



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



Index number

Study Programme	: Bachelor of Industrial studies Honours in Agriculture
Name of the Examination	: Final Examination
Course Code and Title	: AGI6550/AEI6250 Advanced biotechnology
Academic Year	: 2017/18
Date	: 11 th February 2019
Time	: 0930-1230hrs

SECTION 2: Answer any four (04) questions.

1. (a) List the methods of bio monitoring in environmental biotechnology. (5 marks)
- (b) Discuss the advantages and disadvantages of biotechnological treatment of wastes. (10 marks)
- (c) Briefly explain the aerobic treatment of solid and liquid wastes. (10 marks)
2. (a) What is biofertilizer? (5 marks)
- (b) Write an account on use of Nitrogen bio fertilizers on crop improvement giving examples. (20 marks)
3. Write an essay on "Overcoming crossing barriers of crops using tissue culture techniques". (25 marks)
4. (a) Define the term "Somaclonal Variation" (5 marks)
- (b) Write an essay on Somaclonal variation by explaining responsible factors for variation and isolation methods of variants. (20 marks)
5. Critically evaluate the use of biodiversity for biotechnological applications in Sri Lanka. (25 marks)
6. Write short notes on any two (02) of following. (12.5 marks each)
 1. Essential components of Composting Processes
 2. Importance of Single Cell Culture in biotechnology industry
 3. Methods used for haploid production
 4. National biosafety framework in Sri Lanka

