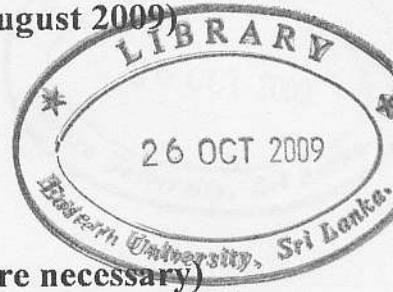


EASTERN UNIVERSITY, SRI LANKA  
FIRST EXAMINATION IN SCIENCE 2007/2008 (August 2009)  
SECOND SEMESTER  
ZL 103 GENETICS



Time: 01 hour.

Answer all questions.

(Illustrate your answers with clear labeled diagrams where necessary)

1. a). A gene is regulated to synthesize a required gene product in bacteria.  
Explain it with known example.

b).i) What is a mutation?

ii) Give the chemical mutagens that cause mutation.

iii) Discuss a point mutation with an example.

2. Comment on **any two** of the following:

a). Centromere

b). Polyploids in plants

c). Sex limited genes

d). Polytene chromosomes as a tool for cytogenetic mapping.

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