



RAJARATA UNIVERSITY OF SRI LANKA
FACULTY OF APPLIED SCIENCES, MIHINTALE

B.Sc. (Special) Degree in Applied Biology
Fourth Year Semester I Examination – April/ May 2015

BIO 4101 – BIOTECHNOLOGY AND BIODIVERSITY

Time: One and a half (1½) hours

Answer ALL questions.

1. a) Presuming you are addressing a group of students in Year 13, explain the advantages of modern biotechnology over plant breeding. Focus your answer on technology.

(50 Marks)

- b) Discuss the importance of biotechnology and possible tools to be used for biodiversity assessment.

(50 Marks)

2. a) Briefly discuss the probability of transfer of foreign genes in Genetically Modified Crops to wild relatives.

Mention three possible impacts of such an event on the wild relatives. **(25 Marks)**

- b) Mention five concerns (except the character transferring to wild relatives) expressed by interest groups on biodiversity against the use of herbicide tolerant crops developed using modern biotechnology. **(25 Marks)**

- c) As a knowledgeable person in modern biotechnology and also in biodiversity, justify or defy these concerns. **(50 Marks)**

3. Critically analyze the practicability of adoption of provisions of Cartagena Protocol to Sri Lanka. Use the Biosafety Framework of Sri Lanka as a reference point in your answer. **(100 Marks)**
