

B. Sc. DEGREE EXAMINATION, NOVEMBER 2017  
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 (5x1=5)

- 1) Which of the following drugs was not isolated from a natural source?
  - a) Quinine
  - b) Morphine
  - c) Isoniazid
  - d) Artemisinin
- 2) Karanja oil is extracted from which plant?
  - a) *Azadirachta indica*
  - b) *Pongamia glabra*
  - c) *Cinnamomun zeylanicum*
  - d) *Phyllanthus amarus*
- 3) What is the useful part of *Aloe vera* ?
  - a) Leaf
  - b) Whole plant
  - c) Roots
  - d) Flower & fruit
- 4) Vitamin C rich fruits are found in
  - a) *Emblica officinalis*
  - b) *Terminalia*
  - c) *Piper longum*
  - d) *Myrstica fragrans*
- 5) *Rauwolfia serpentina* is used to treat
  - a) Diabetes
  - b) Cancer
  - c) Hypertension
  - d) AIDS

II. Fill in the Blanks (5x1=5)

6. The generic name for periwinkle is \_\_\_\_\_ .
7. Hippocrates is the father of \_\_\_\_\_ medicine.
8. Cinnamon bark is used in the treatment of \_\_\_\_\_ .
9. \_\_\_\_\_ is a system of medicine which originated in India.
10. A \_\_\_\_\_ is a piece of cloth which is applied to the body to relieve soreness and inflammation.

III. Write True or False (4x1=4)

11. Kayakalpa is a set of therapies mentioned in Vedic texts that can reverse physical degeneration caused by age.
12. Aromatherapy uses plant materials and aromatic plant oils, including essential oils, and other aroma compounds for improving psychological or physical well-being.
13. Churnam is used for massage as an external application.
14. Hippocrates is the father of Ayurveda.

V. Match the following (4x1=4)

- |                                 |              |
|---------------------------------|--------------|
| 15. <i>Catharanthus roseus</i>  | Curcumin     |
| 16. <i>Azadirachta indica</i>   | Vincristin   |
| 17. <i>Zingiber officinalis</i> | Azadirachtin |
| 18. <i>Curcuma longa</i>        | Gingerol     |

**VI Answer any six in 50 words. Each answer should not exceed 50 words. (6x3=18)**

19. Irula tribes
20. Dhanvantari
21. Prakruti
22. Role of Dhatu
23. Ethnobotany
24. Ethnocosmetics
25. Traditional knowledge
26. Siddhars
27. Tridosha

**SECTION – B**

**ANSWER ANY FOUR QUESTIONS IN 200 WORDS EACH. DRAW DIAGRAMS WHEREVER NECESSARY: (4X6=24)**

28. Discuss the role of adulterants used in the herbal industry.
29. Enumerate upon the types of herbal preparations that you have studied.
30. What are the basic principles of Siddha ?
31. Highlight the importance of herbal products in the cosmetic industry.
32. Elaborate upon the methodologies used in ethnobotanical research.
33. What is a crude drug and how can it be analysed ?

**SECTION – C**

**ANSWER ANY TWO QUESTIONS IN 1000 WORDS EACH. DRAW DIAGRAMS WHEREVER NECESSARY: (2X20=40)**

34. Write an essay on the role of ethnobotany in biodiversity conservation.
35. Discuss the role of Ayurveda in Beauty Care.
36. Describe the active principles and medicinal properties of
  - a) *Curcuma longa*
  - b) *Ocimum* sp.
  - c) *Piper longum*
  - d) *Azadirachta indica*
37. Write an essay bringing out how ethnobotany has led to modern drug discovery. Cite examples.

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