

**Rajiv Gandhi University of Health Sciences, Karnataka**  
**III Year B.Pharm Degree Examination – Sep 2012**

**Time: Three Hours****Max. Marks: 70 Marks**

**PHARMACOGNOSY AND PHYTOCHEMISTRY**  
**(Revised Scheme 3)**

**Q.P. CODE: 2613**

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

**LONG ESSAYS (Answer any Two)****2 x 10 = 20 Marks**

1. Write the pharmacognosy of Opium. Explain the biosynthesis of Morphine and Papaverine
2. Give an account on general methods for extraction of Natural products. Explain superfluid critical extraction in detail
3. Give the chemistry of cardiac glycosides. Write the pharmacognostic scheme of one crude drug possessing cardiac glycosides

**SHORT ESSAYS (Answer any Six)****6 x 5 = 30 Marks**

4. Discuss precursor – product sequence method
5. Give source, diagnostic characters, active principles and uses of Ginger
6. Write the chemistry of flavanoid glycosides
7. Write a note on method of estimation of moisture content
8. Leaf surface constants
9. Give the chemical structure and one specific test for digitoxin and colchicines
10. Give the method of extraction and chemical tests for tannin acid
11. Classify volatile oils with examples

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

12. Terpeneless volatile oils
13. Cyanogenetic glycosides
14. Adulterants and chemical tests for Senna
15. Chemical structure and uses of Conessine
16. Differentiate Sumatra benzoin from siam benzoin
17. Taxus species
18. Significance of steroidal glycosides as a source of drugs
19. Manipulated opium
20. Nonphenolic alkaloids of Ipecacuanha
21. Importance of lycopodium spore method