

Rajiv Gandhi University of Health Sciences, Karnataka

IV Year B.Pharm Degree Examination - DEC 2017

Time: Three Hours Max. Marks: 80 Marks

INDUSTRIAL PHARMACOGNOSY (Revised Scheme - 2) Q.P. CODE: 1970

Your answers should be specific to the questions asked Draw neat labeled diagrams wherever necessary

LONG ESSAYS (Answer any Two)

 $2 \times 10 = 20 \text{ Marks}$

- 1. Explain the methods of isolation, identification and estimation of Ephedrine and Quinine.
- 2. Discuss the importance of standardization of raw materials, extracts and formulations with suitable examples.
- 3. Describe in detail production of Streptokinase and Urokinase.

SHORT ESSAYS (Answer any Eight)

 $8 \times 5 = 40 \text{ Marks}$

- 4. Give the identification and evaluation methods for the active constituent present in Vasaka by HPTLC.
- 5. Give the brief account of herbal drug industry.
- 6. What are direct methods of gene transfer in plants?
- 7. Explain the methods for isolation, preparation and uses of Papain.
- 8. What are explants? How will you induce callus from it?
- 9. What is immobilization? Describe various methods of immobilization of enzymes and their applications.
- 10. Explain different methods of isolation and estimation of glycyrrhizin.
- 11. How do you estimate copper and zinc in herbal preparation?
- 12. What is Asava? Explain various methods determination of alcohol in it.
- 13. Give the methods of standardization of Punamava and Aswagandha.

SHORT ANSWERS

 $10 \times 2 = 20 \text{ Marks}$

- Give the source and uses of Asiaticoside.
- 15. Give the source, chemical constituent and uses of Bilva.
- 16. Patent of natural products.
- 17. What is hybridisation?
- 18. Explain the procedure involved in preparation of Bhasma.
- 19. Describe Homeopathy system of medicine.
- 20. What is organogenesis? What are its applications?
- 21. Explain the role of Soapnut in herbal cosmetics.
- 22. Give the structure of Sennosides.
- 23. Describe quantitative microscopy.
