



# **MASENO UNIVERSITY**

## **UNIVERSITY EXAMINATIONS 2013/2014**

**FIRST YEAR SECOND SEMESTER EXAMINATIONS FOR THE  
DEGREE OF MASTER OF SCIENCE IN PHARMACEUTICAL  
SCIENCE**

**(CITY CAMPUS)**

### **PPS 880: CHEMISTRY OF NATURAL PRODUCTS**

Date: 3<sup>rd</sup> April, 2014

Time: 2.00 - 5.00 p.m.

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## MASENO UNIVERSITY

### PPS 880: Chemistry of Natural Products Masters in Pharmaceutical Science

**Instructions: Attempt THREE questions only. 20 Mks**

1. Discuss role of *Chemical Structural Variation* in the Chemistry of Esters of Galanicals derived from plant sources.
2. Discuss the composition of plant extract giving emphasis to the *chemical proportions* of each constituent and using a *specific example*.
3. Discuss the three *methods of analysis* available for extract analysis specifically emphasizing their precision.
4. Explain a method of isolating Natural Acids and Alcohol in galanicals
5. Illustrate the degenerative routes of chrisanthemates after C-1, C-2, C-3 addition or bond formation