



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

B.Sc. DEGREE EXAMINATION – PLANT BIOLOGY AND PLANT BIOTECHNOLOGY

FIFTH SEMESTER – APRIL 2024

UPB 5504 – HERBAL SCIENCES AND ETHNOBOTANY

Date: 22-04-2024

Dept. No.

Max. : 100 Marks

Time: 09:00 AM - 12:00 NOON

Draw diagrams / flowcharts wherever necessary.

SECTION A - K1 (CO1)

Answer ALL the Questions (10 x 1 = 10)

1. Fill in the blanks

- a) The study of crude drugs of natural origin is -----.
- b) Vasicin is obtained from -----.
- c) The taste of tannin is generally -----.
- d) Traditional system of medicine practice in India is-----.
- e) The number of dominant tribal communities living in Nilgiris is -----.

2. True or False

- a) Organoleptic is taste, colour, odour and feel.
- b) *Phyllanthus amarus* is the queen of herbs.
- c) Hydrotherapy uses water for treatment.
- d) Siddha is composed of six elements.
- e) The language of Toda tribe is Malayalam.

SECTION A - K2 (CO1)

Answer ALL the Questions (10 x 1 = 10)

3. Choose the Correct Answer

- a) Starch contains amylopectin and
 - i) Lactose
 - ii) Amylose
 - iii) Sucrose
 - iv) Glucose
- b) *Emblica officinalis* is a member of the family
 - i) Myrtaceae
 - ii) Lamiaceae
 - iii) Euphorbiaceae
 - iv) Annoaceae
- c) Alkaloides are prevalent in the family
 - i) Apocynaceae
 - ii) Annonaceae
 - iii) Poaceae
 - iv) Myrtaceae
- d) Father of ethnobotany is
 - i) British botanist
 - ii) Richard Evanschultes
 - iii) Theophrastus
 - iv) Charles Darwin
- e) Which one of the following is related to Tribal Economy?
 - i) Intensive cultivation
 - ii) Footloose industry
 - iii) Mining and quarrying
 - iv) Shifting cultivation

4. Answer the following.

- a) Define drug adulteration.
- b) Mention the medicinal uses of turmeric.
- c) Mention the uses of resins.
- d) Expand AYUSH.
- e) Mention any two tribes of Tamil Nadu.

SECTION B - K3 (CO2)

Answer any TWO of the following each in about 500 words (2 x 10 = 20)

- 5. Explain the microscopic evaluation of drugs.
- 6. Describe the organoleptic characters of *Andrographis paniculata*.
- 7. Give a brief note on poultice and compresses.
- 8. Write notes on ethnobotany and its scope.

SECTION C – K4 (CO3)

Answer any TWO of the following each in about 500 words (2 x 10 = 20)

9.	Write notes on the morphological classification of crude drug.
10.	Analyze the medicinal uses of <i>Tinospora</i> , <i>Acorus</i> and <i>Ocimum</i>
11.	Describe the methodologies of ethnobotanical research
12.	Write a detailed account on the contribution of Todas and Irulas on herbal medicine.

SECTION D – K5 (CO4)

Answer any ONE of the following in about 1000 words. (1 x 20 = 20)

13.	Explain the medicinal value of some alkaloids and add a note on methodology of extraction of alkaloids from medicinal plants.
14.	Discuss the pharmaceutical application of glycosides, Volatile Oils and Tannins.

SECTION E – K6 (CO5)

Answer any ONE of the following in about 1000 words. (1 x 20 = 20)

15.	Discuss about the Indian system of medicines and state their importance.
16.	Explain about traditional knowledge of medicinal plants with reference to IPR.

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