



The Open University of Sri Lanka
Faculty of Engineering Technology
Bachelor of Industrial Studies Honours (Agriculture) Programme
Final Examination - 2016/2017

AEI5241 Agricultural biotechnology

Date : 19 - 11 - 2017
Time : 0930 - 1230 hours
Duration : Three (03) hours

SECTION 2: Answer any four (04) questions.

1. a.) Explain the role of restriction enzymes in biotechnology.
b.) Describe the use of vectors for cloning and expression of desired genes.
2. Write an essay on new plant varietal development through recombinant DNA technology.
3. Discuss the use of fermentation biotechnology for improving the food industry in Sri Lanka.
4. Discuss the objectives and procedure of conserving germplams.
5. Write an essay on "Possibilities of applying tissue culture techniques for the development of floriculture industry in Sri Lanka".
6. Write short notes on any two (02) of the following.
 1. Merits and Demerits of Biotechnology
 2. Compare and contrast northern, western and southern blotting techniques.
 3. DNA fingerprinting.
 4. Impacts of genetically modified organisms (GMOs)
 5. Current status and drawbacks of applying gene therapy in curing diseases.