LESSON PLAN FOR EVEN SEM SESSION 2017-18

NAME OF ASSISTANT /ASSOCIATE PROFESSOR: DR. SHIVANI SOOD CLASS/SECTION : B.SC IIIRDYEAR SUBJECT : BIOTECHNOLOGY

UNIT/PART I	TOPIC	
	THEORY	PRACTICAL
DAY1	Introduction to certain Industrial Products.	
DATE 1-1-18		
DAY2	Fermentation, Chemistry & Types of	
DATE 2-1-18	Fermentation.	
DAY3	Production of alcohol: Biochemical Pathway &	
DATE 3-1-18	Raw Materials.	
DAY4	Picking, Handling and Crushing of Fruits.	
DATE 4-1-18		
DAY5		Autoclaving and Incubation of
DATE 5-1-18		Glasswares.
DAY6	Pre treatment of Picking, Handling and Crushing	Autoclaving and Incubation of
DATE 6-1-18	of Fruits in bioreactors.	Glasswares.
DAY7	Fermentation process.	
DATE 8-1-18		
DAY8	Post Fermentation.	
DATE 9-1-18		
DAY9	Racking, Storage and Ageing.	
DATE 10-1-18		
DAY10	Clarification and Packing.	
DATE 11-1-18		
DAY11		Preparation of synthetic seeds.
DATE 12-1-18		
DAY12	Applications and Biochemical characterization of	Preparation of synthetic seeds.
DATE 13-1-18	fermented alcohol.	
DAY13	Production of Beer and Wine: Biochemical	
DATE 15-1-18	Pathway & Raw Materials.	
DAY 14	Picking, Handling and Crushing of grapes.	
DATE 16-1-18		
DAY15	Pretreatment of Picking, Handling and Crushing	
DATE 17-1-18	of grapes in Bioreactors.	
DAY16	Post Fermentation.	
DATE 18-1-18		
DAY17		Study of Bacterial and Yeast
DATE 19-1-18		growth Curve.

DAY18	Racking, Storage and Ageing.	Study of Bacterial and Yeast
DATE 20-1-18		growth Curve.
DAY19	HOLIDAY	HOLIDAY
DATE 22-1-18		
DAY20	SPORTS DAY	SPORTS DAY
DATE 23-1-18		
DAY21	HOLIDAY	HOLIDAY
DATE 24-1-18		
DAY22	Clarification and Packing.	
DATE 25-1-18	_	
DAY23	HOLIDAY	HOLIDAY
DATE 26-1-18		
DAY 24	Applications and Biochemical characterization of	Study of Bacterial and Yeast
DATE 27-1-18	fermented alcohol.	growth Curve.
UNIT/PART	TOPIC	
II	THEORY	PRACTICAL
DAY1	Production of <i>Pencillin:</i> Introduction, Production	
DATE 29-1-18	and upstream &downstream processing.	
DAY2	Fermentation process, Isolation of <i>pencillin</i> ,	
DATE 30-1-18	Processing and Applications.	
DAY3	HOLIDAY	HOLIDAY
DATE 31-1-18	110222.11	
DAY4	Production of Citric Acid: Introduction and	
DATE 1-2-18	Biochemical Pathway.	
DAY5		Production of alcohol.
DATE 2-2-18		
DAY6	Raw materials and Fermentation.	Production of alcohol.
DATE 3-2-18	The wind in the commentation	
DAY7	Biomass removal and liquid liquid extraction.	
DATE 5-2-18	Bromass romo var and riquid riquid charactions	
DAY8	Crystallization, Drying and Applications.	
DATE 6-2-18		
DAY9	Production of Vitamin B12: Introduction,	
DATE 7-2-18	Structure and Raw materials.	
DAY10	Microbial Production, Sterilization and	
DATE 8-2-18	Fermentation	
DAY11	ASSIGNMENT 1	Production of wine and pH of
DATE 9-2-18		alcohol.
DAY12	HOLIDAY	HOLIDAY
DATE 10-2-18		
DAY13	Recovery and Applications.	
DATE 12-2-18	The state of the s	
DAY14	HOLIDAY	
DATE 13-2-18	IIOLIDA I	
DAY15	Production of Glutamic acid: Introduction,	
DATE 14-2-18	Structure and Raw materials.	
DATE 14-2-18	Structure and Naw Materials.	

DAY16	Crystallization, Separation and Neutralization	
DATE 15-2-18	Crystamzation, Separation and Neutranzation	
DAY17		Estimation of Lactic acid by
DATE 16-2-18		titration method & pH of
DATE 10-2-16		alcohol & wine.
DAV10	Due direction of Duestococa Latin direction	
DAY18 DATE 17-2-18	Production of Protease: Introduction, Classification and Fermentation.	Estimation of Citric acid by
DATE 17-2-18	Classification and Fermentation.	titration method & pH of
DAMIO		alcohol & wine.
DAY19	Screening and Applications.	
DATE 19-2-18		
DAY20	Production of Amylase: Introduction,	
DATE 20-2-18	Classification and Raw materials.	
DAY21	Fermentation and Applications.	
DATE 21-2-18		
DAY22	Biotransformation of Steriods : Introduction,	
DATE 22-2-18	Classification and Commercial Development.	
DAY23		Presence of sugar and
DATE 23-2-18		estimation of alcohol by
		specific gravity method.
UNIT/PART	TOPIC	
III	THEORY	PRACTICAL
DAY1	Fermentation and Applications.	Presence of sugar & estimation
DATE 24-2-18		of alcohol by specific gravity
		method.
DAY2	Single cell Protein: Introduction, Production and	
DATE 26-2-18	Applications.	
DAY3	Single cell Protein: Introduction, Production	
DATE 27-2-18	andApplications.	
DAY4	HOLIDAY	HOLIDAY
DATE 28-2-18		
DAY5	HOLIDAY	HOLIDAY
DATE 1-3-18	110 222 111	
DAY6	HOLIDAY	HOLIDAY
DATE 2-3-18	110222111	110212111
DAY7	HOLIDAY	HOLIDAY
DATE 3-3-18		
DAY8	Sewage waste water treatment technique.	
DATE 5-3-18	20	
DAY9	Sewage waste water treatment plants.	
DATE 6-3-18	Sewage waste water treatment plants.	
DAY10	Biodegradation of xenobiotic compounds.	<u> </u>
DATE 7-3-18	Blodegradation of Achobiotic Compounds.	
DAY11	Biodegradation of xenobiotic compounds.	
DATE 8-3-18	Biodegradation of xenobiotic compounds.	
		Proposition of Callers authors
DAY12		Preparation of Callus culture.

DATE 9-3-18		
DAY13	ASSIGNMENT 2	Preparation of Callus culture.
DATE 10-3-18		
DAY 14	Biomining of microorganisms.	
DATE 12-3-18		
DAY15	Bioleaching of microorganisms.	
DATE 13-3-18		
DAY16	Production of Biogas.	
DATE 14-3-18		
DAY17	Production of Biogas.	
DATE 15-3-18		
DAY18		Biomass production Agaricus,
DATE 16-3-18		Aspergillus
DAY19	Production of Xanthan Gum:	Preparation of Suspension
DATE 17-3-18	Introduction, Fermentation and Applications.	culture.
DAY20	Production of Xanthan Gum:	
DATE 19-3-18	Introduction,Fermentation and Applications.	
DAY21	Production of polyhydroxyalkanoides:	
DATE 20-3-18	Introduction, Fermentation and Applications.	
DAY22	Production of polyhydroxyalkanoides:	
DATE 21-3-18	Introduction, Fermentation and Applications.	
DAY23	CONDITIONAL TEST	
DATE 22-3-18		
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DAY 24	HOLIDAY	HOLIDAY
	HOLIDAY	HOLIDAY
DAY 24	HOLIDAY Production of polyhydroxyalkanoides:	HOLIDAY Preparation of suspension
DAY 24 DATE 23-3-18	Production of polyhydroxyalkanoides:	
DAY 24 DATE 23-3-18 DAY 25	Production of polyhydroxyalkanoides: Introduction,Fermentation and Applications.	Preparation of suspension
DAY 24 DATE 23-3-18 DAY 25	Production of polyhydroxyalkanoides: Introduction,Fermentation and Applications. TOPIC	Preparation of suspension culture and Micropropagation
DAY 24 DATE 23-3-18 DAY 25 DATE 24-3-18	Production of polyhydroxyalkanoides: Introduction,Fermentation and Applications. TOPIC THEORY	Preparation of suspension culture and Micropropagation
DAY 24 DATE 23-3-18 DAY 25 DATE 24-3-18 UNIT/PART IV DAY1	Production of polyhydroxyalkanoides: Introduction,Fermentation and Applications. TOPIC THEORY Biocontrol agents for disease control:	Preparation of suspension culture and Micropropagation from Suspension Culture
DAY 24 DATE 23-3-18 DAY 25 DATE 24-3-18 UNIT/PART IV	Production of polyhydroxyalkanoides: Introduction,Fermentation and Applications. TOPIC THEORY	Preparation of suspension culture and Micropropagation from Suspension Culture
DAY 24 DATE 23-3-18 DAY 25 DATE 24-3-18 UNIT/PART IV DAY1 DATE 26-3-18 DAY2	Production of polyhydroxyalkanoides: Introduction,Fermentation and Applications. TOPIC THEORY Biocontrol agents for disease control: Bioinsecticides. Biocontrol agents for disease control:	Preparation of suspension culture and Micropropagation from Suspension Culture
DAY 24 DATE 23-3-18 DAY 25 DATE 24-3-18 UNIT/PART IV DAY1 DAY1 DATE 26-3-18 DAY2 DATE 27-3-18	Production of polyhydroxyalkanoides: Introduction,Fermentation and Applications. TOPIC THEORY Biocontrol agents for disease control: Bioinsecticides. Biocontrol agents for disease control: Bioherbicides.	Preparation of suspension culture and Micropropagation from Suspension Culture
DAY 24 DATE 23-3-18 DAY 25 DATE 24-3-18 UNIT/PART IV DAY1 DATE 26-3-18 DAY2 DATE 27-3-18 DAY3	Production of polyhydroxyalkanoides: Introduction,Fermentation and Applications. TOPIC THEORY Biocontrol agents for disease control: Bioinsecticides. Biocontrol agents for disease control: Bioherbicides. Biofertilizers and its advantages over chemical	Preparation of suspension culture and Micropropagation from Suspension Culture
DAY 24 DATE 23-3-18 DAY 25 DATE 24-3-18 UNIT/PART IV DAY1 DATE 26-3-18 DAY2 DATE 27-3-18 DAY3 DATE 28-3-18	Production of polyhydroxyalkanoides: Introduction,Fermentation and Applications. TOPIC THEORY Biocontrol agents for disease control: Bioinsecticides. Biocontrol agents for disease control: Bioherbicides. Biofertilizers and its advantages over chemical methods.	Preparation of suspension culture and Micropropagation from Suspension Culture PRACTICAL
DAY 24 DATE 23-3-18 DAY 25 DATE 24-3-18 UNIT/PART IV DAY1 DATE 26-3-18 DAY2 DATE 27-3-18 DAY3 DATE 28-3-18 DAY4	Production of polyhydroxyalkanoides: Introduction,Fermentation and Applications. TOPIC THEORY Biocontrol agents for disease control: Bioinsecticides. Biocontrol agents for disease control: Bioherbicides. Biofertilizers and its advantages over chemical	Preparation of suspension culture and Micropropagation from Suspension Culture
DAY 24 DATE 23-3-18 DAY 25 DATE 24-3-18 UNIT/PART IV DAY1 DATE 26-3-18 DAY2 DATE 27-3-18 DAY3 DATE 28-3-18 DAY4 DATE 29-3-18	Production of polyhydroxyalkanoides: Introduction,Fermentation and Applications. TOPIC THEORY Biocontrol agents for disease control: Bioinsecticides. Biocontrol agents for disease control: Bioherbicides. Biofertilizers and its advantages over chemical methods. HOLIDAY	Preparation of suspension culture and Micropropagation from Suspension Culture PRACTICAL
DAY 24 DATE 23-3-18 DAY 25 DATE 24-3-18 UNIT/PART IV DAY1 DATE 26-3-18 DAY2 DATE 27-3-18 DAY3 DATE 28-3-18 DAY4 DATE 29-3-18 DAY5	Production of polyhydroxyalkanoides: Introduction,Fermentation and Applications. TOPIC THEORY Biocontrol agents for disease control: Bioinsecticides. Biocontrol agents for disease control: Bioherbicides. Biofertilizers and its advantages over chemical methods. HOLIDAY Genetically engineered microbes: Introduction,	Preparation of suspension culture and Micropropagation from Suspension Culture PRACTICAL HOLIDAY Production of Primary
DAY 24 DATE 23-3-18 DAY 25 DATE 24-3-18 UNIT/PART IV DAY1 DATE 26-3-18 DAY2 DATE 27-3-18 DAY3 DATE 28-3-18 DAY4 DATE 29-3-18 DAY5 DAYE 30-3-18	Production of polyhydroxyalkanoides: Introduction,Fermentation and Applications. TOPIC THEORY Biocontrol agents for disease control: Bioinsecticides. Biocontrol agents for disease control: Bioherbicides. Biofertilizers and its advantages over chemical methods. HOLIDAY Genetically engineered microbes: Introduction, concept and techniques.	Preparation of suspension culture and Micropropagation from Suspension Culture PRACTICAL
DAY 24 DATE 23-3-18 DAY 25 DATE 24-3-18 UNIT/PART IV DAY1 DATE 26-3-18 DAY2 DATE 27-3-18 DAY3 DATE 28-3-18 DAY4 DATE 29-3-18 DAY5 DAY5 DATE 30-3-18 DAY6	Production of polyhydroxyalkanoides: Introduction,Fermentation and Applications. TOPIC THEORY Biocontrol agents for disease control: Bioinsecticides. Biocontrol agents for disease control: Bioherbicides. Biofertilizers and its advantages over chemical methods. HOLIDAY Genetically engineered microbes: Introduction, concept and techniques. Genetically engineered microbes: Introduction,	Preparation of suspension culture and Micropropagation from Suspension Culture PRACTICAL
DAY 24 DATE 23-3-18 DAY 25 DATE 24-3-18 UNIT/PART IV DAY1 DATE 26-3-18 DAY2 DATE 27-3-18 DAY3 DATE 28-3-18 DAY4 DATE 29-3-18 DAY5 DATE 30-3-18 DAY6 DATE 31-3-18	Production of polyhydroxyalkanoides: Introduction,Fermentation and Applications. TOPIC THEORY Biocontrol agents for disease control: Bioinsecticides. Biocontrol agents for disease control: Bioherbicides. Biofertilizers and its advantages over chemical methods. HOLIDAY Genetically engineered microbes: Introduction, concept and techniques. Genetically engineered microbes: Introduction, concept and techniques.	Preparation of suspension culture and Micropropagation from Suspension Culture PRACTICAL
DAY 24 DATE 23-3-18 DAY 25 DATE 24-3-18 UNIT/PART IV DAY1 DATE 26-3-18 DAY2 DATE 27-3-18 DAY3 DATE 28-3-18 DAY4 DATE 29-3-18 DAY5 DATE 30-3-18 DAY6 DATE 31-3-18 DAY7	Production of polyhydroxyalkanoides: Introduction,Fermentation and Applications. TOPIC THEORY Biocontrol agents for disease control: Bioinsecticides. Biocontrol agents for disease control: Bioherbicides. Biofertilizers and its advantages over chemical methods. HOLIDAY Genetically engineered microbes: Introduction, concept and techniques. Genetically engineered microbes: Introduction,	Preparation of suspension culture and Micropropagation from Suspension Culture PRACTICAL
DAY 24 DATE 23-3-18 DAY 25 DATE 24-3-18 UNIT/PART IV DAY1 DATE 26-3-18 DAY2 DATE 27-3-18 DAY3 DATE 28-3-18 DAY4 DATE 29-3-18 DAY5 DATE 30-3-18 DAY6 DATE 31-3-18	Production of polyhydroxyalkanoides: Introduction,Fermentation and Applications. TOPIC THEORY Biocontrol agents for disease control: Bioinsecticides. Biocontrol agents for disease control: Bioherbicides. Biofertilizers and its advantages over chemical methods. HOLIDAY Genetically engineered microbes: Introduction, concept and techniques. Genetically engineered microbes: Introduction, concept and techniques.	Preparation of suspension culture and Micropropagation from Suspension Culture PRACTICAL

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DATE 3-4-18		
DAY9	Role of GEM in Agriculture.	
DATE 4-4-18		
DAY10		
DATE 5-4-18		
DAY11	Role of GEM in Medicines.	Production of secondary
DATE 6-4-18		Metabolite.
DAY12	Role of GEM in Medicines.	Production of secondary
DATE 7-4-18		Metabolite.
DAY13	Role of GEM in Medicines.	
DATE 9-4-18		
DAY14	Role of GEM in Industry.	
DATE 10-4-18		
DAY15	Role of GEM in Industry.	
DATE 11-4-18		
DAY16		
DATE 12-4-18		
DAY17	Role of GEM in Industry.	Revision and file checking.
DATE 13-4-18		
DAY18	HOLIDAY	HOLIDAY
DATE 14-4-18		
DAY19	Revision	
DATE 16-4-18		
DAY20	Revision	
DATE 17-4-18		
DAY21	HOLIDAY	
DATE 18-4-18		
DAY22		
DATE 19-4-18		
DAY23	Revision	Revision and file checking
DATE 20-4-18		

CLASS/SECTION : B.SC IIND YEAR : BIOTECHNOLOGY

UNIT/PART I	TOPIC	
	THEORY	PRACTICAL
DAY1	Definition of Bioinformatics, Scope and its	Isolation and quantification of
DATE 1-1-18	Importance.	genomic DNA from Bacteria.
DAY2	Applications of Bioinformatics.	Isolation and quantification of
DATE 2-1-18		genomic DNA from Bacteria.
DAY3	Applications of Bioinformatics.	Isolation and quantification of
DATE 3-1-18		genomic DNA from Bacteria.

DAY4		Isolation and quantification of
DATE 4-1-18		genomic DNA from Bacteria.
DAY5		
DATE 5-1-18		
DAY6	Applications of Bioinformatics.	
DATE 6-1-18	TT	
DAY7	Internet basics: Web browsers, WWW,	Isolation and quantification of
DATE 8-1-18	Email.	genomic DNA from Leaves.
DAY8	Internet basics: HTML, HTTP, URL.	Isolation and quantification of
DATE 9-1-18	, ,	genomic DNA from Leaves.
DAY9	Information flow in Biology	Isolation and quantification of
DATE 10-1-18		genomic DNA from Leaves.
DAY10		Isolation and quantification of
DATE 11-1-18		genomic DNA from Leaves.
DAY11		
DATE 12-1-18		
DAY12	Information flow in Biology	
DATE 13-1-18		
DAY13	Introduction to Databases: OOPS	Separation of DNA by Agarose
DATE 15-1-18	databases, RDMS & Biological databases.	Gel Electrophoresis.
DAY 14	Primary and Secondary Databases.	Separation of DNA by Agarose
DATE 16-1-18		Gel Electrophoresis.
DAY15	Genome information resources and its	Separation of DNA by Agarose
DATE 17-1-18	Experimental Approach.	Gel Electrophoresis.
DAY16		Separation of DNA by Agarose
DATE 18-1-18		Gel Electrophoresis.
DAY17		
DATE 19-1-18		
DAY18	DNA sequence data: GenBank, EMBL	
DATE 20-1-18		
DAY19	HOLIDAY	HOLIDAY
DATE 22-1-18	g= 0 = mg = 1 = 1	
DAY20	SPORTS DAY	SPORTS DAY
DATE 23-1-18	7707 77 177	7707 77 177
DAY21	HOLIDAY	HOLIDAY
DATE 24-1-18		
DAY22		Autoclaving of Glasswares.
DATE 25-1-18	HOLDAY	HOLIDAY
DAY23	HOLIDAY	HOLIDAY
DATE 26-1-18	DDDI Wahaita Visit	
DAY 24	DDBJ, Website Visit.	
DATE 27-1-18 UNIT/PART II	TODIC	
UNII/PAKI II	THEORY	PRACTICAL
DAY1		
DATE 29-1-18	ExPasy and Structural database,	Ligation of DNA fragment
DATE 29-1-18	WebsiteVisit.	

DAY2	ExPasy database with and without	Ligation of DNA fragment
DATE 30-1-18	accession Numbers and Website Visit.	
DAY3	HOLIDAY	HOLIDAY
DATE 31-1-18		
DAY4		Ligation of DNA fragment
DATE 1-2-18		
DAY5		
DATE 2-2-18		
DAY6	ExPasy database with protein, Gene,	
DATE 3-2-18	Authors Name and Website Visit.	
DAY7	NCBI model: Introduction, Mission,	DNA fingerprinting.
DATE 5-2-18	applications.	
DAY8	NCBI model: GeneBank, PubMed,	DNA fingerprinting.
DATE 6-2-18	PubMed Central, OMIM, EST, SNP.	
DAY9	NCBI model: Website visit.	Ligation of DNA fragment
DATE 7-2-18		
DAY10		DNA fingerprinting.
DATE 8-2-18		
DAY11	ASSIGNMENT 1	
DATE 9-2-18		
DAY12	HOLIDAY	HOLIDAY
DATE 10-2-18		
DAY13	Biological data analysis and applications.	Extraction and estimation of
DATE 12-2-18		proteins from plant.
DAY14	HOLIDAY	HOLIDAY
DATE 13-2-18		
DAY15	Biological data analysis and applications.	Estimation of RNA by orcinol
DATE 14-2-18		method.
DAY16		Extraction and estimation of
DATE 15-2-18		proteins from plant.
DAY17		
DATE 16-2-18		
DAY18	File Formats.	
DATE 17-2-18		
DAY19	Small Molecules Databases:	Extraction & estimation of
DATE 19-2-18	Carbohydrate Structure Databases.	proteins from plant and Internet
	-	Basics.
DAY20	Pharmaceutical Product and Signal	Internet Basics.
DATE 20-2-18	Transduction Pathway Databases.	
DAY21	DrugBank – A Resource for Drug	Internet Basics.
DATE 21-2-18	Discovery and Disease Treatment.	
DAY22		Internet Basics.
DATE 22-2-18		
DAY23		
DATE 23-2-18		
UNIT/PART III	TOPIC	

	THEORY	PRACTICAL
DAY1	Website visit.	
DATE 24-2-18		
DAY2	Website visit.	Study of NCBI Model.
DATE 26-2-18		
DAY3	Website visit.	Study of NCBI Model.
DATE 27-2-18		
DAY4	HOLIDAY	HOLIDAY
DATE 28-2-18		
DAY5	HOLIDAY	HOLIDAY
DATE 1-3-18		
DAY6	HOLIDAY	HOLIDAY
DATE 2-3-18		
DAY7	HOLIDAY	HOLIDAY
DATE 3-3-18		
DAY8	Protein Information Resources	Retrieving GenBank, PuBMed
DATE 5-3-18		entry with different keywords
		from NCBI.
DAY9	Protein Information Resources and	Retrieving FASTA Format from
DATE 6-3-18	Website visit.	NCBI.
DAY10	PDB database with and without accession	Study of NCBI Model.
DATE 7-3-18	Numbers and Website Visit.	
DAY11		Study of NCBI Model.
DATE 8-3-18		
DAY12		
DATE 9-3-18	A COLONIA PENIES A	
DAY13	ASSIGNMENT 2	
DATE 10-3-18	DDD 1 - 1 - 14 D - 1 - 14 - 1	D
DAY 14	PDB database with Protein and Authors	Retrieving protein entry with
DATE 12-3-18	Name and Website Visit.	different keywords from
DAV15	DI ACT. Introduction Alamida Con 1	ExPASY.
DAY15	BLAST: Introduction, Algorithm, Graphic	Retrieving FASTA Format from
DATE 13-3-18 DAY16	Display & the Results.	ExPASY. Potrioving ConPonk DuPMod
DATE 14-3-18	Types of BLAST & Website Visit.	Retrieving GenBank, PuBMed entry with different keywords
DATE 14-3-18		from NCBI.
DAY17		Retrieving FASTA Format from
DATE 15-3-18		NCBI.
DATE 13-3-18 DAY18		NCDI.
DATE 16-3-18		
DAY19	Phi and Psi BLAST Algorithm, Graphic	
DATE 17-3-18	Display & the Results.	
DAY20	Dot Matrix alignment: Algorithm, Graphic	Retrieving Protein Structure
DATE 19-3-18	Display & the Results.	from PDB.
DAY21	Website visit.	Retrieving Protein Structure
DATE 20-3-18	VI COSITE VISIT.	from PDB.
DATE 20-5-10		HOIII I DD.

DAY22	CONDITIONAL TEST	Retrieving protein entry with
DATE 21-3-18	CONDITIONAL TEST	different keywords from
DATE 21-3-16		
DAMO		ExPASY.
DAY23	CONDITIONAL TEST	Retrieving protein entry with
DATE 22-3-18		different keywords from
		ExPASY.
DAY 24	HOLIDAY	HOLIDAY
DATE 23-3-18		
DAY 25	Multiple Sequence Alignment: Algorithm,	
DATE 24-3-18	Graphic Display & the Results.	
UNIT/PART IV	TOPIC	
	THEORY	PRACTICAL
DAY1	Tools for MSA: CLUSTAL W & X:	Study of Open Reading Frames
DATE 26-3-18	Algorithm, Graphic Display, Results.	of Nucleotide Sequences.
DAY2	Tools for MSA: T COFFEE: Algorithm,	Sequence alignment of
DATE 27-3-18	Graphic Display & the Results.	
DATE 27-3-16	Graphic Display & the Results.	Nucleotide and Protein through
DAMO	XX 1 '4 ' '4	BLAST.
DAY3	Website visit.	Retrieving FASTA Format from
DATE 28-3-18		ExPASY.
DAY4	HOLIDAY	HOLIDAY
DATE 29-3-18		
DAY5		
DATE 30-3-18		
DAY6	Homology Modelling Tools: Algorithm,	
DATE 31-3-18	Graphic Display & the Results.	
DAY7	Predictive Methods For Nucleotide	Multiple alignment of
DATE 2-4-18	Sequences: Online tools & WebsiteVisit.	Nucleotide and Protein
		Sequences.
DAY8	Online tools: Genomatix, ORF finder,	Study of Physiochemical
DATE 3-4-18	Genscan, Promoter Analysis & Website	properties of Proteins.
DITIES 1 10	Visit.	properties of Freems.
DAY9	Online tools: Detecting Functional Sites in	Retrieving Protein Structure
DATE 4-4-18	the DNA and Website Visit.	from PDB.
DAY10	une Divi and website visit.	Study of Open Reading Frames
DATE 5-4-18		of Nucleotide Sequences.
	+	or racieotide sequences.
DAY11		
DATE 6-4-18		
DAY12	Online tools: Visualization and Integration	
DATE 7-4-18	Tools and Website Visit.	
DAY13	Predictive Methods For Protein Sequences:	Sequence alignment of
DATE 9-4-18	Online tools and Website Visit.	Nucleotide and Protein BLAST.
DAY14	Predicting Structure and Features of	Multiple alignment of
DATE 10-4-18	protein sequences and Website Visit.	Nucleotide and Protein
DAY15	Predicting Structure and Features of	Study of Physiochemical
DATE 11-4-18	protein Sequences and Website Visit.	properties of Proteins.
DAY16		Phyre Software for structure
2.11.10		Injie Bottmare for Biractare

DATE 12-4-18		prediction
DAY17		
DATE 13-4-18		
DAY18	HOLIDAY	HOLIDAY
DATE 14-4-18		
DAY19	Human Genome Project.	Phyre Software for structure
DATE 16-4-18		prediction.
DAY20	Human Genome Project.	Bioinformatics word problem.
DATE 17-4-18		
DAY21	HOLIDAY	HOLIDAY
DATE 18-4-18		
DAY22		Bioinformatics word problem.
DATE 19-4-18		
DAY23		
DATE 20-4-18		

CLASS/SECTION

: B.SC IST YEAR

SUBJECT : BIOTECHNOLOGY

UNIT/PART I	TOPIC		
	THEORY	PRACTICAL	
DAY5		Protein estimation by Lowry	
DATE 5-1-18		Method.	
DAY11		Analysis of urine for urea,	
DATE 12-1-18		glucose, uric acid and chloride.	
DAY17		Estimation of Vit. C.	
DATE 19-1-18			
DAY23	HOLIDAY	HOLIDAY	
DATE 26-1-18			
UNIT/PART II	TOPIC		
	THEORY	PRACTICAL	
DAY5		Separation of Lipids by TLC	
DATE 2-2-18		method.	
DAY11		PAGE.	
DATE 9-2-18			
DAY17		Gel Filteration.	
DATE 16-2-18			
DAY23		Ion Exchange Chromatography.	
DATE 23-2-18			
UNIT/PART III	TOF	TOPIC	
	THEORY	PRACTICAL	
DAY6	HOLIDAY	HOLIDAY	
DATE 2-3-18			

DAY12		Preparation of Different Types
DATE 9-3-18		of Media.
DAY18		Study of Different Streaking
DATE 16-3-18		Techniques.
DAY 24	HOLIDAY	HOLIDAY
DATE 23-3-18		
UNIT/PART IV	TOPIC	
	THEORY	PRACTICAL
DAY5		Isolation of Bacteria and Fungi
DATE 30-3-18		from Soil, Air and Water.
DAY11		Study of Dilution and Pour
DATE 6-4-18		plate Technique from Soil and
		Water.
DAY17		Staining of Bacteria and Fungi.
DATE 13-4-18		
DAY23		Staining of Bacteria and Fungi.
DATE 20-4-18		

NAME OF TEACHER