

CORK INSTITUTE OF TECHNOLOGY
INSTITIÚID TEICNEOLAÍOCHTA CHORCAÍ

Autumn Examinations 2012

Module Title: Pharmacognosy

Module Code: CHEO8002

School: Biological Sciences

Programme Title: Bachelor of Science (Honours) in Herbal Science –Year 4

Programme Code: SHERB_8_Y4

External Examiner(s): Dr Julia Green

Internal Examiner(s): Mr Germain 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: Autumn 2012

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 effects of growing conditions in the optimisation of metabolite profiles in view of phenotypical expression of metabolic pathways. (25 Marks)
- Q2. Comment on how the conditions of harvest or collect of medicinal plants and of plant identification impact on the initial quality of drug obtained from these plants. (15 Marks)
- Elaborate on the risks of adulteration of crude herbal drug at harvest and post-harvest stages. (10 Marks)
- Q3. (a) Discuss the effect of post harvesting treatments on drug quality and how the preservation methods affect the metabolite profiles of plant biomass. (15 Marks)
- (b) Deteriorations of drugs can occur during storage, detail the main causes of deterioration and how they could be prevented to maintain optimum quality. (10 Marks)
- Q4. What are the different types of steroidal cardiac glucosides? (10 Marks)
- Elaborate on their chemical structure. (7 Marks)
- Discuss their biological properties and applications. (8 Marks)
- Q5. Discuss the different types of tannins. (10 Marks)
- What the main test for characterisation of the different types of tannins. (8 Marks)
- Elaborate on the uses and applications of tannins. (7 Marks)