

B. Sc. DEGREE EXAMINATION, NOVEMBER 2012
BRANCH V (a) – PLANT BIOLOGY AND PLANT BIOTECHNOLOGY
THIRD SEMESTER

COURSE : MAJOR – CORE
PAPER : PHYTOTHERAPY & ETHNOBOTANY
TIME : 3 HOURS MAX. MARKS: 100

SECTION – A

ANSWER ALL QUESTIONS (18 marks)

I. Choose the correct answer

- _____ is addition of one article to another due to ignorance or carelessness
a. Deterioration b. Admixture c. Substitution d. Sophistication
- What is the term given to tincture in Ayurvedic medicine?
a. kalpa b. churana c. agava d. kashaya
- The major chemical component of *Strychnos nux-vomica* is _____
a. alkaloids b. flavonoids c. saponins d. terpenoids
- _____ dhatu supports the red blood cells of the human body
a. Rasa b. Mamsa c. Raktha d. Asthi
- Irulas are called as _____
a. nomadic tribals b. honey hunters c. foragers d. all the above

II. Complete the following

- The average number of palisade cells beneath each epidermal cell is called _____.
- Anticancer drug vincristine is obtained from the plant _____.
- Plant tissue culture is a type of _____ conservation method.
- _____ is a thick paste of plant material and applied directly to the skin.
- _____ is the active principle of *Ocimum sanctum*.

III. State Whether the following are True or False

- Trichomes are present in roots.
- Cinnamon is a spice obtained from the flower of several trees from the genus Cinnamomum.
- National Biodiversity Authority of India is located in Chennai.
- Steam distillation technique is not used for extraction of volatile oils.

IV. Match the following

15. Adulterant of Black Pepper	-	Conservation
16. <i>Rauwolfia</i>	-	Papaya seeds
17. Biosphere reserve	-	Ethnobotany
18. Herbarium	-	Reserpine

V Answer any six in 50 words**(6X3=18)**

19. Write short notes on the Tridosha in Ayurveda System of medicine?
20. What is Bhasmam?
21. Define stomatal index.
22. Define pharmacognosy
23. List out the medicinal uses of *Acalypha indica*.
24. Mention the scope of ethnobotany
25. What are sacred groves?
26. Enumerate the role of Dhatu in physical beauty
27. Mention any three plants used in commercially available herbal products for facial care.

SECTION – B

ANSWER ANY FOUR QUESTIONS IN 200 WORDS EACH. DRAW DIAGRAMS WHEREVER NECESSARY:

(4X6=24)

28. Write short notes on the types of adulterants with suitable examples.
29. Explain the process of preparation of infusion and decoction.
30. Discuss the therapeutic importance of the following:
a) *Zingiber officinalis* b) *Rauwolfia serpentina*
31. Mention the binomical, family and the ethnobotanical importance of any three medicinal plants used by Irula tribes.
32. Explain the significance of biodiversity conservation.
33. Discuss the principles of Siddha.

SECTION – C

ANSWER ANY TWO QUESTIONS IN 1000 WORDS EACH. DRAW DIAGRAMS WHEREVER NECESSARY:

(2X20=40)

34. Explain the role of quantitative microscopy and qualitative chemical methods in the evaluation of drugs.
35. Write in detail the Binomial, family, active principle, morphology & medicinal uses of
a) Neem b) Amla.
36. Describe various methods of *in situ* and *ex situ* conservation of biodiversity.
37. Elucidate the process of preparation of essential oils and salads.
