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**1605E603**

Candidate's Seat No : \_\_\_\_\_

M.Phil. Science Examination

Paper-III : Zoology

May-2017

Time : 3 Hours]

{Max. Marks : 70

**NB: All questions are compulsory.**

**Illustrate your answers with neat diagrams wherever necessary**

1. Write a detailed note on behavioural patterns in animals 14  
**OR**
1. Describe:  
(a). National Parks and Sanctuaries of Gujarat  
(b). Conservation of natural resources
2. Describe: 14  
(a) Radioprotective agents  
(b) Recent methods for female contraception  
**OR**
2. Give a detailed account on the steps, risk factors and drawbacks of IVF
3. Explain signal transduction by G-Protein mediated receptors 14  
**OR**
3. Write an account on:  
(a). Receptor recycling  
(b). Pituitary hormones and their role
4. Explain: 14  
(a). DNA damage and SOS repair mechanism  
(b). Acute and chronic toxicity testing  
**OR**
4. Discuss tests for evaluation of Genotoxicity
5. Write short notes on any **THREE** of the following: 14
  - a. Pesticide toxicity
  - b. Nuclear Receptors
  - c. GIFT, SUZI and ICSI
  - d. Wetlands of Gujarat State
  - e. Psychosomatic disorders