

Rajiv Gandhi University of Health Sciences, Karnataka

IV Year B.Pharm Degree Examination – Sep 2012

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 x 10 = 20 Marks**

1. Explain the general methods for isolation and purification of enzymes. Give the applications of Urokinase, Asparaginase and Streptokinase.
2. What are transgenic plants? Give examples. Explain the physical delivery methods of direct gene transfer in plants.
3. Define standardization and explain the different methods for standardization of crude drugs.

SHORT ESSAYS (Answer any Eight)**8 x 5 = 40 Marks**

4. Explain the basic principles involved in preparation of Asava and Arista.
5. What is the role of Aloe vera, Turmeric and Sandalwood in herbal cosmetics?
6. What is patenting? Explain the importance of patenting of herbal drugs.
7. Explain the standardization of Brahmi extract.
8. Explain the methods for evaluation of safety of herbal drugs.
9. Explain the methods for isolation and estimation of Ca sennosides.
10. How are immobilized enzymes prepared? Give their applications.
11. What is mutation and mutation breeding? How is it useful in plant biotechnology?
12. Explain the commercial production of shikonin. Give its uses.
13. Explain the methods for isolation and estimation of Withanolides.

SHORT ANSWERS**10 x 2 = 20 Marks**

14. Give source, chemical constituents and uses of Gokhru and Arjuna.
15. What are enzyme reactors? Give two examples.
16. Explain the terms: Totipotency and micropropagation.
17. What are the differences between Ayurveda and Siddha.
18. Give the source and uses of Gymnemic acid.
19. What is quantitative microscopy?
20. Define and give applications of polyploidy.
21. What are citrus bioflavonoids?
22. Write the structure of Quinine and ephedrine.
23. What is agrobacterium? Give its uses.