

**Semester 1 Examinations 2009/10**

**Module Title:      Pharmacognosy**

**Module Code:          CHEO8002**

**School:                  School of Science**

**Programme Title:      Bachelor of Science (Honours) in Herbal Science**

**Programme Code:      SHERB\_8\_Y4**

**External Examiner(s):      Prof. E. Williamson, Dr. D. Clare**

**Internal Examiner(s):      Mr G. Levieille**

**Instructions:              Answer any 4 of the 5 questions asked. Each question carries a equal mark weighing of 25%. Please state clearly the questions addressed in your paper.**

**Duration:                  2 hours**

**Sitting:                      Winter 2009**

**Requirements for this examination:**

**Note to Candidates:** Please check the Programme Title and the Module Title to ensure that you have received the correct examination paper.  
If in doubt please contact an Invigilator.

- Q1. Discuss the methods of preservation of plant material for medicinal applications. Indicate the applications, advantages and limitations of these methods.
- Q2. Adulteration of crude drugs is an important problem; describe the different types of adulteration. How would you ensure accuracy of your supply of herbal material to avoid this?
- Q3. What are the factors of primary and secondary deterioration of herbal products and raw materials? Discuss practical approaches to prevent and remedy these problems.
- Q4. What are the basic chemical characteristics of coumarins? Describe some of the biological actions and uses of coumarins, particularly their anticoagulant action.
- Q5. Discuss the regulation of metabolic pathways leading to the accumulation of therapeutic secondary metabolites and its relation to the quality of a herbal drug.