## **Course Content**

Day	Date	Session to be instructed
1	9th Jan 2023	Discussion on basic Extraction methods
2	10th Jan 2023	Demonstration on Soxhlation process
3	11th Jan 2023	Demonstration on Reflux Extraction process
4	12th Jan 2023	Demonstration on Cold Maceration Extraction method
5	13th Jan 2023	Demonstration on Spray Drying of liquid extract
6	16th Jan 2023	Discussion on different Identification test for Carbohydrates
7	17th Jan 2023	Discussion on different Identification test for Alkaloids
8	18th Jan 2023	Discussion on different Identification test for Tannins
9	19th Jan 2023	Discussion on different Identification test for Volatile oils
10	20th Jan 2023	Discussion on different Identification test for Glycosides
11	21st Jan 2023	Discussion on different Identification test for Proteins and Amino acids
12	23rd Jan 2023	Demonstration on Molisch's test
13	24th Jan 2023	Demonstration on Mayer's and Hager's test
14	25th Jan 2023	Demonstration on Dragendorff's test and Wagner's test
15	27th Jan 2023	Demonstration on Goldbeater's Skin test
16	28th Jan 2023	Demonstration on Identification test for Volatile oils
17	30th Jan 2023	Demonstration on Bontrager's test
18	31st Jan 2023	Demonstration on Bromine test, Borax test and Cupraloin test
19	1st Feb 2023	Demonstration on Miller's test, Biuret test and Ninhydrin test
20	2nd Feb 2023	Demonstration on detection of Fixed oils and Fats
21	3rd Feb 2023	Discussion on Physical Evaluation of Crude drug
22	4th Feb 2023	Demonstration on determination of Moisture content and Viscosity
23	6th Feb 2023	Demonstration on determination of Ash content and Extractives
24	7th Feb 2023	Demonstration on determination of Optical rotation and Refractive Index
25	8th Feb 2023	Discussion on Morphological and Organoleptic Evaluation
26	9th Feb 2023	Discussion on Microscopic Evaluation
27	10th Feb 2023	Demonstration on determination of Palisade ratio and Vein-islet number
28	11th Feb 2023	Demonstration on determination of Stomatal Index
29	13th Feb 2023	Demonstration on determination of Stomata number and Vein termination number
30	14th Feb 2023	Demonstration on Lycopodium spore method for percentage purity
31	15th Feb 2023	Assessment



School of Pharmacy **ARKA JAIN UNIVERSITY JHARKHAND CONDUCTS** 

**30 HOURS VALUE ADDED COURSE** 

# **BASIC EXTRACTION METHODS & STANDARDISATION OF HERBAL DRUGS**

# 9th January - 14th February, 2023

#### **Resource** Person

Professor Dr. Jyotirmaya Sahoo Dean School of Pharmacy, ARKA JAIN University Mr. Sumanta Sen Associate Professor, School of Pharmacy, ARKA JAIN University Mr. Alok Kumar Moharana Associate Professor, School of Pharmacy, ARKA JAIN University

#### **Course Developer**

Professor Dr. Jyotirmaya Sahoo Dean School of Pharmacy, ARKA JAIN University Mr. Sumanta Sen Associate Professor, School of Pharmacy, ARKA JAIN University Mr. Alok Kumar Moharana Associate Professor, School of Pharmacy, ARKA JAIN University

#### **Course Duration**

**30 Days (30 Hours)** Time: 4:30 pm - 5:30 pm

**Commencement Date** 

From 9th January 2023

#### Who Can Apply?

#### Students with Pharmacy background or pursuing Pharmacy

#### **Process of Enrolment and Certification**

- Interested candidates can fill the registration from through the link provided below.
- **Registration Link :** https://forms.gle/aQ2ENL4eZRbMA1Ah8
- Registration Charges: Rs.100 (Please send the payment through online payment using Google pay, Phone pay)
- > Payment Link is available with the registration form
- > Last date of Registration: 5 th January 2023.
- > The selected students will attend the thirty days course in which attendance ismandatory for all the thirty days and also Assignments and assessments forgetting the Certificate.

### **About The Course:**

The use of herbal drugs as medicine is the ancients form of health care known to delicacy and it is used in all cultures throughout history. The primeval persons learned by trial and error basis to identified beneficial plants. The identification of purely active moiety is an important requirement for Quality control and dose determination of plant related dugs. Standardization of herbal drugs means confirmation of its identity, Quality and purity. The present overview covers the standardization parameters with their standards value of the some herbal drugs.

### The learning Objective of the Course:

The medicinal plants are important source for pharmaceutical manufacturing. Medicinal plants & amp; herbal medicines account for a significant percentage of the pharmaceutical market. As the side effects of Synthetic medicine have started getting more apparent, majority of formulation are prepared from herbs. The herbal medicines however, suffer from lack of standardization parameters. The main limitation is the lack of standardization of raw materials, of processing methods and of the final products, dosage formulation, and the non-existence of criteria for quality control. It is necessary to introduce measures on the regulation of herbal medicines to ensure quality, safety, efficacy of herbal medicines by using modern techniques, applying suitable standards & amp; GMP.

### By the end of the course, participants may be able to:

- > Develop the basic understanding about the various extraction methods of herbal drugs.
- Methods of identification of secondary metabolites.
- > Methods of detection of impurities in the crude drugs by physical identification tests.
- > Methods of detection of impurities in the crude drugs by microscopic evaluation methods.

