



The Open University of Sri Lanka
Faculty of Engineering Technology
Bachelor of Industrial Studies (Agriculture) programme
Final Examination- 2015/2016

AEI5241 Agricultural biotechnology

Date : 27 - 11 - 2016
Time : 0930 - 1230 hours
Duration : Three (03) hours

SECTION 2: Answer any four (04) questions.

1. a.) What is the Recombinant DNA Technique?
b.) Explain how does agrobacterium mediated gene transfer affect on formig recombineantor Genetically modified organism
c.) Critically evaluate the impacts of Genetically Modified Organisms (GMOs) on humans and animals.
2. Explain the process of protein synthesis.
3. Write an account on use of biotechnology in food industry.
4. "Enzymes are a sustainable alternative for chemicals use in the industries"
Critically evaluate this statement.
5. a) Explain the procedure of cell and protoplast culturing.
b) Discuss the contribution of cell and protoplast culturing methods for the development of tissue culture industry.
6. Write short notes on any four (04) of the following.
 1. Nucleic acid hybridization
 2. Random Amplified Polymorphic DNA (RAPD's)
 3. Need of the Ethical Reviews for palnt and animal biotechnology.
 4. Designing a tissue culture laboratory
 5. Germplasm conservation using cells and tissue culture.