



Uva Wellassa University
B.Sc. in Export Agriculture /
B.Sc. in Tea Technology and Value Addition



End Semester Examination February / March 2011
Year III Semester I

Agricultural Biotechnology EAG 312-2

Instructions

Answer **Three** questions including **Question 1**

No. of questions : Seven (07)

No. of pages : Two (02)

Total marks allocated : 50%

Time : One hour (1hr)

Index No:

Part III - Essay

Question 1

Explain a method of DNA fingerprinting technique in molecular characterization of an organism

a. when the sequence data of an organism is not available

(15 Marks)

b. when the sequence data of the organism is available

(15 Marks)

Question 2

By using techniques of genetic engineering, scientists are able to modify genetic materials so that a particular gene of interest from one organism can be incorporated into a different organism. Describe a procedure which can be used to produce a transgenic crop.

(10 Marks)

Question 3

Describe briefly how industrial waste can be managed by using biotechnological applications.

(10 Marks)

Question 4

Discuss how biotechnological applications can be used to produce biofuel.

(10 Marks)

Question 5

Explain how pharmaceuticals are produced by means of molecular 'pharming'.

(10 Marks)

Question 6

Describe how the efficiency of producing industrial products can be increased by using modified microorganisms.

(10 Marks)

Question 7

Write short note on " Ethical considerations on the utilization of GMOs / GMFs".

(10 Marks)