

Programme: M. Sc. (Zoology)

Course Code: ZOO-409

Number of Credits: 2

Effective from AY: 2018-19

Title of the Course: Nutritional Biochemistry

<u>Prerequisites for the course:</u>	Basic knowledge of physiology and biochemistry	
<u>Objective:</u>	To understand the importance of various nutrients to keep in a well- being State.	
<u>Content:</u>	Module 1: Basic concepts of energy and energy expenditure; dietary requirements of carbohydrates, proteins and lipids; natural source of carbohydrates, protein and lipids; importance of dietary fibres; protein requirement at different stages of development; Nutrigenomics of Omega 3 PUFA and some amino acids	12 hours
	Module 2: Electrolyte concentrations of body fluids; concept of acidosis and alkalosis Nutritional significance of Minerals, Biochemical functions of vitamin and specific deficiency diseases Nutritional requirements during pregnancy and lactation.	12 hours
<u>Pedagogy:</u>	Lectures/ tutorials/assignments/self-study	
<u>References/Readings</u>	1. Brody T, Nutritional, Biochemistry, Academic Press, New York. 2. Chattejea MN and Shindea R, Text Book of Medical Biochemistry, Jaypee Pub. India. 3. Elia M, Ljungqvist O, Stratton R and Lanham SA, Clinical Nutrition, Willey Blackwell Publication, UK. 4. Swaminathan MS, Nutritional Biochemistry, T R Publication, India	
<u>Learning Outcomes</u>	1. Gaining the knowledge of importance about the nutrition and keeping ourselves in well- being state. 2. Understanding the importance of some nutrient in controlling the expression of genes.	