**Pharmacognosy-2 Question Bank- IIB.Pharm (V Sem)**

**UNIT I**

**10 marks**

1. Explain different methods for elucidation of biosynthetic pathways

**5 marks**

1. Write a note on Shikimic acid pathway and its significance
2. Write a note on radio isotopes and their applications in biogenetic studies
3. Explain the steps involved in acetate pathway
4. Explain Tracer technology and its significance in biogenetic studies
5. Mention different methods for biogenetic investigations and explain tracer technology
6. Explain Grafting and Mutant strain methods of biogenetic studies
7. Write a note on radio isotopes and their applications in biogenetic studies
8. Describe Autoradiography and competitive feeding
9. Write a note on tracer technique and its significances.

**2 marks**

1. Define secondary plant metabolite with suitable examples
2. Give the significance of acetate pathway
3. Write a note on autoradiography
4. Write a note on Amino Acid Pathway
5. Autoradiography
6. Liquid scintillation counter
7. Competitive feeding experiments
8. Define radioisotopes and give their uses in biogenetic studies

**UNIT II**

**10 marks**

1. What are cardiac glycosides? Give the Pharmacognosy of Digitalis in detail
2. Write Pharmacognosy of Liquorice
3. Write the Pharmacognostical study of Senna
4. Write the biological source, morphology, microscopy , chemical constituents, uses , adulterants and substitutes of Rauwolfia
5. Write the biological source, morphology, microscopy , chemical constituents, uses , adulterants and substitutes of Belladonna
6. Write Pharmacognosy of Liquorice
7. Write Pharmacognosy of Cinnamon
8. Pharmacognosy of Dioscorea.

**5 Marks**

1. Give the biological source, Chemical constituents and uses of any two volatile oil drugs
2. Give the biological source, Chemical tests and uses Benzoin
3. Describe the microscopy of Clove with a neat labeled diagram
4. Give the biological source, Chemical constituents and uses of any two alkaloid drugs
5. Describe the Pharmacognosy of Guggul
6. Describe macroscopy and microscopy of Licorice
7. Give macroscopy and microscopy fennel
8. Give macroscopy and microscopy fennel
9. Give the biological source, Chemical constituents and uses of Cinnamonand Opium
10. Give biosources, chemical constituents and uses of Coriander and Belladonna
11. Give the biological source, chemical constituents and uses of Clove and Coriander
12. Give the Pharmacognosy of Vinca
13. Explain biosources, chemical constituents of Liquorice and Vinca
14. Describe microscopic method of fennel with neat labeled diagram
15. Give biosources and chemical constituents of  Gentian and Ruta
16. Adulterants of Senna and Digitalis
17. Give biosources, chemical constituents and uses of Coriander and Belladonna
18. Give the chemical constituents and therapeutic uses of Mentha and Fennel
19. Give the identification tests for Benzoin and Colophony.
20. Explain with a neat labeled microscopic diagram of Clove
21. Explain microscopy of Ginger with neat labeled diagram
22. Give biological source and active constituents of Podophyllum and Vinca
23. Explain with a neat labeled microscopic diagram of Fennel
24. Differentiate between Pale Catechu and Black Catechu
25. Give biological source and active constituents of Opium and Belladonna
26. Give biosources, chemical constituents and uses of Coriander and Belladonna
27. Give the chemical constituents and therapeutic uses of Mentha and Fennel
28. Give botanical source and chemical constituents of Aloes and Tea
29. Give chemical test for Benzoin and Colophony
30. Give the biological source and Chemical constituents of Cinnamon and Gentian
31. Explain microscopy of Ginger with neat labeled diagram
32. Write a note on Carotenoids

**2 Marks**

1. Give botanical source and Chemical Constituent of Tea
2. Write botanical source and uses of Digitalis
3. Write Vitalimorin test
4. Explain Combined umbelliferone test.
5. Write the botanical source and chemical nature of Taxus
6. Write a note on umbelliferous fruits
7. Write botanical source and chemical constituents of Senna
8. Name two unorganized drugs with their botanical source and uses
9. Give the source and uses of eugenol containing crude drug
10. Explain modified brontrager’s test
11. Write a short notes on Pterocarpus
12. Write botanical source and uses of any one drug belonging to the family Liliaceae.
13. Write the chemical structure of Caffeine and Reserpine
14. Give the chemical structure Quinine and Caffeine
15. Write botanical source and chemical constituents of Gentian
16. Classification and uses of Carotenoids
17. Name any two resinous drugs and give their uses
18. Write a note on taxol
19. Give the adulterants of Clove bud
20. Botanical source and chemical constituents of Ruta
21. Explain Murexide test
22. Identification test for Aloes
23. Write a note on lignans
24. Write the chemical tests for pale catechu
25. Chemical tests for Myrrh
26. Write the chemical structures of Eugenol and Quinine
27. Write biological sources and uses of Vincristine and Taxol.
28. Write  biosource and Chemical constituents of Fennel
29. Write identification test for Sennoside
30. Write chemical structures of Diosgenin and Eugenol
31. Write chemical tests of Benzoin
32. Give adulterants and uses of Clove
33. Define chromatography and its principles
34. Give chemical constituents and uses of Opium.
35. Give chemical constituents and uses for Liquorice
36. Write chemical constituent and uses of Mentha
37. Write the chemical tests for Reserpine
38. Give the identification test for Atropine.
39. Describe biological sources and Uses of Coleus
40. Write chemical structures of Caffeine and Eugenol
41. Give chemical constituents and uses of Aloes
42. Give chemical constituents and uses for Tea
43. Write adulterants of Clove
44. Write chemical test for Digitalis.
45. Define Resins with examples
46. Give the chemical structure of Reserpine and Quinine
47. Write chemical constituents and uses of Taxus
48. Classification and uses of Carotenoids
49. Write the chemical tests for pale catechu
50. Write a note on Balsams
51. Explain Keller Killani Test
52. Give biological source of Mentha and Rauwolfia
53. Define Tannins and Carotenoids
54. Give biological sources and Uses of Coleus

**UNIT III**

**10 marks**

1. Discuss the industrial production and estimation of Forskolin and Diosgenin
2. Explain industrial method of production and estimation of Vincristine and Atropine.
3. Describe industrial production and estimation of Diosgenin and sennoside.
4. Explain industrial production and estimation of Sennosides and vinblastine
5. Describe the Industrial production and estimation of Caffeine and Digoxin
6. Explain industrial method of production and estimation of Sennoside and Caffeine
7. Describe in detail about industrial production, estimation and uses of Diosgenin

**5 marks**

1. Write the isolation and estimation of Glycyrhetenic acid
2. Explain the method of isolation and estimation of Curcumin
3. Describe the method of isolation and identification of Atropine
4. Write the isolation and identification of Quinine
5. Describe the isolation and identification of Rutin
6. Write the isolation and identification of Curcumin.
7. Describe the isolation and identification of Citral
8. Describe different methods of extraction and identification of Glycyrrhizin
9. Write industrial production and methods of estimation of vincristine
10. Write the method of isolation and estimation of Curcumin
11. Write isolation and analysis of Glycyrrhizin
12. Write methods of estimation of Artemisinin and Quinine
13. Write identification test and estimation of Digoxin
14. Explain in detail method of isolation and identification of Rutin

**2 marks**

**UNIT IV**

**10 Marks**

1. Describe the Industrial production and estimation of Caffeine and Digoxin
2. Explain industrial production and estimation of Atropine and Diosgenin
3. Describe industrial production and estimation of Diosgenin and sennoside
4. Explain industrial production and estimation of Sennosides and vinblastine.

**5 marks**

1. Explain the industrial production and uses of  Artemisinin
2. Describe the estimation of vincristine and caffeine
3. Discuss the industrial production and uses of Vincristine
4. Explain the industrial production of digoxin
5. Discuss the industrial production and estimation of forskolin
6. Explain the industrial production and estimation of Digoxin
7. Industrial production and utilization of Atropine
8. Discuss the industrial production and estimation of forskolin
9. Discuss the industrial production and identification of Sennosides.
10. Write the method of production and identification for Atropine
11. biological source and active constituents of Podophyllum and Vinca

**2 marks**

1. Give the source and uses of Citral
2. Write Source and uses of Podophyllotoxin
3. Utilization of Vinca alkaloids

**UNIT V**

**10 marks**

1. Enumerate the various modern methods of extraction and explain in detail about SFE
2. Explain in detail about Super critical fluid extraction and solid phase extraction
3. What is Microwave assisted extraction; describe its process, applications, advantages and disadvantages.
4. Describe the Solid phase extraction
5. Explain in detail about Super critical fluid extraction

**5 Marks**

Write a note on column chromatography

1. Describe microwave assisted extraction
2. Write applications of GC and TLC
3. Applications of GC and HPLC
4. Describe HPTLC with its advantages and applications
5. Explain the role of column chromatography in isolation and purification of phytoconstituents
6. Describe HPTLC with its advantages and applications
7. Give the applications of HPTLC and GC.

**2 Marks**

1. Write the applications of Microwave assisted extraction
2. Write the applications of HPTLC
3. Write the applications of HPLC and HPTLC
4. Give applications of electrophoresis
5. Write applications of Super critical fluid extraction
6. Applications of Microwave assisted extraction
7. Define Electrophoresis and give its applications
8. Define Chromatography and Electrophoresis
9. Give application of gas chromatography
10. Write a note on UV and visible spectroscopy
11. Write a Note on Spectroscopy