

EASTERN UNIVERSITY, SRI LANKA
FIRST EXAMINATION IN SCIENCE 2008/2009(May 2011)
EXTERNAL DEGREE - SECOND SEMESTER
EXT203 GENETICS AND DEVELOPMENTAL BIOLOGY

Time : 02 hours

Answer all questions

(Illustrate your answer with clear labeled diagrams where necessary)

1.
 - a. Define concisely the term DNA sequencing.
 - b. Describe briefly on Sanger's enzymatic method for sequencing DNA.

2. Comment on **any two** of the following:
 - a) P- element;
 - b) Tetrad analysis;
 - c) Plasmids;
 - d) Polyploids.

3.
 - a) Describe the term gastrulation.
 - b) (i) Briefly explain the process of gastrulation in amphibia.
(ii) Indicate the induction and competence takes place during the process that you have mentioned in 3b i).

4. Write short notes on **any two** of the following:
 - a) Telolecithal egg;
 - b) Formation of fertilization membrane;
 - c) Parkinson disease;
 - d) Human placenta.



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