

6th Semester		Protein Engineering	L-T-P 3-0-0	3 CREDITS
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Module I:

Primary structure, secondary structure, tertiary structure, quaternary structure, Ramachandran plots

Module II:

Strategies for design of novel proteins-strategies for the design of structure and function, computer methods in protein modelling

Module III:

Site and strategies for heterologous expressions, methods for expressing recombinant proteins in yeast, in vitro mutagenesis.

Module IV:

NMR spectroscopy, crystallography, spectroscopic and calorimetric methods

Module V:

Design of polymeric biomaterials, nicotinic acetylcholine receptors as a model for a super family of ligand - gated ion channel proteins

Books:

1. Protein Engineering and Design by Paul R. Carey, Academic Press, 1996, 361 pages.