EASTERN UNIVERSITY, SRI LANKA THIRD YEAR, FIRST SEMESTER EXAMINATION IN AGRICULTURE - 2012/2013 AB 3101: CROP IMPROVEMENT TECHNOLOGY **END SEMESTER EXAMINATION** 27 OCT 2017

Answer all questions.

This paper should be answered in English. Time: One hour

01. a) Describe the recurrent selection method to increase oil content in maize.

(50 Marks)

b) A groundnut cultivar with desirable agronomic characters is found highly susceptible (RR) to leaf rust disease. It is proposed to introduce leaf rust resistance into this cultivar where leaf rust resistance is controlled by a pair of recessive genes 'rr' found in a local groundnut variety. Outline the breeding method to incorporate leaf rust resistance in to the groundnut cultivar.

(50 Marks)

02. Write a brief account on the following;

2	a)	Genetic male sterility and maintenance		(30 Marks)
1	b)	Basic Genetic Resources (BGR)	· · ·	(30 Marks)
(c)	Marker assisted selection in plant breeding		(40 Marks)
