S.Y. B.PHARM SEMESTER IV

PHARMACOGNOSY & PHYTOCHEMISTRY-I (CBCS R-2019)

QUESTION BANK

DESCRIPTIVE

Answer the following-

1. Draw the heterocyclic nucleus/ general structure and write one example with its use, chemical test for the following phytoconstituents.
   i. Isothiocyanate glycoside
   ii. Volatile oil containing phenyl propanoid
   iii. Quinoline alkaloid
2. Draw the heterocyclic nucleus/ general structure and write one example with its use , chemical test for the following phytoconstituents
   i. Volatile oil containing terpene
   ii. Anthraquinone glycoside
   iii. Indole alkaloid
3. Draw the nucleus, example, use and chemical test of the following-
   i. Tropane alkaloid
   ii. Cardiac glycosides
   iii. Triterpenoidal pentacyclic saponin
4. Draw the nucleus, example, use and chemical test of the following
   i. Anthraquinone Glycosides
   ii. Steroidal saponin
   iii. Isoquinoline alkaloids
5. Draw the heterocyclic nucleus/ general structure and write one example with its use , chemical test for the following phytoconstituents
   i. Hydrolysable tannin
   ii. Indole alkaloid
   iii. Cardiac glycoside

6. Enlist various physical Evaluation parameters for the study of DONO. Explain the method and significance of any two Physical parameters.
7. With the help of suitable examples differentiate between organized and unorganized drugs.
8. Give advantages & disadvantages of morphological and pharmacological classification of drugs of natural origin.
9. Write about Sero-taxonomical classification of Drugs of natural origin with suitable examples.
10. Discuss pharmacological and chemical classification of drugs of natural origin with suitable examples.
11. Define Substitution and discuss with examples the reasons for substitution of drugs of natural origin.
12. Discuss unintentional adulteration with suitable example in detail.
13. Write a note on chemistry and two functions of Auxins and Ethylene
14. Write in detail about any three factors influencing cultivation of medicinal plants with one example each.
15. Write a note on
    i. Collection of barks
    ii. Storage of crude drugs
16. Write a note on Garbling and broad casting. Write different methods of collection of herbal drugs
17. Define Polyploidy and Hybridization
18. Write a note on chemistry and two functions of Gibberellins and Auxins.
19. Explain Quantitative microscopy in crude drugs
20. Define Ash value and swelling Index? Write a note on wax obtained from animal source.
21. Write note on various types of extractive values. Mention it's significance with suitable examples.
22. Define and write the significance of moisture content as physical parameter in the evaluation of Drugs of Natural origin.

23. Enlist different types of plant tissue cultures techniques and write a note on nutritional requirement in plant tissue culture technique
24. Give salient features and applications of edible vaccine.
25. Discuss transgenic plants and their use in the production of edible vaccines. Give the advantages of edible vaccine.
26. Write advantages and disadvantages of edible vaccines.
27. Differentiate between Callus and Suspension culture
28. Define plant tissue culture and its advantages. Explain briefly callus culture and protoplast culture.
29. Write a note on Biodiversity.
30. Write a note on Conservation of medicinal plants.
31. Write a note on Novel medicinal agents from marine source
32. Mention the methods of conservation of plants
33. Mention the role of Pharmacognosy in Siddha and Unani system of medicine.
34. Mention the role of Pharmacognosy in homeopathy and Chinese system of medicine.
35. Explain the role of Pharmacognosy in Allopathy and Ayurveda system of medicine with examples.
36. Differentiate between absorbent and non-absorbent cotton with respect to its preparation and one chemical test.
37. Classify fibres based on the biological source. Write a note on any one fibre
38. Give biological source, chemical constituent and identification test for Tragacanth and Acacia
39. Differentiate between Acacia and tragacanth
40. Give complete pharmacognostic account of any one oil having cathartic property.
41. Write a note on Agar
42. Discuss the proteolytic enzymes pepsin and papain in detail.
43. Explain any two proteolytic enzymes obtained from plant source.
44. Write the source, preparation, constituents, chemical tests and uses of 'Acacia'.
45. Write a note on Pharmacognosy of wool fat.
46. Discuss Urokinase and Gelatin in detail.
47. Give biological source, chemical constituent and identification tests for bees wax

48. Classify following with suitable examples:
    i. Volatile oil
    ii. Resins
49. Define Tannins. Discuss the different classes of tannins and its chemical test with examples
50. Discuss resins with respect to its classification, properties, uses and examples.