Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER–IV(OLD) • EXAMINATION – WINTER 2016

Subject Code:140301 **Date:23/11/2016**

Subject Name:Life Science-2

Time:02:30 PM to 05:00 PM **Total Marks: 70**

Instructions:

1. **Attempt all questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**

Q-01	(A)	Briefly explain the alimentary tract with neat diagram.	07
	(B)	Draw and explain anatomy of kidney.	07
Q-02	(A)	Draw and explain the structure of spinal cord.	07
	(B)	Briefly explain the anatomy of male reproductive organs.	07
		OR	
	(B)	Briefly explain the anatomy of female reproductive organs.	07
Q-03	(A)	Write a short note on: Micturition.	07
	(B)	Draw and explain basic principle of dialysis with an artificial kidney.	07
		OR	
Q-03	(A)	Draw and explain the structure of large neuron in brain and also briefly explain the role of synapses in processing information.	07
	(B)	Write a short note on: Sensory receptors.	07
Q-04	(A)	Enlist and explain the hormones secreted by pituitary gland. Also state the relation of pituitary gland with the hypothalamus gland.	07
	(B)	What is biofeedback mechanism of hormone regulation? Explain the regulation mechanism of growth hormone (GH).	07
		OR	
Q-04	(A)	Write a short note on: Spermatogenesis.	07
	(B)	Write a short note on: Ovarian cycle.	07
Q-05	(A)	Explain the types of movements in gastrointestinal tract.	07
	(B)	Briefly explain: mastication and deglutition.	07
		OR	
Q-05	(A)	Explain the secretions done by lever. Also explain the role of bile salts in fat digestion.	07
	(B)	Write a short note on: Gastrointenstinal absorption.	07