M. Sc. (Part-II) Examination
April / May – 2003
Zoology : Paper - IV
(Development Biology, Animal Behaviour & Evolution)

Time : 3 Hours] [Total Marks : 100

NB: All questions carry equal marks.
All questions are compulsory.
Illustrate your answers with neat diagrams wherever necessary

1. Describe: a). Cleavage patterns
   b). Gradients in Development of the embryo

   OR

   b). Epithelial – mesenchymal interaction in development

2. Describe: a). Gastrulation
   b). Behavioural components and equipments

   OR

2. Write an account on: a). Cell interactions with reference to organogenesis
   of eye
   b). Forms of Territoriality

   b). Communication in bats and moths

   OR

3. Describe: a). Individual behavioural patterns with suitable examples
   b). Reproductive behavioural patterns

   b). Forces in evolution

   OR

   b). Role of Mimicry in evolution

5. Write short notes on Any three of the following:
   a). Types of growth
   b). Amphibian fate maps
   c). Dances in Bees
   d). Proximate and Ultimate causations
   e). Molecular phylogeny
   f). Embryonic induction

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