



Rajiv Gandhi University of Health Sciences, Karnataka

First Year M. Pharm Degree Examination – May 2016

Time: Three Hours

Max. Marks: 100 Marks

INDUSTRIAL PHARMACOGNOSY

(Revised Scheme 4)

Q.P. CODE: 9385

Your answers should be specific to the questions asked.

Draw neat labeled diagrams wherever necessary

LONG ESSAYS (Answer any Two)

2 x 20 = 40 Marks

1. What parameters will you suggest for standardization of single and multi component classical Ayurvedic and Unani formulations? Explain the applications of HPLC and HPTLC analysis for the same.
2. Explain the methods for isolation and estimation of: Andrographolides, Glycyrrhizin and Piperine.
3. Explain the structure elucidation of the following compounds with special emphasis on their UV, IR, NMR and Mass spectroscopical analysis data: Caffeine and β -sitosterol.

SHORT ESSAYS (Answer any FIVE)

5 x 10 = 50 Marks

4. What are the different types of herbal drug industries? Explain their infrastructure requirements.
5. Explain the objectives and guidelines of USFDA, WHO and ICH for herbal drugs.
6. Explain the details and comparison of herbal monographs as per Indian, US and Chinese Pharmacopoeia.
7. Explain the terms: Marker compound analysis, chromatographic finger printing and phytoequivalence studies.
8. Explain the role of herbal drugs in different types of cosmetic preparations. What are the regulatory aspects of safety of herbal cosmetics?
9. Explain the various physical, physicochemical and chemical parameters which are assessed for shelf life study of herbal products.

SHORT NOTES

2 x 5 = 10 Marks

10. Give details of novel drug delivery methods for herbal drugs.
11. What are plant breeder's and farmer's rights?
