P.G. Department of Microbiology

M. Sc. Semester-I(2019-20)

Microbiology Paper I

Name of Teacher -Ms. Dhanashree Badwaik

Sr. No.	Nome - CC4 1	Assignment Topics
1.	Achala Waghmare	DNA sequencing
2.	Anjali Pogade	Plant Lectins: -Con A, GS4, WGA
3.	Ankita Manapure	Reverse TCA cycle
4.	Asmita Phophate	Membrane lipids, biosynthesis of membrane phospholipids
5.	Darshana Gawali	Gametogenesis
6.	Komal Dhoble	Green sulphur bacterial, non-sulphur bacterial, purple phototrophic bacteria
7.	Mithila Jadhav	Bioluminiscence
8.	Niharika Kapse	Steroid transformation
9.	Palash Vaidya	Concept of protein domain and motif
0.	Poonam Ekunkar	Salvage pathway
1.	Rakhi Khandelwal	Nitrogen fixation: Symbiotic, nonsymbiotic
2.	Sakshi Sonsare	Unusual structures: palindrome, inverted repeats, mirror repeats
3.	Sakshi Chinchulkar	Cyanobacteria

14.	Saloni Komawar	Purple phototrophic bacteria	
15.	Shradhha Bhandarkar	Oxidation of reduced sulphur compounds and Iron	
16.	Shraddha Nikhare	Human Cloning & Transplantation Possibilities	
17.	Simran Gajbhiye	Triplet DNA, G tetraplex, secondary structure of RNA	
18.	Supriya Nimkar	Purine and pyrimidine biosynthesis	
19.	Surabhi Bawankar	Acetate use and autotrophy	
20.	Shrutika Dhole	Nitrate reduction and Denitrification	
21.	Vaishnavi Manmode	Nitrification and Anammox	



Signature of Teacher Ms. Dhanashree Badwaik Dr. Pranita Gulhane
Head of the Department

P.G. Department of Microbiology

M. Sc. Semester-I(2019-20)

Microbiology Paper II

Name of Teacher -Mrs. Manpreet Kaur

Sr. No.	Name of the Student	Seminar Topic
1.	Achala Waghmare	Enzyme biosensors: General concept, glucose biosensor
2.	Anjali Pogade	Immobilized enzyme kinetics
3.	Ankita Manapure	Immobilized bioreactors
4.	Asmita Phophate	Applications of immobilized enzymes
5.	Darshana Gawali	Immobilization techniques for cells
6.	Komal Dhoble	Significance of Michaelis-Menten equation and its transformations
7.	Mithila Jadhav	Mechanism of action of lysozyme and serine proteases
8.	Niharika Kapse	Covalent binding, entrapment, micro encapsulation, cross- linking
9.	Palash Vaidya	Mechanism of action of serine proteases
10.	Poonam Ekunkar	Conservtaion Biology
11.	Rakhi Khandelwal	Protein engineering
12.	Sakshi Sonsare	Protein: ligand binding studies: association and dissociation constants
13.	Sakshi Chinchulkar	Co-operative ligand binding MWC or concerted model, sequential model
14.	Saloni Komawar	Industrial applications of enzymes
15.	Shradhha Bhandarkar	Objectives& strategies of enzyme engineering

16.	Shraddha Nikhare	Techniques for isolation and purification of enzymes
17.	Simran Gajbhiye	Methods for enzyme assays
18.	Supriya Nimkar	Covalent Modification
19.	Surabhi Bawankar	Feed -back inhibition
20.	Shrutika Dhole	Allosterism: Kinetic analysis of allosteric enzymes
21.	Vaishnavi Manmode	Kinetics of bi-substrate reaction &multistep reactions

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Signature of Teacher Mrs. Manpreet Kaur

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Dr. Pranita Gulhane Head of the Department

P.G. Department of Microbiology

M. Sc. Semester-I(2019-20)

Microbiology Paper III

Name of Teacher -Mrs. Vanita Kolhe

Sr. No.	Name of the Student	Assignment Topics
1.	Achala Waghmare	Centrifugation Techniques
2.	Anjali Pogade	Agarose Gelelectrophoresis
3.	Ankita Manapure	Electron Microscopy: SEM, TEM
4.	Asmita Phophate	Staining Procedures
5.	Darshana Gawali	Confocal Microscopy
6.	Komal Dhoble	Scanning Tunneling
7.	Mithila Jadhav	Immunoelectron Microscopy
8.	Niharika Kapse	WesternBlotting
9.	Palash Vaidya	Immune-electrophoresis
10.	Poonam Ekunkar	SouthernBlotting
11.	Rakhi Khandelwal	NorthernBlotting
12.	Sakshi Sonsare	FISH
13.	Sakshi Chinchulkar	Cryoelectron Microscopy
14.	Saloni Komawar	Radioimmunoassay
15.	Shradhha Bhandarkar	NMR and its biological importance
16.	Shraddha Nikhare	Site-directed mutagenesis

17.	Simran Gajbhiye	SDS-page
18.	Supriya Nimkar	Confocal Microscopy
19.	Surabhi Bawankar	Diffusion s\Sedimentation
20.	Shrutika Dhole	CD/ORD
21.	Vaishnavi Manmode	Light Scattering

Signature of Teacher Mrs. Vanita Kolhe Dr. Pranita Gulhane Head of the Department

P.G. Department of Microbiology

M. Sc. Semester-I(2019-20)

Microbiology Paper IV

Name of Teacher -Ms.Sameera Siddiqui

Sr. No.	Name of the Student	Assignment Topics
1.	Achala Waghmare	Mitochondria
2.	Anjali Pogade	Active and Passive transport
3.	Ankita Manapure	ATP powered pumps
4.	Asmita Phophate	Non-gated ion channels
5.	Darshana Gawali	Cotransport bysymporters and antiporters
6.	Komal Dhoble	Transepithelial transport
7.	Mithila Jadhav	G-protein coupled receptorsand their effectors
8.	Niharika Kapse	Osmoregulatory pathways
9.	Palash Vaidya	Heat shock proteins
10.	Poonam Ekunkar	Histidine kinase pathway
11.	Rakhi Khandelwal	JAK-STAT pathway
12.	Sakshi Sonsare	Cytokine receptors and their mechanism
13.	Sakshi Chinchulkar	Basic two component system
14.	Saloni Komawar	Sporulation as a model of bacterial signaltransduction
15.	Shradhha Bhandarkar	Mating types of yeast
16.	Shraddha Nikhare	Down regulations of pathways

17.	Simran Gajbhiye	Flow Cytometry
18.	Supriya Nimkar	Flouroscence Photobleaching Recovery
19.	Surabhi Bawankar	Differential Scanning Colorimetry
20.	Shrutika Dhole	Membrane Vesicles
21.	Vaishnavi Manmode	Membrane Junctions

Signature of Teacher Ms.Sameera Siddiqui

Dr. Pranita Gulhane Head of the Department