

VIVEKANAND COLLEGE, KOLHAPUR.

STATEMENT OF SYLLABUS COVERED

Year : 2020 - 2021

Term : Ist / IInd

Name of the Teacher : Mr. A. L. Upadhye.

Department : Biotech (Entire)

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to Covered	Remarks
B.3C III	bioinformatics.	Unit I Introduction to bioinformatics, and genomics, literature data-base, sequence alignment.	All covered	-	
		Unit II - phylogenetic analysis structure-based drug-designing & ligand-based drug.	All covered	-	
		04 practical	All covered	-	

HEAD
DEPARTMENT OF BIOTECHNOLOGY (ENTIRE)
VIVEKANAND COLLEGE, KOLHAPUR
(EMPOWERED AUTONOMOUS)




(Mr. A. L. Upadhye)

VIVEKANAND COLLEGE, KOLHAPUR.

STATEMENT OF SYLLABUS COVERED

Year : 2020-20 21

Term : Ist / IInd

Name of the Teacher : Mr. Mulla.

Department : Biotech (Entire)

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to Covered	Remarks
BSC-I sem-I	DSC-A physics	Unit -1 Elasticity. Introduction, definitions, of stress.	All Covered	—	
		Unit-2 viscosity & surface tension. Sound waves.	All covered	—	

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to Covered	Remarks
BSC-IT SEM II	PSC-B physics	Unit-1 Optics completed with microscopy. Bioelectricity.	All covered	—	
		Unit-2 Semiconductor Devices & Digital electronics	All covered	—	

(Signature of the Head of Dept.)

HEAD
DEPARTMENT OF BIOTECHNOLOGY (ENTIRE)
VIVEKANAND COLLEGE, KOLHAPUR
(EMPOWERED AUTONOMOUS)



(Signature of the Teacher)

(Mr. Muller)

VIVEKANAND COLLEGE, KOLHAPUR.

STATEMENT OF SYLLABUS COVERED

Year : 2020 - 2021

Term : Ist / IInd

Name of the Teacher : Mr. R.R. Mane.

Department : Biotech (entire)

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to Covered	Remarks
B.Sc-I (Sem-I)	DSC-A Computer	Unit-1 computer basics operating system office operation	All covered	—	
		Unit-2- Database Management System.			
		Basic of bioinformatics.	All covered.	—	

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to Covered	Remarks
BSc-I sem II	DSC-B Statistics	Unit-I - Introduction to statistics & collection of data. Graphical representation	AU covered		
		Unit-2 - Correlation & Regression Probability & testing of Hypothesis limits of probability	AU covered.		

(Signature of the Head of Dept.)

HEAD

DEPARTMENT OF BIOTECHNOLOGY (ENTIRE)
VIVEKANAND COLLEGE, KOLHAPUR
(EMPOWERED AUTONOMOUS)



(Signature of the Teacher)

MS. ~~Atijit~~ ~~leumbhar~~
SK

VIVEKANAND COLLEGE, KOLHAPUR.

STATEMENT OF SYLLABUS COVERED

Year : 2020-2021

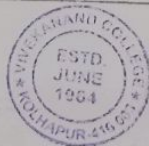
Term : Ist / IInd

Name of the Teacher : Dr. A.A. Patravale

Department : Biotech (Entire)

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to Covered	Remarks
B.Sc-I	DSC-B chemistry	Unit-1 Fundamentals and Mechanistic Basis of organic Reaction Stereochemistry	All Covered	—	
		Unit-2 Titrimetric Analysis & Gravimetric Analysis, chemistry of natural products.	All covered	—	

DEPARTMENT OF BIOTECHNOLOGY (ENTIRE)
VIVEKANAND COLLEGE, KOLHAPUR
(EMPOWERED AUTONOMOUS)



A.A. Patravale
(Dr. A.A. Patravale)

VIVEKANAND COLLEGE, KOLHAPUR.

STATEMENT OF SYLLABUS COVERED

Year : 2020-2021

Term : Ist / IInd

Name of the Teacher : Dr. D.S. Gaikwad

Department : Biotech (Entire)

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to Covered	Remarks
B.Sc-I	DSC-A - chemistry	Unit-1- Basics concepts in chemistry. Acids & Bases Analytical & industrial chemistry Reaction kinetics	All covered	—	
		unit-2- Thermodynamics structure & Bonding. Concept & Hybridization. Hydrogen Bonding coordination complexes.	All covered	—	

HEAD
DEPARTMENT OF BIOTECHNOLOGY (ENTIRE)
VIVEKANAND COLLEGE, KOLHAPUR
(EMPOWERED AUTONOMOUS)



(Dr. D.S. Gaikwad)

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to Covered	Remarks
		Co-enzyme.	All covered.		
BSc-II	DSC 1346	unit-1 - Atomic C-biophysics Absorption & Enzymology. NMR, IR ESR. Unit-2 - Enzymology Factors affecting on catalytic efficiency of enzyme.	All covered.		
BSc-III	DSC 1347	unit-1 - c. meta bolic Pathway metabolism carbohydrate, Lipid metabolism	All covered.		

S.V.
(Signature of the Head of Dept.)

DEPARTMENT OF BIOTECHNOLOGY (ENTIRE)
VIVEKANAND COLLEGE, KOLHAPUR
(EMPOWERED AUTONOMOUS)



S.G. Kulkarni
(Signature of the Teacher)
(Mr. S. G. Kulkarni)

VIVEKANAND COLLEGE, KOLHAPUR.

STATEMENT OF SYLLABUS COVERED

Year : 2020-2021

Term : Ist / IInd

Name of the Teacher : Mr. S.G. Kulkarni

Department : Biotech (Entire)

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to Covered	Remarks
BSC-I	DSC-A biochemi- -stry	Unit-1 Origin of life pH, pKa value Nucleic acids Carbohydrates Lipids.	All covered		
		Unit-2 physical properties, chemical proper- -ties	All covered.		
	DSC-B biochem.	unit-1- protein chromatography Enzymes	All covered.		

VIVEKANAND COLLEGE, KOLHAPUR.

STATEMENT OF SYLLABUS COVERED

Year : 20 - 20

Term : Ist / IInd

Name of the Teacher : Mr. S. G. Kulkarni

Department : _____

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to Covered	Remarks
		unit-2 Respiration Anaerobic Respiration			
BSC-1I	DSC 1247D plant biochem.	unit-1 plant water relation photosynthesis			
		unit-2- nitrogen metabolism Introduction to plant hormones			

HEAD
DEPARTMENT OF BIOTECHNOLOGY (ENTIRE)
VIVEKANAND COLLEGE, KOLHAPUR
(EMPOWERED AUTONOMOUS)



S.G.K.
(Mr. S. G. Kulkarni)

VIVEKANAND COLLEGE, KOLHAPUR.

STATEMENT OF SYLLABUS COVERED

Year : 2020 - 2021

Term : Ist / IInd

Name of the Teacher : Vinaya Namdev More

Department : Biotech (Entire)

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to Covered	Remarks
Bsc-II sem (III)	DSC-1345C Genetics	Unit-1 - Mendel's law of Inheritance Deviations of mendel laws, Interaction of gene - linkage Unit-2 - structural & numerical changes in chromosome mutation, plasmid recombination.	All covered		
Bsc-II sem (IV)	DSC-1345D Immunology	Unit-1 - Types & Introduction to immunity types of defence	All covered		

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to Covered	Remarks
		unit-2 - Ag-Ab reaction types of immune response, Hypersensitivity	All covered.		
BSc-II sem (IV)	Dsc-1346 D Advances in cell biology	unit-2 - types of cell signaling, protein traffic- king unit-2 - types of cell cycle & cancer	All covered		

S. Y.

(Signature of the Head of Dept.)

HEAD
DEPARTMENT OF BIOTECHNOLOGY (ENTIRE)
VIVEKANAND COLLEGE, KOLHAPUR
(EMPOWERED AUTONOMOUS)



V.N. More

(Signature of the Teacher)

(Miss. V. N. More)

VIVEKANAND COLLEGE, KOLHAPUR.

STATEMENT OF SYLLABUS COVERED

Year : 2020 - 2021

Term : Ist / IInd

Name of the Teacher : Miss. S. V. Sarnaik.

Department : Biotech (Entire)

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to Covered	Remarks
B.Sc I	Microbiology I	Unit I History, introduction, morphology and cytology, methods of isolation, bacterial taxonomy,	All covered	—	
		Unit II concept of sterilization, and staining procedure.	All covered	—	
		06 Practicals	All covered	—	

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to Covered	Remarks
B.sc I	Microbiology	Unit I Culture media and Pure culture techniques. methods of isolation Water, air.	All covered		
		Unit II Water microbiology Air microbiology	All covered.		
		OS Practical	All covered		

(Signature of the Head of Dept.)

HEAD

DEPARTMENT OF BIOTECHNOLOGY (ENTIRE)

VIVEKANAND COLLEGE, KOLHAPUR
(EMPOWERED AUTONOMOUS)



(Signature of the Teacher)
(Miss S.V. Sarank)

VIVEKANAND COLLEGE, KOLHAPUR.

STATEMENT OF SYLLABUS COVERED

Year : 2020 - 2021

Term : Ist / IInd

Name of the Teacher : Miss. Sruvanti V. Sarnaik

Department : Biotech (Entire)

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to Covered	Remarks
B.Sc III	Industrial Biotechnology	Unit I Introduction to Industrial Biotechnology microbial Screening Scale up and Strain Improvement	All covered	—	
		Unit II Fermentation media, Downstream process and product recovery	All covered	—	
		06 Practicals	All covered	—	

Sy /
HEAD

DEPARTMENT OF BIOTECHNOLOGY (ENTIRE)
VIVEKANAND COLLEGE, KOLHAPUR
(EMPOWERED AUTONOMOUS)



(Miss. S. V. Sarnaik)

VIVEKANAND COLLEGE, KOLHAPUR.

STATEMENT OF SYLLABUS COVERED

Year : 2020-2021

Term : Ist / IInd

Name of the Teacher : S.V. Samant

Department : Biotech (Entire)

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to Covered	Remarks
BSc-III	Food & microbial-technology	Microbial production of Industrial product	All covered	—	
		fermented food & Beverages.			
		Food spoilage & preservation	All covered	—	
		& toxicity.			
		Impact of			

VIVEKANAND COLLEGE (ENTIRE)
VIVEKANAND COLLEGE, KOLHAPUR
(ESTD. JUNE 1964)



M/S

VIVEKANAND COLLEGE, KOLHAPUR.

STATEMENT OF SYLLABUS COVERED

Year : 2020 - 2021

Term : Ist / IInd

Name of the Teacher : Miss. Srushti V. Sornai.

Department : Biotech (Entire)

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to Covered	Remarks
B.Sc II	Ecology	Unit I Ecosystem, Productivity, food chain, Ecological Pyramid. Biogeochemical cycle.	All covered	—	
		Unit II Population ecology, Population growth, equation	All covered	—	
		AS Practicals	All covered	—	

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to Covered	Remarks
B.Sc II	Environmental Biotechnology	Unit I water pollution, Air pollution, soil pollution,	All covered	—	
		Unit II Environmental toxicology, Bio Fuel production	All covered	—	
		OS Practicals	All covered	—	

(Signature of the Head of Dept.)

HEAD
DEPARTMENT OF BIOTECHNOLOGY (ENTIRE)
VIVEKANAND COLLEGE, KOLHAPUR
(EMPOWERED AUTONOMOUS)



(Miss. S. V. Samalik)
(Signature of the Teacher)

VIVEKANAND COLLEGE, KOLHAPUR.

STATEMENT OF SYLLABUS COVERED

Year : 2020 - 2021

Term : Ist / IInd

Name of the Teacher : Ms. Pooja. D. Patil

Department : Biotechnology (Ent)

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to Covered	Remarks
B.Sc I Biotech (Ent) Sem I	Bio-techniques & Instrumentation	Unit I :- Protein Purification, Centrifugation	All covered	—	
	DSC - A	Unit II :- Microscopy UV-visible Spectroscopy	All covered	—	
	Practical	Practical :- 08	All covered	—	
B.Sc I Biotech (Ent) Sem II	Cell Biology DSC - B	Unit I :- Cell structure	All covered	—	
		Unit II :- Cytoskeleton assembly	All covered	—	
	Practical	Practical :- 03	All covered	—	

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to Covered	Remarks
B.Sc II Biotech (Ent) Sem III	Plant Tissue Culture	Unit I :- Introduction, Laboratory, Culture Medium	All covered	—	
		Unit II :- Anther & Pollen Culture, Micropropagation	All covered	—	
	Practical	Practical :- 05	All covered	—	
B.Sc II Biotech (Ent) Sem IV	Animal Tissue Culture	Unit I :- Introduction, Culture Medium, DSC-1350 D Characterization	All covered	—	
		Unit II :- Scale up, stem Cell Technology, Contamination	All covered	—	
	Practical	05	All covered	—	

(Signature of the Head of Dept.)

HEAD
DEPARTMENT OF BIOTECHNOLOGY (ENTIRE)
VIVEKANAND COLLEGE, KOLHAPUR
(EMPOWERED AUTONOMOUS)



(Principal/PAT)
Ms. P. D. Pati
(Signature of the Teacher)

VIVEKANAND COLLEGE, KOLHAPUR.

STATEMENT OF SYLLABUS COVERED

Year : 2020 - 2021

Term : Ist / IInd

Name of the Teacher : Mrs. Pooja D. Patil

Department : Biotechnology (Ent)

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to Covered	Remarks
B.Sc III Biotech (Ent) Sem V	Application of Biotechnology in Health DSE-135FE	Unit I :- Crop Improvement, Somatic hybridization	All covered	—	
	Practical	of	All covered	—	
B.Sc III Biotech (Ent) Sem VI	Application of Biotechnology in Health DSE-1354F	Unit I :- stem cells vaccines	All covered	—	

(2)

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to Covered	Remarks
B.Sc III Biotech (Ent) Sem VI	Application of Biotechnology in Health OSE 1257-F	Unit II: Monoclonal Antibodies Gene Therapy	All covered	—	
	Practical	06	All covered	—	

(Signature of the Head of Dept.)

HEAD
DEPARTMENT OF BIOTECHNOLOGY (ENTIRE)
VIVEKANAND COLLEGE, KOLHAPUR
(EMPOWERED AUTONOMOUS)



(P. D. Pati)
Ms P. D. Pati
(Signature of the Teacher)

VIVEKANAND COLLEGE, KOLHAPUR.

STATEMENT OF SYLLABUS COVERED

Year : 2020 - 2021

Term : Ist / IInd

Name of the Teacher : Mr. A. L. Upadhye

Department : Biotech (Entire)

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to Covered	Remarks
B.sc II	Molecular Biology I	Unit I Experimental evidences for DNA as a genetic material, properties and function of DNA.	All covered	-	
		Unit II DNA replication DNA repair	All covered	-	
		05 Practicals	All covered	-	

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to Covered	Remarks
B.Sc II	Molecular Biology	Unit I Transcription in prokaryote and Eukaryote. Genetic code Translation.	All covered	-	
		Unit II Regulation of gene expression in prokaryote and eukaryote regulation	All covered	-	
		OS Practicals	All covered	-	

S. Y.
(Signature of the Head of Dept.)

HEAD
DEPARTMENT OF BIOTECHNOLOGY (ENTIRE)
VIVEKANAND COLLEGE, KOLHAPUR
(EMPOWERED AUTONOMOUS)



(Mr. A. L. Upadhye)
(Signature of the Teacher)

VIVEKANAND COLLEGE, KOLHAPUR.

STATEMENT OF SYLLABUS COVERED

Year : 20 20 - 20 21

Term : Ist / IInd

Name of the Teacher : Mr. A.L. Upadhye

Department : Biotech (Entire)

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to Covered	Remarks
B.Sc III	Basics in Genetic Engineering	Unit I Enzymes in r-DNA technology, cloning vectors, Bacteriophage vectors plant vectors.	All covered	-	
		Unit II Nucleic acid Hybridization, DNA sequencing and blotting tech.	All covered	-	
		05 Practicals	All covered	-	

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to Covered	Remarks
B.Sc III	Advances in genetic engineering	unit I Isolation of gene, PCR and its applications. Bar coding,	All covered	-	
		unit II cloning methodolo- gies, screening of recombinants, Application of R-DNA technology	All covered	-	
		OS Practicals	All covered	-	

(Signature of the Head of Dept.)

HEAD
 DEPARTMENT OF BIOTECHNOLOGY (ENTIRE)
 VIVEKANAND COLLEGE, KOLHAPUR
 (EMPOWERED AUTONOMOUS)



(Mr. A. V. Upadhye)
 (Signature of the Teacher)