**St Peter’s Institute of Pharmaceutical Sciences**

**Course: Bachelor of Pharmacy**

**Subject: Herbal Drug Technology**

**Subject Code: BP603T**

**Preparation of different Ayurvedic formulations**

**1. ASAVA/ARISHTA**

This type ayurvedic dosage form is processed by soaked the drug in crushed form / decoction form, in a solution of sugar or jaggery for a specific period of time to undergo fermentation.

* Arishta or Asava treatment is preferred for a variety of diseases and conditions
* The difference between arishta and asava is simple arishta is processed from the essence/decoction of medicinal herbs while asava is prepared from fresh herbs

**Preparation**:

Crude Drug mention in the formula



Powdered the drug

**Asava Arishta**

Powdered drug Decoction of powder



Transferred to fermentation Vessel



Then add solution of sugar, Jaggery or Honey is added (Heated to that turn into liquid)



Close up the earthen lid sealed edges with clay smeared cloth



Fermented at constant temperature



Set aside to settle down matter



Fluid decanted & filtered



Boil to avoid further fermentation



Filled with a bottle and sealed

**Properties:**

* It should be clear
* No froth should be produced
* Should not develop into sour on standing
* It have characteristic, aromatic & alcoholic odour
* During fermentation process alcohol is produced which facilitates the extraction of active constituent contain in the drug
* Alcohol is also used as stabilizer in the product
* Earlier, the wooden pots were fumigate with pippali powder and also smeared with ghee before the fermentation liquids was pour into them.

**Storage Conditions:**

* It should be stored in air tight container
* Narrow mouthed
* Store in a cool place
* Away from sunlight

**Marketed Preparations:**

**Asavas**  **Arishtas**

Kumariasava Dashmularishta

Madhukasava Draksharista

Punarnavasava Vidangarista

Chandanasava Asokarishta

**2. LEHYAS/ LEHAM/ AVALEHA:**

Semisolid Ayurvedic dosage forms, which are thicken, sweet extracts of single or combination of herbs/animal & mineral matter.

* Preparation comprises of:
  + Decoction or other liquid
  + Jaggery/ sugar/ honey
  + Powder or Pulp of drug
  + Ghee or Oil

Sugar/ Jaggery + Liquid

 Boiled & Dissolved (Ghee or Oil if any)

Powdered drugs in small quantities



Stirred continuously



Homogenous mass is formed

**Properties:**

* It can be lifted in a spoon
* When pressed between your fingers it show threads during stretching
* Sinks in water without getting easily dissolved
* The finger leaves impression on it
* The components of lehyas are easily absorbed by the body, from the mouth

**Storage:**

* Store in Glass/ Porcelain Jar or suitable plastic or metal container.
* Wide mouthed container is used
* Air tight
* Keep away from hot & humid conditions

**Shelf Life:**

* Used within a year

**Examples:**

* Brahma rasayanam
* Sukumara rasayanam
* Draksavaleha
* Chyavanprasha

**3. BHASMAS**

Theyare powdered form of ayurvedic preparation, obtain by calcinations of metals, minerals or animal products by a special process on closed crucibles or pits covered by cow dung cakes.

Examples: Swarn bhasma, Shnakha bhasma and Tamra bhasma

**Preparation of Bhasma:**

1. **Shodhana** is a process of cleansing and detoxifications by which physical and chemical toxic materials are eliminating substances are subjected for further processing. In this process eliminate harmful substances and impurities present in the drugs.
2. **Marna** is a method in which metals and minerals are made into paste with a variety of drugs and juices. The objective to make bhasma and these drugs are reduced to fine particles.
3. **Jarana** is a method of decomposing the particles by subjected to fire treatment in a considered manner for reducing them to ashes. To make it absorbable.

**Shelf Life:**

* It is a quite stable product, maintain potency for a long time

**Properties:**

* It has a great therapeutic value because they get absorbed easily into body even in very small doses

**Quality Control of Bhasma:**

* There should be not metallic lusture
* When a small amount is spread on cold and still water, it should float on the top surface
* The bhasma should not revert to original state.

**Storage:**

* Store in cool & Dry place
* Keep away from moisture & sunlight
* Important bhasmas and their main ingredient

**No. Bhasma Main Ingredient**

1. Loha bhasma Iron oxide
2. Naga bhasma Lead
3. Abhrak bhasma Mica
4. Yasad Bhasma Zinc Oxide
5. Swarn Bhasma Gold

**References:**

1. Ragozin BV. The history of the development of Ayurvedic medicine in Russia. Ancient Sci Life. 2016; 35(3):143-9.
2. Patra KC, Pareta SK, Harwansh RK, Kumar KJ. Traditional Approaches towards Standardization of Herbal Medicines-A Review. J Pharma Sci Technol. 2016;2(11):372-9