

THE OPEN UNIVERSITY OF SRI LANKA
B. Sc. DEGREE PROGRAMME – LEVEL 05 – 2016/2017
Botany – BOU3106/BOE5106 – Plant Breeding



ASSESSMENT TEST 2 – NO BOOK TEST (NBT)

Reg. No. -----

DURATION: ONE HOUR (10.30 to 11.30 a.m.)

DATE: 11. 11. 2017

ANSWER ALL QUESTIONS

(This paper contains three (03) questions and six (06) pages)

1.

i) What are Seed Production Practices?

ii) Why do we apply Seed Production Practices?

iii) What are the two assumptions generally made in the development of Seed Production Practices?

iv) How many classes of certified seeds you can identify?

v) Indicate the colour codes use for each class of certified seed?

vi) Give a brief explanation on each class of certified seed.

2.

A.

i) What are Somaclonal Variations?

ii) What are the factors that affect Somaclonal Variations?

iii) Give three reasons for genetic instability in plant cell cultures.

iv) Indicate the advantages and problems encounter with Somaclonal Variations.

Advantages

Problems

B

i) What are Somatic Hybrids?

ii) Why are they important?

iii) Briefly explain the methods involve in verifying Somatic Hybrids.

3.

i) What is Self-Incompatibility?

ii) Name the different incompatibility systems found in plants.

iii) What is Male Sterility?

iv) What are the factors which determine Male Sterility?

v) What are the applications of Male Sterility in Agriculture?

vi) Give an example of a crop plant in which Male Sterile lines are used in breeding programs.
