

B.Pharm III Year I Semester (R19) Regular & Supplementary Examinations January 2023
PHARMACOGNOSY & PHYTOCHEMISTRY – II

Time: 3 hours

Max. Marks: 75

PART – A
 (Compulsory Question)

- 1 Answer the following: (10 X 02 = 20 Marks)
- | | |
|---|----|
| (a) Define radioisotopes and give their uses in biogenetic studies. | 2M |
| (b) Define secondary plant metabolite with suitable examples. | 2M |
| (c) Give chemical constituents and uses for Liquorice. | 2M |
| (d) Write botanical source and chemical constituents of Senna. | 2M |
| (e) Write identification of Podophyllotoxins. | 2M |
| (f) Write the isolation process of Citral. | 2M |
| (g) Write the utilization of Diosgenin. | 2M |
| (h) Give a note on industrial production of Vinblastine. | 2M |
| (i) Write the applications of microwave assisted extraction. | 2M |
| (j) Define Electrophoresis and give its applications. | 2M |

PART – B

(Answer any two questions: 02 X 10 = 20 Marks)

- | | |
|---|----|
| 2 (a) What are cardiac glycosides? Give the pharmacognosy of Digitalis in detail. | 7M |
| (b) Give the biological source, chemical tests and uses Clove. | 3M |
| 3 (a) Discuss the industrial production and estimation of Forskolin. | 7M |
| (b) Explain the estimation of Caffeine. | 3M |
| 4 (a) Explain in detail method of isolation and identification of Menthol. | 7M |
| (b) Describe the isolation and identification of Citral. | 3M |

PART – C

(Answer any seven questions: 07 X 05 = 35 Marks)

- | | | |
|--------|---|----|
| 5 | Mention different methods for biogenetic investigations and explain tracer technology. | 5M |
| 6 (a) | Give the biological source, chemical constituents and uses of Belladonna. | 3M |
| (b) | Give the identification tests for Benzoin and Colophony. | 2M |
| 7 (a) | Write note on identification of Rutin. | 2M |
| (b) | Explain the method of isolation and identification of Atropine. | 3M |
| 8 (a) | Describe the estimation and utilization of Artemisinin. | 3M |
| (b) | Write a note on industrial production of Sennoside. | 2M |
| 9 | Explain the role of column chromatography in isolation and purification of phytoconstituents. | 5M |
| 10 (a) | Give the biological source, chemical constituents and uses of Liquorice. | 3M |
| (b) | Give the identification tests for Lignans. | 2M |
| 11 (a) | Write isolation and analysis of Glycyrrhizin. | 3M |
| (b) | Write identification test for Quinine. | 2M |
| 12 (a) | Write the method of production and identification for Podophyllotoxins. | 3M |
| (b) | Give the source and uses of Digoxin. | 2M |
| 13 (a) | Explain the steps involved in aminoacid pathway. | 3M |
| (b) | Describe microwave assisted extraction. | 2M |

B.Pharm III Year I Semester (R19) Supplementary Examinations July/August 2022

PHARMACOGNOSY & PHYTOCHEMISTRY – II

Time: 3 hours

Max. Marks: 75

PART – A
(Compulsory Question)

- 1 Answer the following: (10 X 02 = 20 Marks)
- | | |
|---|----|
| (a) Define primary and secondary metabolites. | 2M |
| (b) Define biosynthetic pathway. | 2M |
| (c) Write the general tests for alkaloids. | 2M |
| (d) Define resins. | 2M |
| (e) Write the confirmatory test for caffeine. | 2M |
| (f) Write the biological source and uses of podophyllotoxin. | 2M |
| (g) Write a note on Vitali-Morin test. | 2M |
| (h) Write the biological source and uses of diosgenin. | 2M |
| (i) Define chromatography and electrophoresis. | 2M |
| (j) Write the difference between preparative and analytical chromatography. | 2M |

PART – B

(Answer any two questions: 02 X 10 = 20 Marks)

- | | |
|--|----|
| 2 (a) Write a note on shikimic acid pathway. | 5M |
| (b) Describe the method of isolation and analysis of quinine. | 5M |
| 3 (a) Explain industrial production and estimation of forskolin. | 5M |
| (b) Write a note on microwave assisted extraction of crude drugs. | 5M |
| 4 (a) Write the biological source, chemical constituents and uses of digitalis & fennel. | 5M |
| (b) Write a note on flavonoids. | 5M |

PART – C

(Answer any seven questions: 07 X 05 = 35 Marks)

- | | |
|---|----|
| 5 Write the role of radio-isotopes in study of biogenetic pathway. | 5M |
| 6 (a) Write the biological source, chemical constituents, chemical tests and uses of guggul & clove. | 2M |
| (b) Write the biological source, chemical constituents, chemical tests and uses of asafoetida & myrrh. | 3M |
| 7 (a) Write a note on Gold beater skin test. | 2M |
| (b) Write the biological source, chemical constituents, chemical tests and uses of catechu & bitter almond. | 3M |
| 8 (a) Write the isolation and analysis of menthol. | 2M |
| (b) Write the isolation and analysis of curcumin. | 3M |

Contd. in page 2