

5556054

Seat No. _____

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

1. Describe: a). Selective action of genes during development
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
3. Give an account of: a). Social life of Baboon
b). Communication in bats and moths

OR

3. Describe: a). Individual behavioural patterns with suitable examples
b). Reproductive behavioural patterns
4. Give an account of: a). Chromosomal mutations
b). Forces in evolution

OR

4. Give an account of: a). Recent theories on Origin of life
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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[150]