

Programme: M. Sc. (Zoology)

Course Code: ZOO: 306

Number of Credits: 2

Effective from AY: 2018-19

Title of the Course: Marine Zoology

<u>Prerequisites for the course:</u>	Elementary knowledge about ecology and environmental science.	
<u>Objective:</u>	This course provides thorough grounding about the diversity of marine organisms, their biogeography, interactions with other organisms and adaptations to their environments, covering marine invertebrates and vertebrates from the smallest zooplankton to the largest animals of marine world, so also awareness of the threats to marine life and its conservation besides extraction of marine resources.	
<u>Content:</u>	Module 1: Marine Biomes & their characteristics, Natural association of organisms, Nutritional relationship, Ecological subdivisions of marine environment and their faunal inhabitants.	12hours
	Module 2: Marine resources (Physical resources, Energy resources, Biological resources and Non-extractive resources), Marine pollution (sources and types, solutions), Bio-fouling & Bio-deterioration.	12 hours
<u>Pedagogy:</u>	Lectures/ tutorials/assignments/self-study	
<u>References/Readings</u>	1. Carol Lalli, and Timothy Parsons (2002), Biological Oceanography, Butterworth-Heinemann Publ.,UK. 2. Karleskint G, Turner R, and Small J (2002), Introduction to Marine Biology, Brooks Cole Publ.,USA. 3. Nair NB and DM Thampy (1990), A Text Book of Marine Ecology, Macmillan Company India Ltd., India 4. Southward, Young & Fuiman (2000), Advances in Marine Biology, Elsevier, UK Sumich JL and Marissey JF (2002), Introduction to Biology of Marine Life, Jones & Bartlett Publ., USA. 5. Alan H Linton, Microbes, Man and Animals. John Wiley & Sons, New York.	
<u>Learning Outcomes</u>	1. Understanding of marine animal diversity and various relationships among them. 2. Scientific awareness to understand the marine environmental conditions and human impacts that are affecting marine life. 3. Knowledge about various adaptation strategies to live in various marine habitats. 4. Knowledge of extraction of various marine resources and their applied usage.	