

**Sardar Bhagwan Singh P.G Institute of Biomedical Sciences & Research
Balawala, Dehradun**

School of Pharmaceutical Sciences and Technology

Sixth Assignment

B. Pharm Pharmacognosy IV Year (VIII Sem)

Subject: Herbal Drugs and Cosmetics (PHR 805 A)

Total Marks: 30

Submission Time: 06 May, 23:59 PM

Section A: Multiple choice questions (1 Mark Each)

1. Ayurvedic formulations whose formation involves pyrolysis
 - a. Asava
 - b. Ghrita
 - c. Ksara
 - d. Kashaya
2. Impurity markers are useful for
 - a. Lavana
 - b. Ksara
 - c. Bhasma
 - d. All of above
3. PCR based molecular markers are
 - a. RAPD
 - b. RFLP
 - c. SNPs
 - d. a and c both
4. Class II microsatellites- perfect SSRs of
 - a. ≥ 12 nucleotides and ≤ 20 nucleotides in length.
 - b. ≥ 21 nucleotides and ≤ 02 nucleotides in length
 - c. ≥ 12 nucleotides and ≤ 20 nucleotides in breadth
 - d. None
5. Markers major transformations are
 - a. Hydrolysis
 - b. Dehydration
 - c. Glycosidation
 - e. All of above

Section B: True / False (1 Mark Each)

1. Ghrita induces microbial transformations
2. Markers of ingredients may not be markers of formulations.
3. PAGE stands for polyacrylamide gel electromagnetic technique
4. PCR products after separation are imaged by ethidium bromide staining.
5. Triple “P” in herbal standardization stands for pharmacognostical, physico-chemical and phytochemical.

Section C: Short answer questions (5 Marks Each)

1. Give WHO guidelines for selection of marker compounds.
2. Write short note on application of chemical markers.

Section D: Long answer question (10 Marks)

1. What are markers? Classify them and discuss genetic markers in detail.