

Code No. 1159/PCI

**FACULTY OF PHARMACY****M. Pharmacy (Pharmacognosy) I-Semester (PCI) (Main) Examination, February 2018****Subject: Phytochemistry****Time: 3 Hrs****Max. Marks: 75****Note: Answer any five questions. All questions carry equal marks.**

- 1 (a) Write the chemistry, biosynthesis, mechanism of action and chemical tests for Digitoxin.  
(b) Write the chemistry and analogs of artemesin. 10+5
- 2 Write abt the chemistry of  
(i) Quinine  
(ii) Withanolides  
(iii) Sennosides 5+5+5
- 3 (a) Define and write the selection and optimization of lead compnds in Drug Discovery with suitable examples. 10+5
- 4 Discuss spectral characters to elucidate the chemical structure of Menthol. 15
- 5 Write the srce, chemical structure and method of isolation of  
i) Quinine ii) Sennosides iii) Piperine. 5+5+5
- 6 Write a note  
(i) Phases of clinical trials (7½)  
(ii) Applications of HPTLC (7½)
- 7 Define and describe different types of extraction and extract techniques with advantages and disadvantages of each technique. 15
- 8 Explain the principle, instrumentation, detectors and applications of HPTLC. 15

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