

Adichunchanagiri University

Model QP :PART- II: PHARMACOGNOSY SPECIALISATION

60M

SEC- A

Note: Answer any 20 questions. Each question carries ONE mark

20x1=20

1. Write two applications of paper chromatography
2. What is normal phase chromatography?
3. What is the meaning of R_T in chromatography?
4. Define the term isocratic elution in chromatography.
5. Give two examples for natural sweetener.
6. Give two examples for natural coloring agents.
7. Give the reason for size reduction of crude drugs before extraction.
8. Which type of plant materials used for infusion method of extraction?
9. Name the chemical tests used to atropine.
10. Theophylline is an important chemical constituent of which plant?
11. Define transgenic plants.
12. Define evaluation of crude drugs.
13. Name two methods used for the extraction of volatile oils.
14. Define and write the significance of determination of ash value.
15. Name two crude (saponin containing) drugs which answer froth test.
16. Name the crude drug which is used in the treatment of joint pain.
17. Name the drugs which are used as immunomodulators.
18. Name the drug which answers Van-Urk's test.
19. Write the application of hairy root culture.
20. Write the chemical structure of quinine.
21. Name the semisynthetic or synthetic derivative of quinine.
22. Name the synthetic derivative salicin.
23. Name the pharmacological model used for screening anti-diabetic activity.
24. Name few crude drugs used in Ayurveda.
25. Define and explain the importance of ethnobotany.
26. Write the important source of lycopene.
27. What is the source of 10-deacetylbaccatin?
28. Write two important uses of phytosterols.
29. What is the important use of Stevia?
30. Write the importance of polarity of solvents on extraction of crude drugs.

SEC- B

Note: Answer any 10 questions. Each question carries TWO marks

10x2=20

1. Explain the importance of preparative TLC

2. Write the various applications flash chromatography
3. Define bioactive compounds and give few examples
4. Name few phytoconstituents used as lead molecules.
5. Name the various plants used in the formulations of hair products.
6. Name the source and chemical constituents of any two plants used as analgesic.
7. Name the source and chemical constituents of any two plants used as antidiabetic.
8. Give the sources and chemical compositions of any two binding agents.
9. Name the source of any two crude drugs used as ointment and suppository bases.
10. List out various methods used for drying crude drugs along with their advantages.
11. Name the sources and chemical constituents of any natural laxatives.
12. List out various plant hormones and explain their role in the plant growth.
13. Write the biological sources and chemical constituents of any two crude drug used in cardiovascular diseases.
14. Explain about micropropagation of medicinal plants.
15. Name the various methods used for the study of antioxidant and free radical scavenging activities.

SEC- C

Note: Answer any 5 questions. Each question carries FOUR marks

5x4=20

1. Explain the role of HPTLC in pharmacognostical studies
2. Write in detail about WHO guidelines for quality control of herbal drugs.
3. Write the analytical profile of *Withania somnifera*.
4. Define and classify various methods of extraction along with their advantages.
5. Explain in detail about medicinal plant biotechnology.
6. Write in detail about the application of various methods of spectroscopy in the field of Pharmacognosy and Phytochemistry.
7. Discuss in detail about isolation and extraction of alkaloids
8. Discuss in detail about column chromatography and its application in the field of research.
9. Explain the principle and procedure involved in the isolation of quinine from *Cinchona* and caffeine from Tea powder.
10. Write the analytical profile of any one herbal drug as per WHO protocol.