3. Define Herbs. Why herbal raw materials are required for processing. Schematically outline the different steps involved in the processing of herbs before herbal formulation development. What is Biodynamic agriculture? 2+2+4+2=10

III. Short answers (Answer seven out of nine questions) 5x7=35

1. Enumerate the nutraceutical value and biological source of "**spirulina**". (5)

2. Write the two names of anti-oxidants nutraceuticals. Enumerate their c.c. and use (5)

3. What are the different methods involved in the pest management in medicinal plants (5)

4. Highlight the herb-drug interaction consequences of *Gingko*, Milk-thistle, and grapefruit juice .(5)

5. Define cosmeceuticals. Enlist different herbs used for skin care cosmetics products. (2+3=5)

6. Write down the biological source, C.C., and utility of Bhringraj ? (1+2+2=5)

7. Enumerate a few anti-oxidant raw herbal ingredients used in skin care bioproducts cosmetics. (5)

8. Enumerate the different opportunity and prospects of herbal drug industry using schematic diagram? 5

9. Describe the method of preparation of phytosomes. (5)

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B.Pharm Even Semester Examination, May, 2025

PHARMACEUTICAL SCIENCES

(6th Semester)

Course No: BP-603T

(Herbal Drug Technology)

FM: 75

Time: 3 Hours

The figures in the right margin indicate full marks for the question

I A. Objective type (Choose the correct answer of the following) 1x10=10

1. Processing of herbal raw materials include

   a) Primary processing

   b) Specific processing

   c) Drawing

   d) All of the above

2. Ethanol is used in the preparation of nanovesicles attributed to

   a) Ethosomes b) Phytosomes

   c) Herbosomes d) All of the above

3. Herbs are defined as plants with

   a) Aromatic property

   b) Flavouring properties

   c) Medicinal properties

   d) All of the above

4. Which one is small phytosomes

a) Large unicameral vesicle

b) multi lamellar vesicle

c) oligo lamellar vesicle

d) bilamellar vesicles.

5. Flavours and perfumes consist of

a) volatile oil b) essential oil

c) liquid d) all of the above.

6. Natural disintegrant

a) Modified starch b) Gelatin

c) lactose d) sucrose

7. The homeopathic repertory is organized to make it easier to do which of the following?

a) Identify the prover of a remedy

b) Identify symptoms associated with a remedy

c) Identify remedies associated with a symptom

d) Identify the animal, botanical, or mineral source of a remedy

8. *Santalum album*cosmetic is derived from

a) Heart-wood b) stem-wood

c) Bark d) All of the above

9. Which ancient ayurvedic formulation contains carbon nano dots

a) Leha b) Churna

c) Bhasma d) All of the above

10. Biodynamic farming means

a) Not to use synthetic pesticides

b) Used organic fertilizers

c) To optimize productivity

d) All of the above

B. Answer the following questions (Attempt all) 2x5=10

1. Define "Biopiracy".

2. Exemplify two cases of Herb-drug interaction.

3. What is "proving"?

4. Enlist four herbs that used in the bioinsecticides formulation

5. Define "Ethosomses"

II. Long answers (Answer any two of the following questions) 10x2=20

1. What is "IPR" ? Why is required ? Enlist the criteria and aspects of Hebal patent filing.Define "Bioprospection".What is trade mark?

2+2+3+2+1=10

2. What is "herbal excipients"? Classify them with example. Describes any two excipients emphasizing their merits and features .

2+3+5=10