Mean Clustering**" being submitted by **NISHA POKHARIYAL** (M. Tech. Roll No.: 18134360003) in the partial fulfilment of the requirements for the award of the degree of *M. Tech. in Computer Science* in the *Department of Computer Science and Engineering, H. N. B. Garhwal University (A Central University), Srinagar Garhwal, Uttarakhand*, is a record of candidate's own work, carried out by her under my supervision and guidance. The matter embodied in this dissertation is original and has not been submitted anywhere else for award of any other degree.

6/3/21

Dr. Narender Kumar

(Assistant Professor)

Department of Computer Science and Engineering

Currently on lien as-

Associate Professor

Department of Computer Science

Doon University, Dehradun

Uttarakhand

**PREDICTING STUDENTS' ACADEMIC PERFORMANCE USING
EDUCATIONAL DATA MINING**

A THESIS

Submitted in partial fulfillment of the requirement for the degree of
MASTER OF TECHNOLOGY IN COMPUTER SCIENCE & ENGINEERING

By

Asish Bhandari

Roll No. 18134360004

Under the Supervision of

Dr. Y.P Raiwani, Professor and Head,

Department of Computer Science and Engineering,

H.N.B Garhwal University (A Central University), Uttarakhand 246174



Department of Computer Science and Engineering,

School of Engineering and Technology

Hemvati Nandan Bahuguna Garhwal University

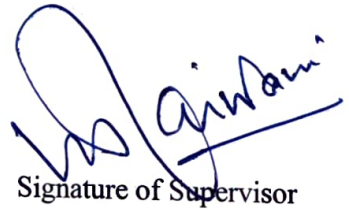
(A Central University), Srinagar Garhwal, Uttarakhand

2018-2020

SUPERVISOR'S CERTIFICATE

I am pleased to certify that the M.Tech dissertation report entitled "**Predicting Students' Academic Performance Using Educational Data Mining**" which is submitted by **Asish Bhandari** (M.Tech Roll No. 18134360004) in partial fulfillment of the requirement for the degree of Master Of Technology in Computer Science in the *Department of Computer Science and Engineering, H.N.B. Garhwal University, Srinagar Garhwal, Uttarakhand*, is a record of the candidate's own work carried out by him under my supervision. The matter embodied in this thesis work is original and has not been submitted for the award of any other degree.

Date: 30/07/2021



Signature of Supervisor

Dr. Y.P Raiwani,
Professor and Head

Dept. of Computer
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IMPROVING THE ACCURACY OF HEART DISEASE PREDICTION USING LOGISTIC REGRESSION AND RANDOM FOREST HYBRID CLASSIFIER

A THESIS

Submitted in partial fulfillment of the requirement for the degree of

MASTER OF TECHNOLOGY IN COMPUTER SCIENCE & ENGINEERING

By

Himanshu Thapliyal

Roll No.18134360005

Under the Supervision of

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Department of Computer Science and Engineering,

School of Engineering and Technology

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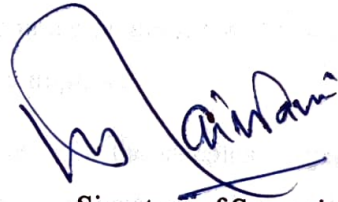
(A Central University), Srinagar Garhwal, Uttarakhand

2018-2020

SUPERVISOR'S CERTIFICATE

This is to certify that Thesis report entitled “**Improving the Accuracy of Heart Disease Prediction Using Logistic Regression and Random Forest Hybrid Classifier**” is done by **Himanshu Thapliyal** (M.tech Roll No. 1813436005) in partial fulfillment of the requirement for the degree of Master Of Technology in Computer Science in the *Department of Computer Science and Engineering, H.N.B. Garhwal University, Srinagar Garhwal, Uttarakhand*, is a record of the candidate's own work carried out by him under my supervision. The matter embodied in this thesis work is original and has not been submitted for the award of any other degree.

Date: 30/07/2021



Signature of Supervisor

**Dr. Y.P Raiwani,
Professor and Head**

Dept. of Computer
Science and Engineering

A Data Classification-Based Scheme for Cloud Data Security Using Various Cryptographic Algorithms

Submitted in partial fulfillment of the requirements of the degree of
Master of Technology (Computer Science & Engineering)

Submitted By

Mohd Naved Ul Haq

Roll No.1813436006

Supervisor (s)

Dr. Narendra Rawal



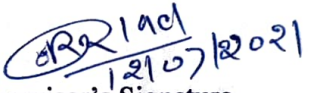
Department of Computer Science & Engineering

HNB Garhwal University Srinagar Uttarakhand

2018-2020

CERTIFICATE

This is to certify that this project entitled “**A Data Classification-Based Scheme for Cloud Data Security Using Various Cryptographic Algorithms**” submitted in fulfillment of the degree of Master of Technology to the Department of Computer Science and Engineering, H.N.B.G.U., Srinagar (Garhwal), Uttarakhand, done by **Mohd Naved Ul Haq** is an authentic work carried out by him under my guidance. The matter embodied in this dissertation work has not been submitted earlier for award of any other degree to the best of my knowledge and belief.

Handwritten signature of Dr. Narendra Rawal in black ink, including the initials 'DRR' and the date '12/07/2021'.

Supervisor's Signature

Dr. Narendra Rawal

Ex. Assistant Professor

HNBGU Dept. of
Computer Science & Engineering

Impact on Wireless Sensor Networks by Artificial Intelligence Technologies

Submitted in partial fulfillment of the requirements
of the degree of

**Master of Technology
(Computer Science & Engineering)**

Submitted by

Ashish Negi

Roll No. 19134360004

Supervisor(s):

Prof. Manmohan Singh Rauthan

Mr. Rohan Verma



Department of Computer Science & Engineering
Hemvati Nandan Bahuguna Garhwal University,
Srinagar (Garhwal), Uttarakhand
2019-2021

SELF- CERTIFICATE

This is to certify that the Thesis report entitled “**Impact on Wireless Sensor Networks by Artificial Intelligence Technologies**” is done by me. **Ashish Negi** (M.Tech Roll No. 19134360006) is an authenticate work carried out in partial fulfillment of the requirement for the degree of Master of Technology in Computer Science and Engineering in the *Department of Computer Science and Engineering, H.N.B. Garhwal University, Srinagar Garhwal, Uttarakhand* under the supervision of **Prof. Manmohan Singh Rauthan**. The matter embodied in this thesis work is original and has not been submitted for the award of any other degree to the best of my knowledge and belief.

Date: 20.4.2022



Ashish Negi

Roll No. 19134360004

SUPERVISOR



(MAN MOHAN SINGH RAUTHAN)

S.N	Subject Code	Subject Title	Periods per week			Evaluation Scheme				Subject Total
						Seasonal			SE	
			L	T	P	Credit	CT	TA	E	
BS.C- I Year										
Semester – I										
1	BSY-CST101	Foundations of Yoga	4	2	-	6	20	10	70	100
2	BSY-CSP102	Yoga Practicum-I	-	2	4	6	20	10	70	100
3	BSY -MD103	Multidisciplinary-I (Basic Yoga Practices-I)	1	-	3	4	20	10	70	100
4	BSY-SC104	Skill Course-I	-	-	2	2	20	10	70	100
5	BSY-VAC105	Life Skill and Personality Development	2	-	-	2	20	10	70	100
						20	TOTAL			500
Semester – II										
1	BSY-CST201	Essence of Patanjali Yoga Sutra	4	2	-	6	20	10	70	100
2	BSY-CST202	General Introduction to Hatha Yoga and its Practices	4	-	2	6	20	10	70	100
3	BSY –MD203	Multidisciplinary (Basic Yoga Practices-II)	1	-	3	4	20	10	70	100
4	BSY-SC204	Skill Course-II	-	-	2	2	20	10	70	100
5	BSY-VAC 205	Extracurricular Course (Basic of Environmental Studies)	2	-	-	2	20	10	70	100
						20	TOTAL			500
BS.C- II Year										
Semester – III										
1	BSY-CST301	General Introduction to Upanishads	4	2	-	6	20	10	70	100
2	BSY-CST302	Yoga Practicum-II	-	2	4	6	20	10	70	100
3	BSY –MD303	Multidisciplinary (Basic Yoga Practices-III)	1	-	3	4	20	10	70	100
4	BSY-SC304	Skill Course-III	-	-	2	2	30		70	100
5	BSY-VAC305	Indian Knowledge System (IKS) OR Additional Multidisciplinary Skill Course (AMSE) ⁺⁺	2	-	-	2	20	10	70	100
						20	TOTAL			500
Semester – IV										
1	BSY-CST401	Four Streams of Yoga	4	2	-	6	20	10	70	100
2	BSY-CST402	Basis of Yoga Therapy	4	-	2	6	20	10	70	100
3	BSY –MS403	Multidisciplinary (Basic Yoga Practices-IV)	1	-	3	4	20	10	70	100
4	BSY-SC404	Skill Course-IV	-	-	2	2	30		70	100

5	BSY-VAC405	Indian Knowledge System (IKS) OR Additional Multidisciplinary Skill Course (AMSE) ⁺⁺	2	-	-	2	20	10	70	100
						20	TOTAL			500
BS.C- III Year										
Semester – V										
1	BSY-CST501	Essence of Shrimad Bhagvada Gita	4	2	-	6	20	10	70	100
2	BSY-CST502	Teaching Methods of Yoga	4	2	-	6	20	10	70	100
3	BSY-FWP503	Field Work-I	-	-	4	4	20	10	70	100
4	BSY-CC504	Culture, traditions and moral Values	2	-	-	2	20	10	70	100
5	BSY-LST505	Language-I (Sanskritam)	2	-	-	2	20	10	70	100
						20	TOTAL			500
Semester – VI										
1	BSY-CST601	Yoga Psychology	4	2	-	6	20	10	70	100
2	BSY-CST602	Human Consciousness in Indian Philosophy	4	2	-	6	20	10	70	100
3	BSY-FWP 603	Field Work-II	0	-	4	4	20	10	70	100
4	BSY-CC604	Communication Skill Course	2	-	-	2	20	10	70	100
5	BSY-LST605	Language-I (Hindi/English)	2	-	-	2	20	10	70	100
						20	TOTAL			500
BS.C-IV YEAR										
Semester – VII (U.G. with Research)										
1	BSY-CST701	Yoga Therapy	3	1	-	4	20	10	70	100
2	BSY-CSP702	Yoga Practical-III	-	-	4	4	20	10	70	100
3	BSY-CE 703	Core Elective-I	4	1	1	6	20	10	70	100
4	BSY-CC704	Research Methodology	3	1	-	4	20	10	70	100
5	BSY-CC705	Research writing and Ethics	2	-	-	2	20	10	70	100
						20	TOTAL			500
Semester – VIII (U.G. with Research)										
1	BSY-CST801	Yoga Philosophy	3	1	-	4	20	10	70	100
2	BSY-CSP802	Yoga Practical-IV	-	-	4	4	20	10	70	100
3	BSY-CE803	Core Elective-II	-	-	2	2	20	10	70	100
4	BSY-CC804	Dissertation	3	1	-	4	20	10	70	100
5	BSY-CC805	Research Paper Presentation Skill (Oral)		1	5	6	20	10	70	100
						20	TOTAL			500
Semester – VII (U.G. with Honors)										
1	BSY-CST701	Yoga Therapy	3	1	-	4	20	10	70	100
2	BSY-CSP702	Yoga Practical-III	-	-	4	4	20	10	70	100
3	BSY-CME 703	Core Major Elective-I	3	1	-	4	20	10	70	100
4	BSY-CRM704	Basic Research Methods-I	3	-	-	3	20	10	70	100
5	BSY-CMi705	Fundamental texts of Yoga-I	3	-	-	3	20	10	70	100
6	BSY-CMiE706	Core Minor Elective -I	2	-	-	2	20	10	70	100

							20	TOTAL			500
Semester – VIII (U.G. with Honors)											
1	BSY-CST801	Yoga Philosophy	3	1	-	4	20	10	70	100	
2	BSY-CSP802	Yoga Practical-V	-	-	4	4	20	10	70	100	
3	BSY-CME 803	Core Major Elective-II	3	1	-	4	20	10	70	100	
4	BSY-CRM804	Basic Research Methods-II	3	-	-	3	20	10	70	100	
5	BSY-CMi805	Swasthvritta	3	-	-	3	20	10	70	100	
6	BSY-CMiE806	Core Minor Elective -II	2	-	-	2	20	10	70	100	
							20	TOTAL			500
TOTAL CREDIT											

Subject Name: Field Work-I

Subject code: BSY-FWP503

Total Number of Hours: 120		Theory	Tutorial	Practical
Credits		0	0	4
Hours/ week		0	0	8
SCHEME OF EXAMINATION				
Total Marks: 100				
Theory : NA		Practical : 100		
Final Exam (SEE)	Internal Assessment (CT+TA)	Final Exam (SEE)	Internal Assessment (CT+TA/PR)	
		70	30	

During this period students shall get an opportunity of teaching yoga to community weekly four hours. The academic institution where the student is undergoing his/her training takes the responsibility of organizing the classes in the nearby community.

Subject Name: Field Work-II

Subject code: BSY-FWP603

Total Number of Hours: 60		Theory	Tutorial	Practical
Credits		0	0	4
Hours/ week		0	0	8
SCHEME OF EXAMINATION				
Total Marks: 100				
Theory : NA		Practical : 100		
Final Exam (SEE)	Internal Assessment (CT+TA)	Final Exam (SEE)	Internal Assessment (CT+TA/PR)	
		70	30	

During this period students shall get an opportunity of teaching yoga to villagers, weekly four hours. The academic institution where the student is undergoing his/her training takes the responsibility of organizing the classes in the nearby villages.

Name of the Department:
History including Ancient Indian History, Culture and Archaeology
Class: BA III Semester
Paper: Historical Tourism : Theory and Practice

Students' Attendance

S.N.	Name Of Students	Roll Number
1.	Astitwa	20134120403
2.	Sarthak Juyal	20134120534
3.	Shreshtha Shah	20134120319
4.	Saurav Singh	20134120540
5.	Lalit Kumar	20134120457
6.	Ayush Ghildiyal	20134120406
7.	Monika Giri	20124120218
8.	Shreshtha Shah	201341203



Prof. Rajpal Singh Negi
(Head)

History AIHC and Archaeology

Head
Deptt. of History Archaeology
H.N.B. Garhwal University
(A Central University)
Srinagar Garhwal. 246174

Attendance sheet of the student

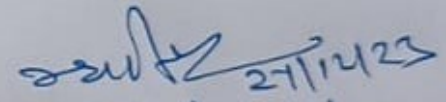
Name of Department: Library Science

Name of Program: Bachelor of Library Science

Name of Course: Tour project report

Academic Session: 2018-2019

S.No	Name of student	Roll No
(1)	Anil Kumar	1132011
(2)	Aridhi Choudhary	1132024
(3)	Rinki	1132010
(4)	Kiran	1132015
(5)	Rinki Semwal	1132013
(6)	Bharti Devi	113203
(7)	Rahul Rana	113207
(8)	Durgi	113205
(9)	Hardev Singh	113208


27/11/23
Dr. Grandhi Singh Chauhan
(Signature with stamp)

Attendance of the students Verified by HOD
श्रीनगर गढ़वाल
ह. न. व. ग. वि. वि.

हेनोबो गढ़वाल विश्वविद्यालय



(केन्द्रीय विश्वविद्यालय)

श्रीनगर गढ़वाल

सत्र : 2018-19

पुस्तकालय एवं सूचना विभाग

शैक्षणिक भ्रमण रिपोर्ट

प्राप्तकर्ता

श्री अनूप बहुगुणा

श्री गांधी चौहान

श्रीमती विजिया पुण्डीर

प्रस्तुतकर्ता

किरन - 113205

Kiran