



Uva Wellassa University, Sri Lanka
End Semester Examination – March 2012
SCT 112-2 General Biology



Time: One hour & thirty-five minutes

Index No:

This paper consists of three parts **Part B** and **Part C**.
Answer all questions of **Part B** in the paper itself.
Answer any **two** questions from **Part C**.
Total mark allocation for Part B is 120 and for Part C is 120 marks out of 300 marks.

Part C

01. Explain the organization of the green leaf to succeed in photosynthetic process. (60 marks)
02. i) Briefly explain the following terms
- a. Recessive genes
 - b. Genotype
 - c. Monohybrid crosses
 - d. Heterozygous (20 marks)
- ii) The F₂ progeny was obtained for a cross between two *Pisum sativum* plants as follows.
- 05 tall plants with the genotype TT
 - 12 tall plants with the genotype Tt
 - 04 dwarf plants with the genotype tt
- i) Find the genotypes of F₁ parents and original parents (30 marks)
- ii) Calculate the genotypic ratio and phenotypic ratio of F₂ generation (10 marks)
03. At present, there is a man and elephant conflict in Sri Lanka. This has caused life losses to both elephants and man. Discuss the root causes of this conflict and suggest measures to alleviate the problem. (60 marks)