

## Nashik Gramin Shikshan Prasarak Mandal's, College of Pharmacy

Brahma valley educational campus, Anjaneri, Nashik – 422 213 Phone No.: (02594) 220146, 220147

# DETAILS OF CERTIFICATE /ADD-ON COURSES

# **ACADEMIC YEAR-2021-22**

(Summary of Add-on Courses, Notice Brochure, List of Students Enrolled, Attendance, Specimen Certificates)



# College of Pharmacy Brahma valley educational campus

Anjaneri, Nashik – 422 213 Phone No. : (02594) 220146, 220147

### List of Add on / Certificate Programs Academic Year – 2021-22

Sr.No	Name of Add on / Certificate programs	Date & Duration (start date -End date)	No of student enrolle d in the year	No.of times offered during the same year	Duratio n of course	Conducting Agency / Institution	Name of faculty coordinator & specialization
1	Communication Skills	17/ 1/22- 26/2/22	55	One	36 Hrs	NGSPM'sCollege of Pharmacy AnjaneriNashik	Mr.Rohit.P.Mali (Pharmacognosy)
2	Unit operations	17/ 1/22- 26/2/22	72	One	36 Hrs	NGSPM'sCollege of Pharmacy AnjaneriNashik	Dr.V.D.Wagh (Pharmaceutics)
3	Hands on Training on Analytical instruments	12/7/21- 21/8/21	36	One	36 Hrs	NGSPM'sCollege of Pharmacy AnjaneriNashik	Mr.S.D.Bhandare (Pharm.chemistr y)
4	Care, Handling and use of Small Laboratory Animal	12/7/21- 21/8/21	35	One	36 Hrs	NGSPM'scollege of Pharmacy Anjaneri Nashik	Mr.P.T.Deshmuk h (Pharmacology)
5	Tablet manufacturing	17/ 1/22- 26/2/22	39	One	36 Hrs	NGSPM's College of Pharmacy Anjaneri Nashik	Mrs.H.S.Ishi (Pharm.chemistr y)
6	General Course on IPR	17/ 1/22- 26/2/22	37	One	36 Hrs	NGSPM's College of Pharmacy Anjaneri Nashik	Ms.S.S.Gaikwad (Pharm.Chemistr y)

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In-charge





# NASHIK GRAMIN SHIKSHAN PRASARAK MANDAL'S College of Pharmacy

BRAHMA VALLEY EDUCATIONAL CAMPUS

Anjaneri, Nashik – 422 213 Phone No. : (02594) 220146, 220147

# Assessment Procedure of Add On / Certificate Programs Academic Year -2021-2022

Sr.no	Name of Add on / Certificate programs	<b>Assessment Procedures</b>		
1	Communication Skills			
2	Unit operations Care	<ul><li>MCQ Based Exam</li><li>Practical Experiment</li></ul>		
Hands on Training on analytical instruments Tab manufacturing		Viva Voce		
4	Care, Handling and use of small laboratory animals			
5	Tablet Manufacturing	MCQ Based Exam		
6	General Course on IPR	<ul><li>Practical Experiment</li><li>Viva Voce</li></ul>		

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# **College of Pharmacy**

BRAHMA VALLEY EDUCATIONAL CAMPUS

Anjaneri, Nashik - 422 213 Phone No.: (02594) 220146, 220147

Established in 2006-07

#### Brochure of Certificate / Add on Course 2021-2022

Name of Certificate/ Add on Course	Communication Skills (CS2/1)		
Name of Coordinator	Mr.Rohit P.Mali (Assistant Professor)		
<b>Duration of Activity</b>	(17/1/22- 26/2/22)		
Class	First Year B.Pharm		
Contact Hours/ Schedule	36 Hrs		

#### Aim/Objective:

Towards the completion of this course, students should be able to learn how to communicate more effectively at work and achieve your goals. Communication skills is an essential and course designed to give both the tools you need to improve your communication skills and the most successful strategies for using them to your advantages.

#### Learning Outcomes:

On successful completion of this course, a student will be expected to be able to:

Lower order	30%	<ul> <li>To understand the importance of effective communication, and how to harness the power of setting goals to improve your performance.</li> </ul>
Middle order	60%	To create memorable and persuasive messages, ask thoughtful questions, engage in active listening, and choose the right medium (face to face conversation, video conference, phone cell, or email) for your messages.
Higher order	10%	<ul> <li>To communicate effectively using the right medium and use gaol setting to increase your productivity and boost your performance</li> <li>To understand what others, want respond strategically to their wants, and needs ,craft convincing and clear messages and develop the critical communication skills you need to get ahead in business and in life</li> </ul>

#### Course contents/Curriculum – (Topics Covered/ Activities and hands on training etc.)

- Communication Skills
  - > What is personality, Greetings
  - > What employers wants
  - > Verbal and Non-Verbal
  - > Stages & Barriers of Communication
  - > Do's & Don'ts of positive Impression
  - > Gesture & Posture, Way of Shaking Hand & Body Language
- Basic English Usage
  - > Basic parts of Speech & Tenses
  - > Construction of sentences, Uses of Articles
  - > How to construct short meaningful sentences
- Written Communication
  - > Different Types of Written Communication
  - > Structure of Business Letter Assessment procedure: The assessment is done on the following parameters.

MCQ Base Examination - 50 %

Practical experiment - 25 %

Viva Voce - 25 %

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## College of Pharmacy BRAHMA VALLEY EDUCATIONAL CAMPUS

Anjaneri, Nashik – 422 213 Phone No.: (02594) 220146, 220147

Established in 2006-07

#### Brochure of Certificate / Add on Course 2021-2022

	2021-2022
Name of Certificate/ Add on Course	Unit Operation (PCG4/1)
Name of Coordinator	Dr.V.D.Wagh
Duration of Activity	(17/1/22 – 26/2/22)
Class	Second Year B.Pharm
Contact Hours/ Schedule	36 Hrs

#### Aim/Objective:

Towards the completion of this course, students should be able to understand the theoretical basis of unit operation and develop skill set in unit operations

#### Learning Outcomes:

of this course. a student will be expected to be able to:

Lower order	30%	<ul> <li>Describe various types unit operations used in laboratories.</li> <li>Understand the theoretical basis of unit operation</li> <li>Skill set required for setup of assembly for unit operation</li> </ul>
Middle order	60%	<ul> <li>Demonstrate the skill sets for various unit operation</li> <li>Design experimental methodologies.</li> </ul>
Higher order	10%	<ul> <li>Explain the basic operations involved in the synthesis, purification of chemical</li> <li>Apply the skill set for various unit operations.</li> <li>Decide the most suitable unit operation for given process.</li> <li>Work independently and become an effective team player</li> </ul>

#### Course contents/Curriculum - (Topics Covered/ Activities and hands on training etc.)

- Distillation
- Fractional Distillation
- Vacuum Distillation
- Use of Rotary Vacuum evaporator
- Steam Distillation
- Column chromatography
- Use of overhead stirrer for various reactions.
- Liquid-Liquid extraction
- Methods of generating and drying various laboratory gases.

#### Assessment procedure: The assessment is done on the following parameters.

- MCO Base Examination 50 %
- Practical experiment 25 %
- Viva Voce 25 %

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# Brochure of Certificate / Add on Course

		2021-2022	
Name of Certificate	e/ Add on Co	cse Care, Handling and use of Small Laboratory Animals (PL5/2)	
Name of Coordinate	tor	Mr.Pradip.T.Deshmukh (Assistant Professor)	
Duration of Activit	ty	(12/7/21-21/8/21)	
Class		T.Y.B.Pharmacy	
Contact Hours/ Sc	hedule	36 Hrs.	
Learning Outcome	es:	fficient handling & proficient use of the small laboratory animals among learner.	
Lower order	30%	<ul> <li>Describe human care of animals</li> <li>Understand harm to animals</li> <li>Identify different types of small laboratory animals and their uses in the research</li> </ul>	
Middle order	60%	<ul> <li>Explain specific &amp; minimum standard for care/handling of rat, mice and guine pig</li> <li>Demonstrate use of minimum standard for nutrition, water provision, Enclosure/housing, space requirement, nesting etc.</li> <li>Maintenance of ambience of animals rooms for proper research output.</li> <li>Able to administer drugs through different routes of administration in routine use.</li> </ul>	
Higher order	10%	<ul> <li>To anaesthetized animals for retro-orbital blood collection</li> <li>To prepare container for blood collection</li> <li>To collect blood without haemolysis</li> <li>To understand proper storage of blood during and after collection blood</li> </ul>	

#### Course contents/Curriculum – (Topics Covered/ Activities and hands on training etc.)

- Discussion about humane use of animals
- Discussion about harm to animals
- Discussion of different types of small laboratory animals and their uses in the research.
- Discussion and hands on specific requirement for handling of small laboratory animals.
- Discussion and hands on minimum standard requirement for nutrition, water provision etc
- Explanation of requirement for blood collection
- Discussion and hands on of blood collection from tail vein

#### Assessment procedure: The assessment is done on the following parameters.

- MCQ Base Examination 50 %
- Practical experiment 25 %
- Viva Voce 25 %

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# NASHIK GRAMIN SHIKSHAN PRASARAK MANDAL'S

# College of Pharmacy BRAHMA VALLEY EDUCATIONAL CAMPUS

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#### Brochure of Certificate / Add on Course 2021 -2022

Name of Certificate/ Add on Course Name of Coordinator	Hands on training on Analytical Instruments (PC5/1)
Duration of Activity	Mr. SaurabhD. Bhandari (Assistant Professor)
Class	(12/7/21-21/8/21)
Contact Hours/ Schedule	Third Year B. Pharmacy
Aim/Objective ·	36 Hrs.

#### Aim/Objective:

Towards the completion of this course, students should be able to understand the theoretical basis and operation of modern instruments used in chemical analysis and apply them in the analysis of real samples.

#### Learning Outcomes:

On successful completion of this course, a student will be e

Lower order	30%	Describe various types of instrumental techniques used in chemistry Understand the theoretical basis of chemical instruments Identify the components and uses of various parts of chemical instruments.
Middle order	60%	<ul> <li>Apply the use of instruments in chemical analysis</li> <li>Design experimental methodologies using proper instruments</li> <li>Collect, analyse and manage experimental data using chemical instruments.</li> </ul>
Higher order	10%	<ul> <li>To evaluate &amp; statistically analyse the data gathered using various instrumental techniques</li> <li>Interpret the results of chemical analysis</li> <li>Produce scientific reports based on laboratory data</li> <li>Work independently and become an effective team player</li> </ul>

# Course contents/Curriculum – (Topics Covered/ Activities and hands on training etc.)

- Overview of Instrumental Analysis and Measurements\
  - > Types of instruments for analysis
  - > Instrumental components
  - > Calibration
  - > Signal to noise enhancement
- UV-Visible absorption spectrometry
- Infrared spectrometry (FTIR)
- Chromatographic methods (HPLC)
- Differential Scanning Calorimetry (DSC)

## Assessment procedure: The assessment is done on the following parameters.

- MCQ Base Examination 50 %
- Practical experiment 25 %
- Viva Voce 25 %

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# Brochure of Certificate / Add on Course

Name of Certificate/ Add on Course	Tablet Manufacturing (PH8/1)
Name of Coordinator	Mrs.H.S.Ishi (Assistant Professor)
Duration of Activity	(17/1/22 – 20/2/22)
Class	Final Year B. Pharmacy
Contact Hours/ Schedule	36 Hrs.

#### Aim/Objective:

Towards the completion of this course, students should be able to understand the basics of tablet compression, consolidation, coating and hands on experience working on tablet compression machine as well as in vitro characterization of tablet in detail.

#### **Learning Outcomes:**

On successful completion of this course, a student will be expected to be able to:

Lower order	30%	<ul> <li>Understand the physics of tablet compression</li> </ul>
		<ul> <li>Understand the mechanism of tablet compression</li> </ul>
		Learn various methods of tablet compression, coating and excipient selection
Middle order	60%	Operation and assembling of tablet compression machine
		Selection of tablet excipients on the basis of physical properties.
Higher order	10%	To evaluate the prepared tablets for in vitro parameters
		<ul> <li>To overcome the tablet manufacturing defects</li> </ul>

#### Course contents/Curriculum – (Topics Covered/ Activities and hands on training etc.)

- Introduction to tablet, Definition, Types of Tablets, Granulation
- Pre compression and post compression parameters
- Granulation by wet granulation
- Granulation by dry granulation
- Study of tablet compression machine
- Assemble tablet machine for tablet preparation
- Tablet compression
- Evaluation of Prepared Tablets
- Calculation of dissolution study
- Introduction to Tablet Coating Machine
- Coating of tablets
- Evaluation of coated tablet

#### Assessment procedure: The assessment is done on the following parameters.

- MCQ Base Examination 50 %
- Practical experiment 25 %
- Viva Voce 25 %

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## **College of Pharmacy** BRAHMA VALLEY EDUCATIONAL CAMPUS

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#### Brochure of Certificate / Add on Course 2021-2022

	2021 2022		
Name of Certificate/ Add on Course	General Course on IPR (IP8/2)		
Name of Coordinator	Miss .Sakshi.S.Gaikwad (Assistant Professor)		
Duration of Activity	(17/1/22 – 26/2/22)		
Class	Final Year B.Pharm		
Contact Hours/ Schedule	36 Hrs		

Aim/Objective: The objective of this course is to provide in depth knowledge of the laws and process related tp Trademarks, Copyright and other forms of IPs with focus on Patents, the Indian and International Patent filling procedure, drafting patent application and conducting prior art searches.

#### **Learning Outcomes:**

On successful co	ompletion of th	nis course, a student will be expected to be able to:
Lower order	30%	To understand key basic concepts of IP like Patents, Copy right, Trademarks, Industrial design etc
Middle order	60%	<ul> <li>To understand the conventions and treaties for implementation of IP like Patent,</li> <li>Copy right, Trademarks, Industrial design etc.</li> <li>To understand and explore the uses of IPR in Pharmaceuticals.</li> </ul>
Higher order	10%	To use various IPRs and try to explore these for their commercial aspects.

Course contents/Curriculum – (Topics Covered/ Activities and hands on training etc.)

- Introduction to all IPs
- International conventions and treaties
- Patent filling application
- Patent compulsory Licensing
- Patent Case Studies
- Copy rights
- Trademarks
- Industrial designes
- Geographical Indication

Assessment procedure: The assessment is done on the following parameters.

- MCQ Base Examination 50 %
- Practical experiment 25 %
- Viva Voce 25 %



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# DETAILS OF CERTIFICATE /ADD-ON COURSES

# **ACADEMIC YEAR-2020-21**

(Summary of Add-on Courses, Notice Brochure, List of Students Enrolled, Attendance, Specimen Certificates)



# NASHIK GRAMIN SHIKSHAN PRASARAK MANDAL'S College of Pharmacy BRAHMA VALLEY EDUCATIONAL CAMPUS

Anjaneri, Nashik – 422 213 Phone No. : (02594) 220146, 220147

### List of Add on / Certificate Programs Academic Year – 2020-21

Sr.No	Name of Add on / Certificate programs	Date & Duration (start date -End date)	No of student enrolle d in the year	No.of times offered during the same year	Duration of course	Conducting Agency / Institution	Name of faculty coordinator & specialization
1	Hands on Training on analytical instruments	17/8/20- 26/9/20	40	One	36 Hrs	NGSPM'sCollege of Pharmacy AnjaneriNashik	Mr.Saurabh D.Bhandare (Pharm chemistry)
2	Care, Handling and use of small laboratory animals	17/8/20- 26/9/20	40	One	36 Hrs	NGSPM'sCollege of Pharmacy AnjaneriNashik	Mr.Pradip.T. Deshmukh (Pharmacology)
5	General Course on IPR	25/1/21- 6/3/21	68	One	36 Hrs	NGSPM's College of Pharmacy Anjaneri Nashik	Miss.Sakshi.S. Gaikwad (Pharm.chemistry)

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Brahma Valley Educational Campus Trimbak Road, Anjanen, Nashik-422 213



# NASHIK GRAMIN SHIKSHAN PRASARAK MANDAL'S College of Pharmacy

BRAHMA VALLEY EDUCATIONAL CAMPUS

Anjaneri, Nashik – 422 213 Phone No. : (02594) 220146, 220147

# Assessment Procedure of Add On / Certificate Programs Academic Year -2020-2021

Sr.no	Name of Add on / Certificate programs	Assessment Procedures
1	Hands on Training on analytical instruments	and the second of the second
2	Care, Handling and use of small laboratory animals	MCQ Based Exam
3	General Course on IPR	<ul><li>Practical Experiment</li><li>Viva Voce</li></ul>

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# NASHIK GRAMIN SHIKSHAN PRASARAK MANDAL'S College of Pharmacy

### BRAHMA VALLEY EDUCATIONAL CAMPUS

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#### **Brochure of Certificate / Add on Course** 2020 - 2021

Name of Certificate/ Add on Course	Hands on training on Analytical Instruments (PC5/1)	
Name of Coordinator	Mr.Saurabh D. Bhandari (Assistant Professor)	
Duration of Activity	(17/8/20-26/9/20)	
Class	Third Year B.Pharm	
Contact Hours/ Schedule	36 Hrs.	
Aim/Objective:		

Towards the completion of this course, students should be able to understand the theoretical basis and operation of modern instruments used in chemical analysis and apply them in the analysis of real samples.

#### **Learning Outcomes:**

On successful com	pletion of this	course, a student will be expected to be able to:
Lower order	30%	<ul> <li>Describe various types of instrumental techniques used in chemistry</li> <li>Understand the theoretical basis of chemical instruments</li> <li>Identify the components and uses of various parts of chemical instruments.</li> </ul>
Middle order	60%	<ul> <li>Apply the use of instruments in chemical analysis</li> <li>Design experimental methodologies using proper instruments</li> <li>Collect, analyse and manage experimental data using chemical instruments.</li> </ul>
Higher order	10%	<ul> <li>To evaluate &amp; statistically analyse the data gathered using various instrumental techniques</li> <li>Interpret the results of chemical analysis</li> <li>Produce scientific reports based on laboratory data</li> <li>Work independently and become an effective team player</li> </ul>

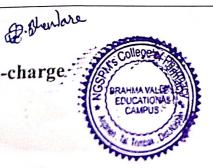
#### Course contents/Curriculum – (Topics Covered/ Activities and hands on training etc.)

- Overview of Instrumental Analysis and Measurements\
  - > Types of instruments for analysis
  - > Instrumental components
  - > Calibration
  - > Signal to noise enhancement
- UV-Visible absorption spectrometry
- Infrared spectrometry (FTIR)
- Chromatographic methods (HPLC)
- Differential Scanning Calorimetry (DSC)

#### Assessment procedure: The assessment is done on the following parameters.

- MCQ Base Examination 50 %
- Practical experiment 25 %
- Viva Voce 25 %

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# Brochure of Certificate / Add on Course

			2020-2021		
Name of Certification		Course	Care, Handling and use of Small Laboratory Animals (PL5/2)		
Name of Coordinator  Duration of Activity			Mr.Pradip.T.Deshmukh (Assistant Professor)		
			(17/8/20 - 26/9/20)		
Class			T.Y.B.Pharmacy		
Contact Hours/ S	Schedule		36 Hrs.		
		re, efficient	handling & proficient use of the small laboratory animals among learner.		
Consuccessful con		is course as	student will be expected to be able to:		
Lower order	30%	■ Und	cribe human care of animals lerstand harm to animals atify different types of small laboratory animals and their uses in the researc		
Middle order	60%	pig Den prov Mai	lain specific & minimum standard for care/handling of rat, mice and guinea nonstrate use of minimum standard for nutrition, water vision, Enclosure/housing, space requirement, nesting etc. Internance of ambience of animals rooms for proper research output. The to administer drugs through different routes of administration in routine		
Higher order	10%	To p	maesthetized animals for retro-orbital blood collection orepare container for blood collection collect blood without haemolysis and after collection blood		

#### Course contents/Curriculum - (Topics Covered/ Activities and hands on training etc.)

- Discussion about humane use of animals
- Discussion about harm to animals
- Discussion of different types of small laboratory animals and their uses in the research.
- Discussion and hands on specific requirement for handling of small laboratory animals.
- Discussion and hands on minimum standard requirement for nutrition, water provision etc
- Explanation of requirement for blood collection
- Discussion and hands on of blood collection from tail vein

## Assessment procedure: The assessment is done on the following parameters.

- MCQ Base Examination 50 %
- Practical experiment 25 %
- Viva Voce 25 %

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# College of Pharmacy BRAHMA VALLEY EDUCATIONAL CAMPUS

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### Brochure of Certificate / Add on Course

Name of Certificate/ Add on Course	General Course on IPR (IP8/1)
Name of Coordinator	Miss .Sakshi.S.Gaikwad (Assistant Professor)
<b>Duration of Activity</b>	(25/1/21-6/3/21)
Class	Final Year B.Pharm
Contact Hours/ Schedule	36 Hrs

Aim/Objective: The objective of this course is to provide in depth knowledge of the laws and process related tp Trademarks, Copyright and other forms of IPs with focus on Patents, the Indian and International Patent filling procedure, drafting patent application and conducting prior art searches.

#### **Learning Outcomes:**

On successful cor	npletion of this	course, a student will be expected to be able to:
Lower order	30%	<ul> <li>To understand key basic concepts of IP like Patents, Copy right, Trademarks, Industrial design etc</li> </ul>
Middle order	60%	<ul> <li>To understand the conventions and treaties for implementation of IP like Patent,</li> <li>Copy right, Trademarks, Industrial design etc.</li> <li>To understand and explore the uses of IPR in Pharmaceuticals.</li> </ul>
Higher order	10%	To use various IPRs and try to explore these for their commercial aspects.

Course contents/Curriculum - (Topics Covered/ Activities and hands on training etc.)

- Introduction to all IPs
- International conventions and treaties
- Patent filling application
- Patent compulsory Licensing
- Patent Case Studies
- Copy rights
- Trademarks
- Industrial designes
- Geographical Indication

Assessment procedure: The assessment is done on the following parameters.

- MCO Base Examination 50 %
- Practical experiment 25 %
- Viva Voce 25 %



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# College of Pharmacy BRAHMA VALLEY EDUCATIONAL CAMPUS

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# **List of Add on / Certificate Programs** Academic Year – 2019-20

Sr.No	Name of Add on / Certificate programs	Date & Duration (start date -End date)	No of student enrolle d in the year	No.of times offered during the same year	Duration of course	Conducting Agency / Institution	Name of faculty coordinator & specialization
.1	Communication Skills	13/ 1/20- 22/2/20	54	One	36 Hrs	NGSPM'sCollege of Pharmacy AnjaneriNashik	Mr.Rohit.P.Mali (Pharmacognosy)
2	Unit operations	13/ 1/20- 22/2/20	70	One	36 Hrs	NGSPM'sCollege of Pharmacy AnjaneriNashik	Dr.V.D.Wagh (Pharmaceutics)
3	Hands on Training on Analytical instruments	15/7/19- 24/8/19	33	One	36 Hrs	NGSPM'sCollege of Pharmacy AnjaneriNashik	Mr. S.S.Kakade (Pharm.chemistry)
4	Care, Handling and use of Small Laboratory Animal	15/7/19- 24/8/19	31	One	36 Hrs	NGSPM'scollege of Pharmacy Anjaneri Nashik	Ms.Y.N.Nikumbh (Pharmacology)
5	Tablet manufacturing	13/1/20- 22/2/20	27	One	36 Hrs	NGSPM's College of Pharmacy Anjaneri Nashik	Mrs.S.S.Malode (Pharmaceutics)
6	General Course on IPR	13/ 1/20- 22/2/20	25	One	36 Hrs	NGSPM's College of Pharmacy Anjaneri Nashik	Ms.H.B.Saindane (Pharm.Chemistry

In-charge



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# NASHIK GRAMIN SHIKSHAN PRASARAK MANDAL'S College of Pharmacy BRAHMA VALLEY EDUCATIONAL CAMPUS

Anjaneri, Nashik – 422 213

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### Assessment Procedure of Add On / Certificate Programs Academic Year -2019-2020

Sr.no	Name of Add on / Certificate programs	Assessment Procedures
1	Communication Skills	MCQ Based Exam
2	Unit operations Care	Practical Experiment
3	Hands on Training on analytical instruments Tablet manufacturing	Viva Voce
4	Care, Handling and use of small laboratory animals	
5	Tablet Manufacturing	<ul><li>MCQ Based Exam</li><li>Practical Experiment</li></ul>
6	General Course on IPR	Viva Voce

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## NASHIK GRAMIN SHIKSHAN PRASARAK MANDAL'S

## College of Pharmacy Brahma valley educational campus

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#### Brochure of Certificate / Add on Course 2019-2020

Name of Certificate/ Add on Course	Communication Skills (CS2/1)	
Name of Coordinator	Mr.Rohit P.Mali (Assistant Professor)	
<b>Duration of Activity</b>	(13/1/20- 22/2/20 )	
Class	First Year B.Pharm	
Contact Hours/ Schedule	36 Hrs	

#### Aim/Objective:

Towards the completion of this course, students should be able to learn how to communicate more effectively at work and achieve your goals. Communication skills is an essential and course designed to give both the tools you need to improve your communication skills and the most successful strategies for using them to your advantages.

#### **Learning Outcomes:**

On successful completion of this course, a student will be expected to be able to:

		precion of this course, a student will be expected to be able to:
Lower	30%	<ul> <li>To understand the importance of effective communication, and how to harness the power of setting goals to improve your performance.</li> </ul>
Middle order	60%	To create memorable and persuasive messages, ask thoughtful questions, engage in active listening, and choose the right medium (face to face conversation, video conference ,phone cell, or email) for your messages.
Higher order	10%	<ul> <li>To communicate effectively using the right medium and use gaol setting to increase your productivity and boost your performance</li> <li>To understand what others, want respond strategically to their wants, and needs ,craft convincing and clear messages and develop the critical communication skills you need to get ahead in business and in life</li> </ul>

#### Course contents/Curriculum – (Topics Covered/ Activities and hands on training etc.)

- Communication Skills
  - > What is personality, Greetings
  - > What employers wants
  - > Verbal and Non-Verbal
  - > Stages & Barriers of Communication
  - > Do's & Don'ts of positive Impression
  - Gesture & Posture, Way of Shaking Hand & Body Language
- Basic English Usage
  - > Basic parts of Speech & Tenses
  - Construction of sentences, Uses of Articles
  - > How to construct short meaningful sentences
- Written Communication
  - > Different Types of Written Communication
  - > Structure of Business Letter Assessment procedure: The assessment is done on the following parameters.

MCQ Base Examination - 50 %

Practical experiment - 25 %

Viva Voce - 25 %

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#### **Brochure of Certificate / Add on Course** 2019-2020

	2019- 2020
Name of Certificate/ Add on Course	Unit Operation (PCG4/1)
Name of Coordinator	Dr.V.D.Wagh
<b>Duration of Activity</b>	(10/1/22 – 22/2/20)
Class	Second Year B.Pharm
Contact Hours/ Schedule	36 Hrs

#### Aim/Objective:

Towards the completion of this course, students should be able to understand the theoretical basis of unit operation and develop skill set in unit operations

#### **Learning Outcomes:**

On successful completion of this course, a student will be expected to be able to:

Lower order	30%	<ul> <li>Describe various types unit operations used in laboratories.</li> <li>Understand the theoretical basis of unit operation</li> <li>Skill set required for setup of assembly for unit operation</li> </ul>
Middle order	60%	<ul> <li>Demonstrate the skill sets for various unit operation</li> <li>Design experimental methodologies.</li> </ul>
Higher order	10%	<ul> <li>Explain the basic operations involved in the synthesis, purification of chemical</li> <li>Apply the skill set for various unit operations.</li> <li>Decide the most suitable unit operation for given process.</li> <li>Work independently and become an effective team player</li> </ul>

## Course contents/Curriculum - (Topics Covered/ Activities and hands on training etc.)

- Distillation
- Fractional Distillation
- Vacuum Distillation
- Use of Rotary Vacuum evaporator
- Steam Distillation
- Column chromatography
- Use of overhead stirrer for various reactions.
- Liquid-Liquid extraction
- Methods of generating and drying various laboratory gases.

## Assessment procedure: The assessment is done on the following parameters.

- MCQ Base Examination 50 %
- Practical experiment 25 %
- Viva Voce 25 %

In-charge



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# NASHIK GRAMIN SHIKSHAN PRASARAK MANDAL'S College of Pharmacy BRAHMA VALLEY EDUCATIONAL CAMPUS

Anjaneri, Nashik – 422 213 Phone No. : (02594) 220146, 220147

Established in 2006-07

#### Brochure of Certificate / Add on Course 2019 -2020

2017 -2020 m CF(1)			
Name of Certificate/ Add on Course Hands on training on Analytical Instruments (PC5/1)			
Name of Coordinator	Ms.S.S.Kakade (Assistant Professor)		
Duration of Activity	(15/7/19 – 24/8/19)		
Class	Third Year B.Pharm		
Contact Hours/ Schedule	36 Hrs.		

#### Aim/Objective:

Towards the completion of this course, students should be able to understand the theoretical basis and operation of modern instruments used in chemical analysis and apply them in the analysis of real samples.

#### Learning Outcomes:

On successful completion of this course, a student will be expected to be able to:

On successful com	pletion of th	is course, a student will be expected to be able to .
Lower order	30%	<ul> <li>Describe various types of instrumental techniques used in chemistry</li> <li>Understand the theoretical basis of chemical instruments</li> <li>Identify the components and uses of various parts of chemical instruments.</li> </ul>
Middle order	60%	<ul> <li>Apply the use of instruments in chemical analysis</li> <li>Design experimental methodologies using proper instruments</li> <li>Collect, analyse and manage experimental data using chemical instruments.</li> </ul>
Higher order	10%	<ul> <li>To evaluate &amp; statistically analyse the data gathered using various instrumental techniques</li> <li>Interpret the results of chemical analysis</li> <li>Produce scientific reports based on laboratory data</li> <li>Work independently and become an effective team player</li> </ul>

#### Course contents/Curriculum - (Topics Covered/ Activities and hands on training etc.)

- Overview of Instrumental Analysis and Measurements\
  - > Types of instruments for analysis
  - > Instrumental components
  - > Calibration
  - > Signal to noise enhancement
- UV-Visible absorption spectrometry
- Infrared spectrometry (FTIR)
- Chromatographic methods (HPLC)
- Differential Scanning Calorimetry (DSC)

#### Assessment procedure: The assessment is done on the following parameters.

- MCQ Base Examination 50 %
- Practical experiment 25 %
- Viva Voce 25 %

In-charge



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College of Pharmacy Brahma valley educational campus

Anjaneri, Nashik – 422 213 Phone No. : (02594) 220146, 220147

Established in 2006-07

# Brochure of Certificate / Add on Course

V		2019-2020			
Name of Certifica	te/ Add on C	Course Care, Handling and use of Small Laboratory Animals (PL5/2)			
Name of Coordinator Ms.Y.N.Nikumbh (Assistant Professor)					
<b>Duration of Activ</b>	ity	(15/7/19 -24/8/19)			
Class		T.Y.B.Pharmacy			
Contact Hours/ S	chedule	36 Hrs.			
Aim/Objective:					
To inculcate com	passionate ca	re, efficient handling & proficient use of the small laboratory animals among learner.			
Learning Outcome On successful con		is course, a student will be expected to be able to:			
Lower order 30% • Des					
		<ul> <li>Understand harm to animals</li> </ul>			
		<ul> <li>Identify different types of small laboratory animals and their uses in the research</li> </ul>			
Middle order	60%	<ul> <li>Explain specific &amp; minimum standard for care/handling of rat, mice and guinea pig</li> </ul>			
■ De		Demonstrate use of minimum standard for nutrition, water			
		provision, Enclosure/housing, space requirement, nesting etc.			
		Transcendice of antificine of antificing forms for proper research output.			
		<ul> <li>Able to administer drugs through different routes of administration in routine use.</li> </ul>			
Higher order	10%	To anaesthetized animals for retro-orbital blood collection			
		<ul> <li>To prepare container for blood collection</li> </ul>			

To collect blood without haemolysis

To understand proper storage of blood during and after collection blood

#### Course contents/Curriculum – (Topics Covered/ Activities and hands on training etc.)

- Discussion about humane use of animals
- Discussion about harm to animals
- Discussion of different types of small laboratory animals and their uses in the research.
- Discussion and hands on specific requirement for handling of small laboratory animals.
- Discussion and hands on minimum standard requirement for nutrition, water provision etc
- Explanation of requirement for blood collection
- Discussion and hands on of blood collection from tail vein

#### Assessment procedure: The assessment is done on the following parameters.

- MCQ Base Examination 50 %
- Practical experiment 25 %
- Viva Voce 25 %

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# College of Pharmacy BRAHMA VALLEY EDUCATIONAL CAMPUS

Anjaneri, Nashik – 422 213 Phone No. : (02594) 220146, 220147

Established in 2006-07

# Brochure of Certificate / Add on Course

Name of Certificate/ Add on Course	Tablet Manufacturing (PH8/1)
Name of Coordinator	Mrs.S.S.Malode (Assistant Professor)
Duration of Activity	(13/1/20 – 22/2/20 )
Class	Final Year B.Pharmacy
Contact Hours/ Schedule	36 Hrs.

#### Aim/Objective:

Towards the completion of this course, students should be able to understand the basics of tablet compression, consolidation, coating and hands on experience working on tablet compression machine as well as in vitro characterization of tablet in detail.

#### **Learning Outcomes:**

On successful completion of this course, a student will be expected to be able to

Lower order	30%	<ul> <li>Understand the physics of tablet compression</li> <li>Understand the mechanism of tablet compression</li> <li>Learn various methods of tablet compression, coating and excipient selection</li> </ul>
Middle order	60%	<ul> <li>Operation and assembling of tablet compression machine</li> <li>Selection of tablet excipients on the basis of physical properties.</li> </ul>
Higher order	10%	<ul> <li>To evaluate the prepared tablets for in vitro parameters</li> <li>To overcome the tablet manufacturing defects</li> </ul>

### Course contents/Curriculum - (Topics Covered/ Activities and hands on training etc.)

- Introduction to tablet, Definition, Types of Tablets, Granulation
- Pre compression and post compression parameters
- Granulation by wet granulation
- Granulation by dry granulation
- Study of tablet compression machine
- Assemble tablet machine for tablet preparation
- Tablet compression
- Evaluation of Prepared Tablets
- Calculation of dissolution study
- Introduction to Tablet Coating Machine
- Coating of tablets
- Evaluation of coated tablet

# Assessment procedure: The assessment is done on the following parameters.

- MCQ Base Examination 50 %
- Practical experiment 25 %
- Viva Voce 25 %

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Established in 2006-07

# Brochure of Certificate / Add on Course

Name of Certificate/ Add on Course	General Course on IPR (IP8/2)
Name of Coordinator	Ms. H.B. Saindane (Assistant Professor)
<b>Duration of Activity</b>	13/1/20 – 22/2/20
Class	Final Year B.Pharm
Contact Hours/ Schedule	36 Hrs

Aim/Objective: The objective of this course is to provide in depth knowledge of the laws and process related tp Trademarks, Copyright and other forms of IPs with focus on Patents, the Indian and International Patent filling procedure, drafting patent application and conducting prior art searches.

#### **Learning Outcomes:**

On successful completion of this course, a student will be expected to be able to:

On successful completion of this course, a student will be expected to be able to:				
Lower order	30%	<ul> <li>To understand key basic concepts of IP like Patents, Copy right, Trademarks,</li> </ul>		
		Industrial design etc		
Middle order	60%	<ul> <li>To understand the conventions and treaties for implementation of IP like Patent,</li> </ul>		
		Copy right, Trademarks, Industrial design etc.		
		<ul> <li>To understand and explore the uses of IPR in Pharmaceuticals.</li> </ul>		
Higher order	10%	To use various IPRs and try to explore these for their commercial aspects.		

#### Course contents/Curriculum – (Topics Covered/ Activities and hands on training etc.)

- Introduction to all IPs
- International conventions and treaties
- Patent filling application
- Patent compulsory Licensing
- Patent Case Studies
- Copy rights
- Trademarks
- Industrial designes
- Geographical Indication

Assessment procedure: The assessment is done on the following parameters.

- MCQ Base Examination 50 %
- Practical experiment 25 %
- Viva Voce 25 %

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# Nashik Gramin Shikshan Prasarak Mandal's, College of Pharmacy

Brahma valley educational campus, Anjaneri, Nashik – 422 213 Phone No. : (02594) 220146, 220147

# DETAILS OF CERTIFICATE /ADD-ON COURSES

# **ACADEMIC YEAR-2018-19**

(Summary of Add-on Courses, Notice Brochure, List of Students Enrolled, Attendance, Specimen Certificates)



# College of Pharmacy BRAHMA VALLEY EDUCATIONAL CAMPUS

Anjaneri, Nashik – 422 213 Phone No. : (02594) 220146, 220147

# List of Add on / Certificate Programs Academic Year – 2018-19

Sr.No	Name of Add on / Certificate programs	Date & Duration (start date -End date)	No of student enrolle d in the year	No.of times offered during the same year	Duration of course	Conducting Agency / Institution	Name of faculty coordinator & specialization
1	Communication Skills	14/1/19- 23/2/19	58	One	36 Hrs	NGSPM'sCollege of Pharmacy AnjaneriNashik	Ms.P.T.Kare (Pharmacognosy)
2	Unit operations	14/1/19- 23/2/19	62	One	36 Hrs	NGSPM'sCollege of Pharmacy AnjaneriNashik	Dr.V.D.Wagh (Pharmaceutics)
3	Hands on Training on Analytical instruments	9/7/18- 18/8/18	27	One	36 Hrs	NGSPM'sCollege of Pharmacy AnjaneriNashik	Mr. S.S.Kakade (Pharm.chemistry)
4	Care, Handling and use of Small Laboratory Animal	9/7/18- 18/8/18	26	One	36 Hrs	NGSPM'scollege of Pharmacy Anjaneri Nashik	Ms.Y.N.Nikumbh (Pharmacology)
5	Tablet manufacturing	14/1/19- 23/2/19	29	One	36 Hrs	NGSPM's College of Pharmacy Anjaneri Nashik	Mrs.S.S.Malode (Pharmaceutics)
6	General Course on IPR	14/1/19- 23/2/19	30	One	36 Hrs	NGSPM's College of Pharmacy Anjaneri Nashik	Ms.H.B.Saindane (Pharm.Chemistry)

In-charge



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# College of Pharmacy BRAHMA VALLEY EDUCATIONAL CAMPUS

Anjaneri, Nashik – 422 213

Phone No.: (02594) 220146, 220147

### **Assessment Procedure of Add On / Certificate Programs** Academic Year -2018-2019

Sr.no	Name of Add on / Certificate programs	Assessment Procedures		
1	Communication Skills	MCQ Based Exam		
2	Unit operations Care	Practical Experiment		
3	Hands on Training on analytical instruments Tablet manufacturing	Viva Voce		
4	Care, Handling and use of small laboratory animals			
5	Tablet Manufacturing	<ul><li>MCQ Based Exam</li><li>Practical Experiment</li></ul>		
6	General Course on IPR	Viva Voce		

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## College of Pharmacy Brahma valley educational campus

Anjaneri, Nashik – 422 213 Phone No. : (02594) 220146, 220147

Established in 2006-07

#### **Brochure of Certificate / Add on Course 2018-2019**

Name of Certificate/ Add on Course	Communication Skills (CS2/1)	
Name of Coordinator	Ms.P.T.Kare (Assistant Professor)	
<b>Duration of Activity</b>	(14/1/19-23/2/19)	
Class	First Year B.Pharm	
Contact Hours/ Schedule	36 Hrs	

#### Aim/Objective:

Towards the completion of this course, students should be able to learn how to communicate more effectively at work and achieve your goals. Communication skills is an essential and course designed to give both the tools you need to improve your communication skills and the most successful strategies for using them to your advantages.

#### **Learning Outcomes:**

On successful completion of this course, a student will be expected to be able to:

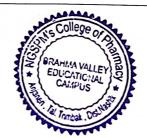
Lower order	30%	<ul> <li>To understand the importance of effective communication, and how to harness the power of setting goals to improve your performance.</li> </ul>
Middle order	60%	■ To create memorable and persuasive messages, ask thoughtful questions, engage in active listening, and choose the right medium (face to face conversation, video conference ,phone cell, or email) for your messages.
Higher order	10%	<ul> <li>To communicate effectively using the right medium and use gaol setting to increase your productivity and boost your performance</li> <li>To understand what others, want respond strategically to their wants, and needs ,craft convincing and clear messages and develop the critical communication skills you need to get ahead in business and in life</li> </ul>

Course contents/Curriculum - (Topics Covered/ Activities and hands on training etc.)

- Communication Skills
  - > What is personality, Greetings
  - > What employers wants
  - > Verbal and Non-Verbal
  - > Stages & Barriers of Communication
  - > Do's & Don'ts of positive Impression
  - > Gesture & Posture, Way of Shaking Hand & Body Language
- Basic English Usage
  - > Basic parts of Speech & Tenses
  - > Construction of sentences, Uses of Articles
  - > How to construct short meaningful sentences
- Written Communication
  - > Different Types of Written Communication
  - > Structure of Business Letter Assessment procedure: The assessment is done on the following parameters.
  - MCQ Base Examination 50 %
- Practical experiment 25 %

Viva Voce - 25 %

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# NASHIK GRAMIN SHIKSHAN PRASARAK MANDAL'S College of Pharmacy BRAHMA VALLEY EDUCATIONAL CAMPUS

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Established in 2006-07

#### **Brochure of Certificate / Add on Course** 2018-2019

Name of Certificate/ Add on Course	2018-2019	
Name of Coordinator	Unit Operation (PCG4/1)	
	Ms.P.V.Alai	
Duration of Activity Class	(14/1/19-23/2/19)	
	Second Year B.Pharm	
Contact Hours/ Schedule	36 Hrs	
Aim/Objective:		

Towards the completion of this course, students should be able to understand the theoretical basis of unit operation and develop skill set in unit operations

#### **Learning Outcomes:**

On successful completion of this course, a student will be expected to be able to:

Lower order	30%	<ul> <li>course, a student will be expected to be able to:</li> <li>Describe various types unit operations used in laboratories.</li> <li>Understand the theoretical basis of unit operation</li> <li>Skill set required for setup of assembly for unit operation</li> </ul>
Middle order	60%	<ul> <li>Demonstrate the skill sets for various unit operation</li> <li>Design experimental methodologies.</li> </ul>
Higher order	10%	<ul> <li>Explain the basic operations involved in the synthesis, purification of chemical</li> <li>Apply the skill set for various unit operations.</li> <li>Decide the most suitable unit operation for given process.</li> <li>Work independently and become an effective team player</li> </ul>

# Course contents/Curriculum – (Topics Covered/ Activities and hands on training etc.)

- Distillation
- Fractional Distillation
- Vacuum Distillation
- Use of Rotary Vacuum evaporator
- Steam Distillation
- Column chromatography
- Use of overhead stirrer for various reactions.
- Liquid-Liquid extraction
- Methods of generating and drying various laboratory gases.

# Assessment procedure: The assessment is done on the following parameters.

- MCQ Base Examination 50 %
- Practical experiment 25 %
- Viva Voce 25 %



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# NASHIK GRAMIN SHIKSHAN PRASARAK MANDAL'S College of Pharmacy

BRAHMA VALLEY EDUCATIONAL CAMPUS Anjancri, Nashik – 422 213

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Established in 2006-07

#### Brochure of Certificate / Add on Course 2018 -2019

Nome CO 115	2010 -2019
Name of Certificate/ Add on Course	Hands on training on Analytical Instruments (PC5/1)
Name of Coordinator	Ms.S.S.Kakade (Assistant Professor)
<b>Duration of Activity</b>	(9/7/18-18/8/18)
Class	Third Year B.Pharm
Contact Hours/ Schedule	36 Hrs.

#### Aim/Objective:

Towards the completion of this course, students should be able to understand the theoretical basis and operation of modern instruments used in chemical analysis and apply them in the analysis of real samples.

#### Learning Outcomes:

On successful completion of this course, a student will be expected to be able to:

Lower order	30%	<ul> <li>Describe various types of instrumental techniques used in chemistry</li> <li>Understand the theoretical basis of chemical instruments</li> </ul>
		<ul> <li>Identify the components and uses of various parts of chemical instruments.</li> </ul>
Middle order	60%	Apply the use of instruments in chemical analysis
		<ul> <li>Design experimental methodologies using proper instruments</li> </ul>
		Collect, analyse and manage experimental data using chemical instruments.
Higher order	10%	■ To evaluate & statistically analyse the data gathered using various instrumental techniques
		■ Interpret the results of chemical analysis
		Produce scientific reports based on laboratory data
		Work independently and become an effective team player

Course contents/Curriculum - (Topics Covered/ Activities and hands on training etc.)

- Overview of Instrumental Analysis and Measurements\
  - > Types of instruments for analysis
  - > Instrumental components
  - > Calibration
  - > Signal to noise enhancement
- UV-Visible absorption spectrometry
- Infrared spectrometry (FTIR)
- Chromatographic methods (HPLC)
- Differential Scanning Calorimetry (DSC)

Assessment procedure: The assessment is done on the following parameters.

- MCQ Base Examination 50 %
- Practical experiment 25 %
- Viva Voce 25 %

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# College of Pharmacy BRAHMA VALLEY EDUCATIONAL CAMPUS

Anjaneri, Nashik – 422 213 Phone No. : (02594) 220146, 220147

# Brochure of Certificate / Add on Course

Name of Certificate/ Add on Course  Name of Coordinator  Duration of Activity  Class  Care, Handling and use of Sma  Mrs. Y.N.Nikumbh (Assistant P  (9/7/18-18/8/18)  T.Y.B.Pharmacy	Small Laboratory Animals (PL5/2) ant Professor)
Name of Coordinator Mrs. Y.N.Nikumbh (Assistant P  Duration of Activity (9/7/18- 18/8/18)	
Class T.Y.B.Pharmacy	
Contact Hours/ Schedule 36 Hrs.	

#### **Learning Outcomes:**

On successful completion of this course, a student will be expected to be able to:

Lower order	30%	Describe human care of animals
		<ul> <li>Understand harm to animals</li> <li>Identify different types of small laboratory animals and their uses in the research.</li> </ul>
Middle order	60%	<ul> <li>Explain specific &amp; minimum standard for care/handling of rat, mice and guinea pig</li> <li>Demonstrate use of minimum standard for nutrition, water provision, Enclosure/housing, space requirement, nesting etc.</li> <li>Maintenance of ambience of animals rooms for proper research output.</li> <li>Able to administer drugs through different routes of administration in routine use.</li> </ul>
Higher order	10%	<ul> <li>To anaesthetized animals for retro-orbital blood collection</li> <li>To prepare container for blood collection</li> <li>To collect blood without haemolysis</li> <li>To understand proper storage of blood during and after collection blood</li> </ul>

# Course contents/Curriculum – (Topics Covered/ Activities and hands on training etc.)

- Discussion about humane use of animals
- Discussion about harm to animals
- Discussion of different types of small laboratory animals and their uses in the research.
- Discussion and hands on specific requirement for handling of small laboratory animals.
- Discussion and hands on minimum standard requirement for nutrition, water provision etc
- Explanation of requirement for blood collection
- Discussion and hands on of blood collection from tail vein

### Assessment procedure: The assessment is done on the following parameters.

- MCQ Base Examination 50 %
- Practical experiment 25 %
- Viva Voce 25 %

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# College of Pharmacy BRAHMA VALLEY EDUCATIONAL CAMPUS

Anjaneri, Nashik – 422 213 Phone No. : (02594) 220146, 220147

# Brochure of Certificate / Add on Course

Name of Certificate/ Add on Course	Tablet Manufacturing (PH8/1)
Name of Coordinator	Mrs.S.S.Malode (Assistant Professor)
<b>Duration of Activity</b>	(14/1/19-23/2/19 )
Class	Final Year B.Pharmacy
Contact Hours/ Schedule	36 Hrs.

#### Aim/Objective:

Towards the completion of this course, students should be able to understand the basics of tablet compression, consolidation, coating and hands on experience working on tablet compression machine as well as in vitro characterization of tablet in detail.

#### **Learning Outcomes:**

On successful completion of this course, a student will be expected to be able to:

Lower order	30%	<ul> <li>Understand the physics of tablet compression</li> <li>Understand the mechanism of tablet compression</li> <li>Learn various methods of tablet compression, coating and excipient selection</li> </ul>
Middle order	60%	<ul> <li>Operation and assembling of tablet compression machine</li> <li>Selection of tablet excipients on the basis of physical properties.</li> </ul>
Higher order	10%	<ul> <li>To evaluate the prepared tablets for in vitro parameters</li> <li>To overcome the tablet manufacturing defects</li> </ul>

#### Course contents/Curriculum - (Topics Covered/ Activities and hands on training etc.)

- Introduction to tablet, Definition, Types of Tablets, Granulation
- Pre compression and post compression parameters
- Granulation by wet granulation
- Granulation by dry granulation
- Study of tablet compression machine
- Assemble tablet machine for tablet preparation
- Tablet compression
- Evaluation of Prepared Tablets
- Calculation of dissolution study
- Introduction to Tablet Coating Machine
- Coating of tablets
- Evaluation of coated tablet

#### Assessment procedure: The assessment is done on the following parameters.

- MCQ Base Examination 50 %
- Practical experiment 25 %
- Viva Voce 25 %

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# NASHIK GRAMIN SHIKSHAN PRASARAK MANDAL'S College of Pharmacy BRAHMA VALLEY EDUCATIONAL CAMPUS

Anjaneri, Nashik – 422 213 Phone No.: (02594) 220146, 220147

### Brochure of Certificate / Add on Course

#### 2018-2019 General Course on IPR (IP8/2) Name of Certificate/ Add on Course Miss.H.B.Saindane (Assistant Professor) Name of Coordinator **Duration of Activity** (14/1/19-23/2/19) Class Final Year B.Pharm 36 Hrs

Contact Hours/ Schedule Aim/Objective: The objective of this course is to provide in depth knowledge of the laws and process related tp Trademarks, Copyright and other forms of IPs with focus on Patents, the Indian and International Patent filling procedure, drafting patent application and conducting prior art searches.

**Learning Outcomes:** 

On successful completion of this course, a student will be expected to be able to:

On successful con	npletion of this o	course, a student will be expected to be able to:
Lower order	30%	To understand key basic concepts of IP like Patents, Copy right, Trademarks,
		Industrial design etc
Middle order	60%	<ul> <li>To understand the conventions and treaties for implementation of IP like Patent,</li> <li>Copy right, Trademarks, Industrial design etc.</li> </ul>
		To understand and explore the uses of IPR in Pharmaceuticals.
Higher order	10%	To use various IPRs and try to explore these for their commercial aspects.

Course contents/Curriculum - (Topics Covered/ Activities and hands on training etc.)

- Introduction to all IPs
- International conventions and treaties
- Patent filling application
- Patent compulsory Licensing
- Patent Case Studies
- Copy rights
- Trademarks
- Industrial designes
- Geographical Indication

Assessment procedure: The assessment is done on the following parameters.

- MCQ Base Examination 50 %
- Practical experiment 25 %
- Viva Voce 25 %



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# Nashik Gramin Shikshan Prasarak Mandal's, College of Pharmacy

Brahma valley educational campus, Anjaneri, Nashik – 422 213 Phone No. : (02594) 220146, 220147

# DETAILS OF CERTIFICATE /ADD-ON COURSES

# **ACADEMIC YEAR-2017-18**

(Summary of Add-on Courses, Notice Brochure, List of Students Enrolled, Attendance, Specimen Certificates)

List of students Enrolled for Modules / Add-On Course-



# NASHIK GRAMIN SHIKSHAN PRASARAK MANDAL'S College of Pharmacy

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Anjaneri, Nashik – 422 213 Phone No. : (02594) 220146, 220147

## List of Add on / Certificate Programs Academic Year – 2017-18

Sr.No	Name of Add on / Certificate programs	Date & Duration (start date -End date)	No of student enrolle d in the year	No.of times offered during the same year	Duratio n of course	Conducting Agency / Institution	Name of faculty coordinator & specialization
1	Unit operations	8/1/18- 17/2/18	60	One	36 Hrs	NGSPM'sCollege of Pharmacy AnjaneriNashik	Ms.P.V.Alai (Pharmaceutics)
2	Hands on Training on analytical instruments	10/7/17- 19/8/17	30	One	36 Hrs	NGSPM'sCollege of Pharmacy AnjaneriNashik	Ms.S.S.Kakade (Pharm chemistry)
3	Care, Handling and use of small laboratory animals	10/7/17- 19/8/17	28	One	36 Hrs	NGSPM'sCollege of Pharmacy AnjaneriNashik	MrsY.N.Nikumb (Pharmacology)
4	Tablet manufacturing	8/1/18- 17/2/18	20	One	36 Hrs	NGSPM'sCollege of Pharmacy AnjaneriNashik	Mrs.S.S.Malode (Pharm.chemistry)
5	General Course on IPR	8/1/18- 17/2/18	20	One	36 Hrs	NGSPM's College of Pharmacy Anjaneri Nashik	Ms.H.B.Saindane (Pharm.chemistry)

In-charge



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# College of Pharmacy Brahma valley educational Campus

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# Assessment Procedure of Add On / Certificate Programs Academic Year -2017-2018

Sr.no	Name of Add on / Certificate programs	Assessment Procedures
1	Unit Operation	MCQ Based Exam
2	Hands on Training on analytical instruments	Practical Experiment
3	Care, Handling and use of small laboratory animals	Viva Voce
4	Tablet manufacturing	
5	General Course on IPR	<ul><li>MCQ Based Exam</li><li>Practical Experiment</li><li>Viva Voce</li></ul>

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## College of Pharmacy Brahma valley educational campus

Anjaneri, Nashik – 422 213 Phone No. : (02594) 220146, 220147

Established in 2006-07

# Brochure of Certificate / Add on Course 2017-2018

Name of Certificate/ Add on Course	Unit Operation (PCG4/1)
Name of Coordinator	Ms.P.V.Alai
<b>Duration of Activity</b>	(8/1/18-17/2/18)
Class	Second Year B.Pharm
Contact Hours/ Schedule	36 Hrs

#### Aim/Objective:

Towards the completion of this course, students should be able to understand the theoretical basis of unit operation and develop skill set in unit operations

#### **Learning Outcomes:**

On successful completion of this course, a student will be expected to be able to:

Lower order	30%	<ul> <li>Describe various types unit operations used in laboratories.</li> <li>Understand the theoretical basis of unit operation</li> <li>Skill set required for setup of assembly for unit operation</li> </ul>
Middle order	60%	<ul> <li>Demonstrate the skill sets for various unit operation</li> <li>Design experimental methodologies.</li> </ul>
Higher order	10%	<ul> <li>Explain the basic operations involved in the synthesis, purification of chemical</li> <li>Apply the skill set for various unit operations.</li> <li>Decide the most suitable unit operation for given process.</li> <li>Work independently and become an effective team player</li> </ul>

#### Course contents/Curriculum – (Topics Covered/ Activities and hands on training etc.)

- Distillation
- Fractional Distillation
- Vacuum Distillation
- Use of Rotary Vacuum evaporator
- Steam Distillation
- Column chromatography
- Use of overhead stirrer for various reactions.
- Liquid-Liquid extraction
- Methods of generating and drying various laboratory gases.

#### Assessment procedure: The assessment is done on the following parameters.

- MCQ Base Examination 50 %
- Practical experiment 25 %
- Viva Voce 25 %

In-charge



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# College of Pharmacy BRAHMA VALLEY EDUCATIONAL CAMPUS

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Established in 2006-07

# **Brochure of Certificate / Add on Course**

Name of Certificate/ Add on Course	Hands on training on Analytical Instruments (PC5/1)	
Name of Coordinator	Ms.S.S.Kakade (Assistant Professor)	
<b>Duration of Activity</b>	(10/7/17- 19/8/17)	
Class	Third Year B.Pharm	
Contact Hours/ Schedule	36 Hrs.	
	nts should be able to understand the theoretical basis and operation of and apply them in the analysis of real samples.	

Lower order	30%	<ul> <li>Describe various types of instrumental techniques used in chemistry</li> </ul>
		<ul> <li>Understand the theoretical basis of chemical instruments</li> </ul>
		<ul> <li>Identify the components and uses of various parts of chemical instruments.</li> </ul>
Middle order	60%	Apply the use of instruments in chemical analysis
		<ul> <li>Design experimental methodologies using proper instruments</li> </ul>
		Collect, analyse and manage experimental data using chemical instruments.
Higher order	10%	<ul> <li>To evaluate &amp; statistically analyse the data gathered using various instrumental techniques</li> </ul>
		<ul> <li>Interpret the results of chemical analysis</li> </ul>
		<ul> <li>Produce scientific reports based on laboratory data</li> </ul>
		Work independently and become an effective team player

#### Course contents/Curriculum – (Topics Covered/ Activities and hands on training etc.)

- Overview of Instrumental Analysis and Measurements\
  - > Types of instruments for analysis
  - > Instrumental components
  - > Calibration
  - > Signal to noise enhancement
- UV-Visible absorption spectrometry
- Infrared spectrometry (FTIR)
- Chromatographic methods (HPLC)
- Differential Scanning Calorimetry (DSC)

#### Assessment procedure: The assessment is done on the following parameters.

- MCQ Base Examination 50 %
- Practical experiment 25 %
- Viva Voce 25 %







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# Brochure of Certificate / Add on Course 2017-2018

Name of Certificate/ Add on Course		Course Care, Handling and use of Small Laboratory Animals (PL5/2)	
Name of Coordinator		Mrs. Y.N.Nikumbh (Assistant Professor)	
<b>Duration of Activity</b>		(10/7/17 – 19/8/17 )	
Class		T.Y.B.Pharmacy	
Contact Hours/ Schedule		36 Hrs.	
		re, efficient handling & proficient use of the small laboratory animals among learner.	
Learning Outco On successful co		is course, a student will be expected to be able to:	
Lower order	30%	Describe human care of animals	
		<ul> <li>Understand harm to animals</li> </ul>	
	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	<ul> <li>Identify different types of small laboratory animals and their uses in the research</li> </ul>	
Middle order	60%	<ul> <li>Explain specific &amp; minimum standard for care/handling of rat, mice and guinea pig</li> <li>Demonstrate use of minimum standard for nutrition, water provision, Enclosure/housing, space requirement, nesting etc.</li> <li>Maintenance of ambience of animals rooms for proper research output.</li> <li>Able to administer drugs through different routes of administration in routine use.</li> </ul>	
Higher order	10%	<ul> <li>To anaesthetized animals for retro-orbital blood collection</li> <li>To prepare container for blood collection</li> <li>To collect blood without haemolysis</li> </ul>	

To understand proper storage of blood during and after collection blood

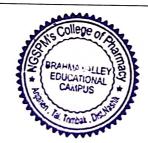
#### Course contents/Curriculum – (Topics Covered/ Activities and hands on training etc.)

- Discussion about humane use of animals
- Discussion about harm to animals
- Discussion of different types of small laboratory animals and their uses in the research.
- Discussion and hands on specific requirement for handling of small laboratory animals.
- Discussion and hands on minimum standard requirement for nutrition, water provision etc
- Explanation of requirement for blood collection
- Discussion and hands on of blood collection from tail vein

#### Assessment procedure: The assessment is done on the following parameters.

- MCQ Base Examination 50 %
- Practical experiment 25 %
- Viva Voce 25 %

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#### **Brochure of Certificate / Add on Course** 2017-2018

Name of Certificate/ Add on Course  Name of Coordinator		Tablet Manufacturing (	(PH8/1)	
		Mrs.S.S.Malode ( Assistant Professor)		
Duration of Activity		(8/1/18- 17/2/18 )		
Class		Final Year B.Pharmacy		
Contact Hours/ Schedule		36 Hrs.		

#### Aim/Objective:

Towards the completion of this course, students should be able to understand the basics of tablet compression, consolidation, coating and hands on experience working on tablet compression machine as well as in vitro characterization of tablet in detail.

#### Learning Outcomes:

On successful completion of this course, a student will be expected to be able to:

Lower order	30%	<ul> <li>Understand the physics of tablet compression</li> <li>Understand the mechanism of tablet compression</li> <li>Learn various methods of tablet compression, coating and excipient selection</li> </ul>
Middle order	60%	<ul> <li>Operation and assembling of tablet compression machine</li> <li>Selection of tablet excipients on the basis of physical properties.</li> </ul>
Higher order	10%	<ul> <li>To evaluate the prepared tablets for in vitro parameters</li> <li>To overcome the tablet manufacturing defects</li> </ul>

#### Course contents/Curriculum - (Topics Covered/ Activities and hands on training etc.)

- Introduction to tablet, Definition, Types of Tablets, Granulation
- Pre compression and post compression parameters
- Granulation by wet granulation
- Granulation by dry granulation
- Study of tablet compression machine
- Assemble tablet machine for tablet preparation
- Tablet compression
- **Evaluation of Prepared Tablets**
- Calculation of dissolution study
- Introduction to Tablet Coating Machine
- Coating of tablets
- Evaluation of coated tablet

#### Assessment procedure: The assessment is done on the following parameters.

- MCQ Base Examination 50 %
- Practical experiment 25 %
- Viva Voce 25 %



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## College of Pharmacy BRAHMA VALLEY EDUCATIONAL CAMPUS

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#### **Brochure of Certificate / Add on Course** 2017-2018

Name of Certificate/ Add on Course	General Course on IPR (IP8/2)		
Name of Coordinator	Miss.H.B.Saindane (Assistant Professor)		
<b>Duration of Activity</b>	(8/1/18- 17/2/18 )		
Class	Final Year B.Pharm		
Contact Hours/ Schedule	36 Hrs		

Aim/Objective: The objective of this course is to provide in depth knowledge of the laws and process related tp Trademarks, Copyright and other forms of IPs with focus on Patents, the Indian and International Patent filling procedure, drafting patent application and conducting prior art searches.

#### **Learning Outcomes:**

On successful completion of this course, a student will be expected to be able to:

protion of th	s course, a student will be expected to be able to .
30%	To understand key basic concepts of IP like Patents, Copy right,
	Trademarks, Industrial design etc
60%	To understand the conventions and treaties for implementation of IP like
	Patent, Copy right, Trademarks, Industrial design etc.
	To understand and explore the uses of IPR in Pharmaceuticals.
10%	To use various IPRs and try to explore these for their commercial aspects.
	30%

Course contents/Curriculum – (Topics Covered/ Activities and hands on training etc.)

- Introduction to all IPs
- International conventions and treaties
- Patent filling application
- Patent compulsory Licensing
- Patent Case Studies
- Copy rights
- Trademarks
- Industrial designes
- Geographical Indication

Assessment procedure: The assessment is done on the following parameters.

- MCQ Base Examination 50 %
- Practical experiment 25 %
- Viva Voce 25 %



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