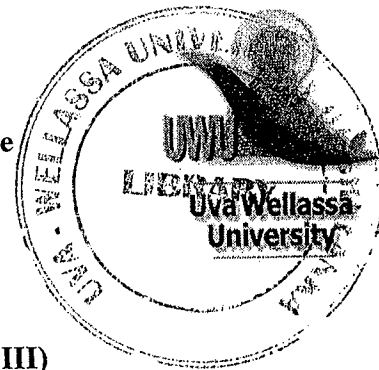


Uva Wellassa University of Sri Lanka
Faculty of Animal Science & Export Agriculture



B.ASc. Degree Programme
Year III Semester II
End Semester Examination – June/ July 2010

ANS 332-3 Animal Biotechnology –Essay (Section III)

Instructions

Answer all questions in Section III in the booklet provided

No. of questions : Three (03)

No. of pages : One (01)

Time : One hour & thirty min. (1hr 30 min.)

Total marks allocated : 50%

1.

a) Lac Z gene is an essential gene for bacterial survival, but it can be used in recombinant DNA technology as a marker gene. State how **Lac Z gene** could be used as a marker gene.

b) Write a brief note on **cDNA library**.

(100 marks)

2. Write short notes on ,

a) **Plasmids**.

b) **Somatic Cell Nuclear Transfer (SCNT)**.

c) **Polymerase Chain Reaction (PCR)**.

(100 marks)

3.

a) Explain how you can identify a gene insert in a recombinant bacterial colony using **Southern Blotting** technique.

b) Briefly explain why a clone sometimes shows different phenotypic characteristics compared to its "**Biological parent**".

(100 marks)

[End of Section II]