## <u>Vivekanand College, Kolhapur (Autonomous)</u> <u>Department of Biotechnology</u>



## Course outcome of B.Sc-II (Entire) Biotechnology CBCS Subject wise both Semester-III and IV Implemented from June 2019-20

Subject Offered Sem-III:- C Sem-IV:- D	Course Outcome
DSC 1345C Genetics	At the end of this course students will be able to: CO 1. Outline of Mendelian inheritance. CO2. Demonstrate the chromosome structure, chromatin organization and variation using model. CO 3. Perceive knowledge about the genetic disease. CO 4. Predict and illustrate model of Pedigree analysis.
DSC 1346C Biophysics and Enzymology	At the end of this course students will be able to: CO 1. Illustrate the importance of spectroscopy. CO 2. Choose the appropriate spectroscopy for specific bimolecule to interpret its structure. CO 3. demonstrate the experimental optimization of Enzyme activity and factors influencing them. CO 4. Able to construct the models explaining the mechanism of enzyme action.
DSC 1347C Metabolic Pathways	At the end of this course students will be able to: CO 1. compare different biochemical reactions in cell CO 2. Explain different methods to study metabolism. CO 3. Conclude the stiochiometry of metabolic pathways. CO 4. To analyze the relation between ATP generation and Electron transport Chain.
DSC 1348C Ecology	At the end of this course students will be able to: CO 1. Appreciate the ethical, cross-cultural and historical context of environment with respect to classical Ecology. CO 2. Construct the relationship between different biogeochemical cycles. CO 3. Outline the importance of population ecology. CO 4. Reflect the importance of Evolution theories in Ecology.
DSC 1349C Molecular Biology-I	At the end of this course students will be able to: CO 1. Explain structure and function of the macromolecules CO2. List the underlined mechanism of Nucleotide Biosynthesis CO3. Compare the mechanism of replication in prokaryotes and eukaryotes. CO 4. Discuss DNA damage and repair mechanism,
DSC 1350C Plant Tissue Culture	At the end of this course students will be able to: CO 1. Construct the design required to set up plant tissue culture laboratory. CO 2. Differentiate between different PTC techniques. CO 3. Illustrate the importance of Asepsis. CO 4. to become entrepreneur in PTC.

DSC 1345D	At the end of this course students will be able to:
Immunology	CO 1. Differentiate between different types of immunity.
	CO 2. Classify cells of immune system.
	CO 3. Construct models demonstrating antigen-antibody interaction.
	CO 4. Perform various serological tests for diagnosis of various types'
	diseases.
DSC 1346D	At the end of this course students will be able to:
Advances in Cell Biology	CO 1. Elaborate the mechanism of cell communication.
Advances in Cell Biology	CO 2. Roles of different organelle in protein trafficking.
	CO 3. Predict causes of Cancer
	CO 4. Understand the mechanism of cell division
DSC 1347D	At the end of this course students will be able to:
Plant Biochemistry	CO 1. Explain mechanism of water absorption.
	CO 2 illustrate concept of photosynthesis.
	CO 3. Differentiate between symbiotic and non symbiotic Nitrogen
	fixation.
	CO4. Predict the relationship between vernalisation and
	photoperiodism.
DCC 4240D	At the end of this course students will be able to:
DSC 1348D Environmental Biotechnology	CO 1. Classify different kinds of pollution
	CO 2.Describe the concept of toxicity.
	CO 3. Describe sources of bioethanol production
	CO4. Discover the different ways of Bioremediation
DCC 4240D	At the end of this course students will be able to:
DSC 1349D Molecular Biology-II	CO 1. Compare the mechanism of Transcription & post-transcriptional
	modification in prokaryotes and eukaryotes
	CO 2.outline the character of genetic code
	CO 3. Compare the mechanism of Translation & post-translational
	modification in prokaryotes and eukaryotes
	CO4. Draw a contrast between operon model and normal gene
	expression.
DSC 1350D	At the end of this course students will be able to:
Animal Tissue Culture	CO 1. Construct the design required to set up animal tissue culture
	laboratory.
	CO 2. Classify different characters and biology of cultured cells.
	CO 3. Define scale up of animal cell culture.
	CO4. Appreciate the importance of stem cell technology.

Head

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