## M.Sc. - ZOOLOGY SEMESTER -IV EXAMINATION, April -2017

## Paper-13 (Ecology and Animal Biotechnology) Paper code: 3706

Time: -2:30 Hours

Time: -2:30 Hours		Total Marks:-70	
Instru	ctions: (1) All Questions carries equal marks.		
	(2) Draw labeled diagram where necessary.		
Q: 01	What is Biogeochemical Cycle? Explain Water cycle or Hydrological Cycle.	14	
	OR		
Q: 01	Write notes on: (a) Mutualism.	07	
	(b) Protoco-operation.	07	
Q: 02	Write notes on: (a) Fecundity and Fertility.	07	
	(b) Mortality and Natality.	07	
	OR		
Q: 02	Define term 'niche'. Give an introduction and types of nich	e. 14	
Q: 03	Write note on: (a) Gir National park.	07	
	(b) Any one sanctuary of Gujarat.	07	
	OR		
Q:03	What is gene banking? Write the methods for its conservation	on. 14	
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Q: 04	Write brief note on Lac operon.	14	
	OR		
Q: 04	What is regeneration? Describe development of main stages regeneration in animal.	of 14	
0.05		14	
Q: U5_	Write note on Artificial animal-breeding.		
Q:05	OR What is transgenic animal? Describe the production of drugs	14	
<u></u>	from it		