

The Open University of Sri Lanka  
Faculty of Engineering Technology  
Department of Agricultural & Plantation Engineering



Study Programme	: Bachelor of Industrial Studies Honours (Agriculture)
Name of the Examination	: Final Examination
Course Code and Title	: AGI5569/AGI5541 Molecular biology and Biotechnology/Agricultural biotechnology
Academic Year	: 2020/2021
Date	: 25 <sup>th</sup> February 2021
Time	: 09.30 - 12.30 hrs

**SECTION 2: Answer any four (04) questions.**

1. Explain the process of protein synthesis by relating to the building up an organism (25 marks).
2. Explain the process of isolating DNA to quantifying in a gel run (25 marks).
3.
  - a. Explain the Recombinant DNA Technique (10 marks).
  - b. Describe the Agrobacterium mediated gene transfer (15 Marks).
4.
  - a. Discuss the factors to be consider when selecting the microorganisms For fermentation (10 marks).
  - b. Explain the different stages of fermentation technology (15 marks).
5. Write an essay on "Use of biotechnology in the food industry" (25 marks).
6. Discuss the use of cell and tissue culture techniques in plant improvement (25 marks).

