

VIVEKANAND COLLEGE, KOLHAPUR.

STATEMENT OF SYLLABUS COVERED

Year : 2019 - 2020

Term : Ist / IInd

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

Department : Biotechnology (Entire)

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to Covered	Remarks
B.Sc. - II	DSC-1346-C	Unit - I			
Biotech (Entire)	Biophysics	- Atomic Absorption spectroscopy			
Sem-III	f Enzymology	- X-ray crystallography	All covered		
		- IR spectroscopy			
		- ESR			
		Unit-II			
		- factors affecting enzyme activity			
		- Factors affecting catalytic activity of enzyme	All covered		
		- Allosteric enzymes			
		- Definition			
		- Properties			

S.G.
HEAD
DEPARTMENT OF BIOTECHNOLOGY (ENTIRE)
VIVEKANAND COLLEGE, KOLHAPUR
(EMPOWERED & AUTONOMOUS)



S.G.
(Ms. S. G. Kulkarni)

VIVEKANAND COLLEGE, KOLHAPUR.

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Year : 2019 - 2020

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Name of the Teacher : Mr S. G. Kulkarni Department : Biotechnology (Ent)

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to Covered	Remarks
B.Sc II Biotech (Ent) Sem III	Metabolic Pathways DSC-1347C	Unit I :- Metabolism Carbohydrates and Lipids	All covered	—	
		Unit II :- Anaerobic Respiration	All covered	—	
	Practical	04	All covered	—	
B.Sc II Biotech (Ent) Sem IV	Plant Biochemistry DSC-1347D	Unit I :- Plant water Relation Photosynthesis	All covered	—	
		Unit II :- Secondary metabolite	All covered	—	

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Year : 2019 - 2020

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

Department : Biotech (Entire)

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to Covered	Remarks
B.Sc I	Biochemi- stry	Unit I origin of life, PH, pKa value Nucleic acid.	All covered	—	
		Unit II Carbohydrates, lipids, physical properties	All covered	—	
		06 Practicals	All covered	—	

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to Covered	Remarks
B.sc I	Biochemistry	unit I Protein, chromatography	All covered	-	
		unit II Enzymes, co-enzymes	All covered	-	
		OS Practicals	All covered	-	

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

VIVEKANAND COLLEGE, KOLHAPUR.

STATEMENT OF SYLLABUS COVERED

Year : 2019 - 2020

Term : 1st / IInd

Name of the Teacher : Dr. A. R. Kasarkar

Department : Biotechnology (Entire)

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to Covered	Remarks
B.Sc. - I	Dsc - A-	Unit - I			
biotech	Plant	- Plant Diversity			
Entire	science	- Taxonomy of Angiosperms			
sem - I		- objectives & functions nomenclature and its significance	All covered		
		Unit - II			
		- Sexual Reproduction in Angiosperms			
		- structure of Typical Flower	All covered		
		- Fruit			
		- seed			
		- Plant Anatomy			

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to Covered	Remarks
B.Sc. - I (Biotech Entire) Sem - II	DSC - B - Animal science	Unit - I - Life concepts & characteristic of life - 3 domain systems - classification of animal kingdom Unit - II - Host Parasite Relationship - Tissue Applied Zoology - Blood, Bone, Cartilage - Vermiculture, Sericulture	All covered All covered		

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(Dr. A. R. Kasarkar)

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VIVEKANAND COLLEGE, KOLHAPUR.

STATEMENT OF SYLLABUS COVERED


Year : 2019 - 2020

Term : Ist / IInd


Name of the Teacher : Mr Mulla.

Department : Biotechnology (Ent)

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to Covered	Remarks
B.Sc I Brotech (Ent) Sem I	Physics DSC-A	Unit I :- Elasticity	AU covered	—	
		Unit II :- Sound waves	AU covered	—	
	Practicals	03	AU covered	—	
B.Sc II Brotech (Ent) Sem II	Physics DSC-B	Unit I :- Optics correlated with microscopy	AU covered	—	
		Unit II :- Semi-conductor Devices and Digital Electronics	AU covered	—	
	Practical	03	AU covered	—	


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 MR. Mulla

VIVEKANAND COLLEGE, KOLHAPUR.

STATEMENT OF SYLLABUS COVERED

Year : 2019 - 2020.

Term : Ist / IInd

Name of the Teacher :

Mr R. R. Mane.

Department : Biotechnology (Ent)

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to Covered	Remarks
B.Sc I Biotech (Ent) Sem I	Computer DSC - A	Unit I :- Computer basics	AU covered	—	
		Operating System	AU covered	—	
		Unit II :- Database Management System			
	Practicals	06	AU covered	—	
B.Sc I Biotech (Ent) Sem II	Computer DSC - B	Unit I :- Introduction to programming Input / output part	AU covered	—	
		Unit II :- Loop	AU covered	—	
	Practicals	07	AU covered	—	

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R. R. Mane
MR. R. R. Mane

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to Covered	Remarks
B.S.C I	Statistics	Unit I Introduction to statistics and collection of data, graphical representa- tion.	All covered	-	
		Unit II correlation and regression, probability, limits of probability	All covered	-	
		OS Practicals	All covered	-	

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VIVEKANAND COLLEGE, KOLHAPUR
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(Signature of the Teacher)

(Miss. S.K. Kumbhar)

VIVEKANAND COLLEGE, KOLHAPUR.

STATEMENT OF SYLLABUS COVERED

Year : 2019 - 2020

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	chemistry	Unit I Basic concepts in chemistry, Acid and Bases, Analytic chemistry, thermodynamics.	All covered	-	
		unit II Structure and Bonding, concept of Hybridization, Hydrogen bonding	All covered	-	
		ii. Practicals	All covered	-	

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Dr. D. S. Gaikwad
(Dr. D. S. Gaikwad)

VIVEKANAND COLLEGE, KOLHAPUR.

STATEMENT OF SYLLABUS COVERED

Year : 2019 - 2020

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 1	chemistry <u>II</u>	Unit I Fundamentals and mechanistic, Basic of organic reaction Stereochemistry	All covered	-	
		Unit II Titrimetric Analysis and Gravimetric Analysis, chemistry of natural products	All covered	-	
		06 Practicals	All covered	-	

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Patravale
(Dr. A.R. Patravale)

VIVEKANAND COLLEGE, KOLHAPUR.

STATEMENT OF SYLLABUS COVERED

Year : 2019-2020

Term : 1st / 2nd

Name of the Teacher : S. V. Sarnaik

Department : Biotech (Entire)

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to Covered	Remarks
Bsc-I	micro-biology	culture media & pure culture technique	All covered	—	
	<u>II</u>	methods of isolation of pure culture	All covered	—	
		water microbiology Air microbiology	All covered	—	
		Genotobiotic life,	All covered	—	
		Medical Microbiology of Practical	all covered	—	

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to Covered	Remarks
BSc-III	Food & microbial technology	microbial production of industrial product	All covered	—	
		Fermentation of food & Beverages	All covered	—	
		Food spoilage preservation & toxicity.			
		Impact of GM food on health	All covered	—	
		Public health principles			
		06 Practicals	All covered	—	

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(Signature of the Teacher)

(Miss. S. V. Sornajik)

VIVEKANAND COLLEGE, KOLHAPUR.

STATEMENT OF SYLLABUS COVERED

Year : 20 19-20 20

Term : Ist / IInd

Name of the Teacher : S.V. Sarnaik.

Department : Biotech Entire.

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to Covered	Remarks
Bsc-I	Micro-biology	History, Introduction, morphology & cytology of bacteria	all covered	—	
	I	Bacterial taxonomy, microbial nutrition, types,	all covered	—	
		Nutritional requirement of mos	all covered	—	
		concept of sterilization & stain &	all covered	—	
		Staining procedure.		—	
		06 Practicals	All covered.	—	

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to Covered	Remarks
Bsc-III	Industrial microbiology	Introduction to industrial biotechnology	all covered	-	
		Microbial screening & scale up & strain improvement	all covered	-	
		Fermentation media, Down-stream process & product recovery	All covered	-	
		06 Practicals	All covered.		

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DEPARTMENT OF BIOTECHNOLOGY (ENTIRE)
VIVEKANAND COLLEGE, KOLHAPUR
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(Signature of the Teacher)
(Miss. J.V. Sarnaik)

VIVEKANAND COLLEGE, KOLHAPUR.

STATEMENT OF SYLLABUS COVERED

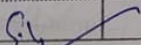
Year : 2019 - 2020

Term : Ist / IInd ✓

Name of the Teacher : Vinaya Namde/ More

Department : Biotech Entire

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to Covered	Remarks
Bsc-II sem- IV	DSE- 1346.D Advances in cell biology	unit-1 - secretory pathway & protein traffi- cking & cell signaling. unit-2 - cell cycle, mitosis meiosis & role of spindle fibers in chromosome separation	All covered All covered.		


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V. N. More
(Miss. V. N. More)

VIVEKANAND COLLEGE, KOLHAPUR.

STATEMENT OF SYLLABUS COVERED

Year : 2019 - 2020

Term : Ist / IInd

Name of the Teacher : More Vinaya Namdev Department : Biotech (Entire)

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to Covered	Remarks
BSc-II	Genetics	Mendels law of Inheritance, Linkage, crossing over	all covered	—	
		Dominance - Inter- action of gene	all covered	—	
		Maternal effect. Mutation			
		Extra chromosomal inheritance, plasmid & recombination. genetic disease.	all covered.	—	

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to Covered	Remarks
BSc-II	Sem IV DSC-1345 D Immunology	Unit-I Introd- uction, types of immunity, types of Defense Introduction to cells & organs of immune system.	All covered	—	
		Unit-2- Ag+Ab Immune response Antigen-Ab reactions, Hypersensitivity.	All covered	—	

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V.N. more
(Signature of the Teacher)

VIVEKANAND COLLEGE, KOLHAPUR.

STATEMENT OF SYLLABUS COVERED

Year : 2019 - 2020

Term : Ist / IInd

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

Department : Biotechnology (Entire)

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to Covered	Remarks
B.Sc III Biotech (Ent) Sem V	Application of Biotechnology in Agriculture DSE 1357 E	Unit I :- Crop Improvement Somatic hybridization, Germplasm Conservation Unit II :- Biofertilizer Biopesticide	AU covered	—	
	Practical	Practical :- 06	AU covered	—	
B.Sc III Biotech (Ent) Sem VI	Application of Biotechnol- ogy in Health DSE-1357F	Unit I :- Stem cells Technology, Vaccines Unit II :- Monoclonal antibodies, Gene Therapy	AU covered	—	
	Practical	Practical :- 06	AU covered	—	

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Priyadpati's
(Priya d. Patil)

VIVEKANAND COLLEGE, KOLHAPUR.

STATEMENT OF SYLLABUS COVERED

Year : 2019 - 2020

Term : Ist / IInd

Name of the Teacher : Miss. Panya . D. Patil

Department : Biotechnology (Entire)

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to Covered	Remarks
B.Sc I Biotech (Ent) Sem I	Bio-Techniques & Instrumentation DSC A	Unit I:- Protein Purification Centrifugation	All covered	—	
		Unit II :- microscopy, UV-visible Spectroscopy	All covered	—	
	Practical	Practical :- 08	All covered	—	
B.Sc II 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 DSC-1350 C	Unit I :- Introduction, Laboratory, Culture Medium	AU covered	—	
		Unit II :- Anther & Pollen Culture, micropropagation	AU covered	—	
	Practical	Practical :- 05	AU covered	—	
B.Sc II Biotech (Ent) Sem IV	Animal Tissue Culture DSC 1350 D	Unit I :- Introduction, characterization of cultured cells.	AU covered	—	
		Unit II :- Scale up, stem cell technology	AU Covered	—	
	Practical	Practical :- 05	AU covered	—	

S.L.
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P. D. Patil
Ms. P. D. Patil
(Signature of the Teacher)

VIVEKANAND COLLEGE, KOLHAPUR.

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Year : 2019 - 2020

Term : Ist / IInd

Name of the Teacher : Miss. Ritika musale. 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 pyramids, Energy flow, cycles.	All covered	-	
		unit II Population Ecology population growth Evolution, equation,	All covered	-	
		OS Practical	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 Environmental toxicology	All covered	-	
		Unit II Environmental Impact, Biofuel production, Bioremediation	All covered	-	
		OS Practical	All covered	-	

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(Signature of the Teacher)
(Miss. R. musale)

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Name of the Teacher : Miss. Ritika musale.

Department : Biotech (Entire)

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to Covered	Remarks
B.Sc III	Developmental Biology	Unit I Plant development, meristem organization Plant Embryology Gametogenesis Apomixis	All covered	-	
		Unit II polyembryony Animal embryology Differentiation & regeneration	All covered	-	

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to Covered	Remarks
B.sc III	Bioinformatics	Unit I Introduction to Bioinformatics, and Genomics, Literature database.	All covered	-	
		Unit II Sequence alignment and polygenetic analysis, structure based drug designing	All covered	-	
		04 Practicals	All covered	-	

S.V.
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(Miss. R. Musale)
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VIVEKANAND COLLEGE, KOLHAPUR.

STATEMENT OF SYLLABUS COVERED

Year : 2019 - 2020.

Term : Ist / IInd

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

Department : Bio technology

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to Covered	Remarks
B.Sc III	Basics in	Unit-I Enzymes in r-DNA technology.	All Covered	—	
Bio tech	G.E	Bacteriophage Vector			
		Unit I & II Plant Vector. Nucleic Acid Hybridization	All Covered	—	
		Unit II DNA Sequencing and Blotting Technique.	All Covered	—	
		Practical os.	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 application.	All Covered	—	
		Unit II Barcoding and Cloning method and	All Covered	—	
		Unit II Application of rDNA technology.	All Covered	—	
		Practical 0.05	All Covered	—	

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(Mr A. L. Upadhye)

VIVEKANAND COLLEGE, KOLHAPUR.

STATEMENT OF SYLLABUS COVERED

Year : 2019 - 2020

Term : Ist / IInd

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

Department : Biotechnology,

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to Covered	Remarks
B.Sc-II	Mol Bio-I	Unit I Experimental Evidences for DNA as genetic material	All Covered	—	
		Unit I and II Organization of genome Nucleic Acid Biosynthesis DNA Replication.	All Covered	—	
		Unit II DNA Replication and Repair	All Covered	—	
		Practical OS	All Covered	—	

Class	Subject	Syllabus Assigned	Syllabus Covered	Syllabus Not to Covered	Remarks
B.Sc-II	Mol Bio-II	Unit I. Transcription in prokaryote & Eukaryotes. Genetic Code.	All Covered.	—	
		Unit I and II Translation in prokaryotes and Eukaryotes.	All Covered.	—	
		Unit II Regulation of gene Expression at transcription & translation.	All Covered	—	
		Practical os	All Covered	—	

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