

Format A:

Name of the Department: Microbiology

UG Training Programme

Semester	Faculty I/C	Faculty for Lectures	Faculty for Tutorials
3 rd	Dr. K. M. Angadi	Dr. R. N. Misra	Dr. R. N. Misra
		Dr. D. P. Pandit	Dr. D. P. Pandit
		Dr. N. R. Gandham	Dr. N. R. Gandham
		Dr. Kalpana M. Angadi	Dr. Kalpana M. Angadi
		Dr. S. V. Jadhav	Dr. S. V. Jadhav
		Dr. Chanda R. Vyawahare	Dr. Chanda R. Vyawahare
		Mr. M. T. Ujgare	Mr. M. T. Ujgare
		Dr. Neetu S. Gupta	Dr. Neetu S. Gupta
		Dr. Dr. Nikunj K. Das	Dr. Dr. Nikunj K. Das
		Dr. Rajashri A. Patil	Dr. Rajashri A. Patil
		Dr. Shahzad B Mirza	Dr. Shahzad B Mirza

Dept. UG Co-ordinator
Name and Signature

Signature of Head of
Department

Format B:**Lecture/ Tutorial Programme****Semester: 3rd****Faculty In charge: Dr. Kalpana M Angadi**

Sr. No	Date	Topic	Name of the Faculty Member
1	01/09/17	General MicrobiologyIntroduction-I	Dr. R. N. Misra
2	06/09/17	General MicrobiologyIntroduction-II	Dr. R. N. Misra
3	08/09/17	Morphology-I	Dr. S. V. Jadhav
4	09/09/17	Morphology-II	Dr. S. V. Jadhav
5	13/09/17	Growth and nutrition	Dr. Rajashri A Patil
6	15/09/17	Sterilization-I	Mr. M. T. Ujgare
7	16/09/17	Sterilization-II	Mr. M. T. Ujgare
8	20/09/17	Hand hygiene	Dr. Kalpana M. Angadi
9	22/09/17	Genetics-I	Dr. Shahzad B Mirza
10	23/09/17	Genetics-II	Dr. Shahzad B Mirza
11	27/09/17	ABST (Antibiotic Sensitivity Test), Antimicrobial Resistance	Dr. Shahzad B Mirza
12	29/09/17	Host- parasite relationship-I	Dr. S. V. Jadhav
13	04/10/17	Host- parasite relationship-II	Dr. S. V. Jadhav
14	06/10/17	Tutorial- General Microbiology-I	Dr. Nikunja Kumar Das
15	07/10/17	Introduction to Immunology	Dr. D. P Pandit
16	11/10/17	Antigen	Dr. N. R. Gandham
17	13/10/17	Antibody	Dr. N. R. Gandham
18	14/10/17	Integrated teaching (Pyelonephritis)	Dr. S.V. Jadhav
19	25/10/17	Structure and function of Immune system-I	Dr. D. P Pandit
20	27/10/17	Structure and function of Immune system-II	Dr. D. P Pandit
21	28/10/17	Complement	Dr. Kalpana M. Angadi
22	01/11/17	Staphylococci	Dr. Chanda R. Vyawahare
23	03/11/17	Ag- Ab reaction-I	Dr. Shahzad B Mirza
24	08/11/17	Ag- Ab reaction-II	Dr. Shahzad B Mirza

25	10/11/17	Streptococci	Dr. Chanda R. Vyawahare
26	11/11/17	Pneumococci	Dr. Chanda R. Vyawahare
27	15/11/17	Tutorial – General Microbiology-II	Dr. Dr. Rajashri A Patil
28	17/11/17	Gram negative cocci	Mr. M. T. Ujgare
29	18/11/17	Immune response-I	Dr. R. N. Misra
30	22/11/17	Immune response-II	Dr. R. N. Misra
31	24/11/17	Corynebacteria	Dr. Neetu S. Gupta
32	25/11/17	Hypersensitivity	Dr. Nikunj K. Das
33	29/11/17	Tutorial – Immunology- I	Dr. Neetu S. Gupta
34	02/12/2017	Doubt clearing class	Dr. Nikunj K. Das

**Semester I/C
Signature**

**Signature of Head of Name and
Department**

Dr. R.N. Misra-

Mr. M.T. Ujgare-

Dr. D.P. Pandit

Dr. Neetu S. Gupta-

Dr. N.R. Gandham-

Dr. N.K. Das-

Dr. K.M. Angadi-

Dr. R.A. Patil-

Dr. S. V. Jadhav-

Dr. Shahzad B Mirza-

Dr. C.R. Vyawahare-

Format C:

Lesson plan schedule (separately for Lectures and Tutorials)

Sr. No	Date	Topic	Lesson Plan
1	01/09/17	General Microbiology Introduction-I	<ul style="list-style-type: none">• Discovery of Microscope• Discovery of Pathogenic micro- organisms
2	06/09/17	General Microbiology Introduction-I	<ul style="list-style-type: none">• Louis Pasteur• Robert Koch & Koch's postulates• Contributions from other Scientists
3	08/09/17	Morphology-I	<ul style="list-style-type: none">• Size of Bacteria microscopy• Staining techniques• Shape of bacteria• Bacterial anatomy
4	09/09/17	Morphology-II	<ul style="list-style-type: none">• Physiology of bacteria• Growth and multiplication of bacteria• Bacterial growth curve• bacteriocins
5	13/09/17	Growth and nutrition	<ul style="list-style-type: none">• Bacterial Growth• Bacterial nutrition• Bacterial metabolism
6	15/09/17	Sterilization-I	<ul style="list-style-type: none">• Definition –Sterilization, disinfection, Antisepsis• Physical agents• Dry heatsterilization• Moist heat sterilization
7	16/09/17	Sterilization-II	<ul style="list-style-type: none">• Chemicalagents used for sterilization• Biological, chemicalcontrols• Testing of Disinfectants
8	20/09/17	Hand Hygiene	<ul style="list-style-type: none">• Introduction• History• Indications• Agents used & adverse effects• Procedure• Implications• Conclusions
9	22/09/17	Genetics-I	<ul style="list-style-type: none">• Introduction and basic principles• Extrachromosomal genetic elements• Mutation• Transmission of genetic material

			<ul style="list-style-type: none"> • Transformation • Transduction
10	23/09/17	Genetics-II	<ul style="list-style-type: none"> • lysogenic conversion • conjugation • Genetics related to antibiotic resistance • Gene therapy • Molecular genetics.
11	27/09/17	ABST (Antibiotic sensitivity Test), Anti-microbial resistance	<ul style="list-style-type: none"> • Introduction and significance of ABST • Various methods of ABST • Quality controls in ABST • Introduction of CLSI • Gold standard methods in ABST& antibiotic resistance
12	29/09/17	Host- parasite relationship-I	<ul style="list-style-type: none"> • Definitions • Terms used in infections • Types of infections • Mode of transmission of infections • Source of infections • Control and prevention of infections
13	04/10/17	Host- parasite relationship-II	<ul style="list-style-type: none"> • Types and role of virulence factors in pathogenicity • Toxins • Pathogenesis and pathogenicity • Mechanisms of pathogenic attributes
14	06/10/17	Tutorial- General Microbiology-I	-Chapters covered till date
15	07/10/17	Introduction to Immunology	<ul style="list-style-type: none"> • Innate immunity • Factors affecting innate immunity • Acquired immunity • Types – active & passive • Measurement of immunity • Local & Herd immunity
16	11/10/17	Antigen	<ul style="list-style-type: none"> • Definition & classification of antigens • Epitope & Para tope • Determinants of antigenecity • Biological classes of antigens
17	13/10/17	Antibody	<ul style="list-style-type: none"> • Definition • Structure of immunoglobulin • Immunoglobulin classes abnormalimmunoglobulin's • Immunoglobulin specificities
18	14/10/17	Integrated Teaching	Pyelonephritis
19	25/10/17	Structure and function of Immune system-I	<ul style="list-style-type: none"> • Lymphoreticular system • T & B cell Maturation • Null cell, Phagocytic cell & Dendritic cell • Central lymphoid organs • Peripheral lymphoid organs
20	27/10/17	Structure and function of Immune system-II	<ul style="list-style-type: none"> • Structure and function of Immune system • Major histocompatibility complex (MHC)

			<ul style="list-style-type: none"> • Classes of proteins • HLA complex • HLA typing • MHC reactions
21	28/10/17	Complement	<ul style="list-style-type: none"> • Definition General properties • Complement activation(classical & alternative pathways) • Inhibitors & In activators of complement components • Biological effect of complements • Deficiencies of complement system
22	01/11/17	Staphylococci	<ul style="list-style-type: none"> • Classification • Staphylococcus aureus, CONS • Morphology,Cultural characteristics, biochemical reactions • Pathogen city & virulence factors • Diseases caused by Staphylococcus • Lab diagnosis • Prophylaxis & treatment
23	03/11/17	Ag- Ab reaction-I	<ul style="list-style-type: none"> • General features of Ag-Ab reaction • Definition-Affinity, Avidity, • Specificity, Sensitivity • Serological reaction • Mechanism of Ag-Ab reaction (Lattice Hypothesis) • Examples of diagnostic tests that utilize the principle of Ag- Ab reactions
24	08/11/17	Ag- Ab reaction-II	<ul style="list-style-type: none"> • Agglutination • Precipitation • ELISA • Immuno florescence Technique • Radio Immuno assay • Immunoblotting techniques
25	10/11/17	Streptococci	<ul style="list-style-type: none"> • History and Classification • Morphology, Cultural characteristics, biochemical reactions • Toxins & other virulence factors of S.pyogenes • Pathogenicity,Lab diagnosis, Prophylaxis & treatment • Other hemolytic streptococci • Viridians group of streptococci
26	15/11/17	Pneumococci	<ul style="list-style-type: none"> • History • Morphology, Cultural characteristics, biochemical reactions • Antigenic properties & virulence factors • Pathogenicity

			<ul style="list-style-type: none"> • Lab diagnosis • Treatment
27	15/11/17	Tutorial – Gen. Microbiology -II	<ul style="list-style-type: none"> • General microbiology
28	17/11/17	Gram negative cocci (Neisseria sp.)	<ul style="list-style-type: none"> • History • Morphology, Cultural characteristics, biochemical reactions • Antigenic properties & virulence factors • Pathogenicity • Lab diagnosis • Treatment
29	18/11/17	Immune response-I	<ul style="list-style-type: none"> • Definition & types of immune response • Humoral and Cell mediated Immune response • Monoclonal antibodies • Factors influencing antibody production
30	22/11/17	Immune response-II	<ul style="list-style-type: none"> • Scope of CMI • Detection of CMI • Superantigen & mitogen • Cytokines • Immunological tolerance
31	24/11/17	Corynebacteria	<ul style="list-style-type: none"> • History, morphology • Cultural characteristics • Biochemical reactions & classification • Pathogenicity, Lab diagnosis • Prophylaxis & treatment • Other diphtheroids
32	25/11/17	Hypersensitivity	<ul style="list-style-type: none"> • Types of Hypersensitivity reactions. • Type I • Type II • Type III • Type IV
33	29/11/17	Tutorial – Immunology- I	<ul style="list-style-type: none"> • Immunology
34	02/12/17	Doubt clearing class	<ul style="list-style-type: none"> • Regarding chapters covered, term end examination portions

Signature of Faculty Member



Dr. D. Y. Patil Medical College, Hospital & Research Centre

DEPARTMENT OF MICROBIOLOGY

Pimpri, Pune-18.

LIST OF TUTORIALS

Sr. No	Tutorials	Date	Teacher
1	General Microbiology –I		Dr. N.K. Das
2	General Microbiology –II		Dr. R.A. Patil
3	Immunology -I		Dr. N.S. Gupta
4	Immunology -II		Dr. D.P. Pandit
5	Gram Positive Cocci		Dr. C.R. Vyawahare
6	Gram Negative Cocci		Mr. M.T. Ujgare
7	Gram Positive Bacilli		Dr. Shahzad Mirza
8	Gram Negative Bacilli- I		Dr. N.K. Das
9	Gram Negative Bacilli- II		Dr. R.A. Patil
10	Mycobacteriology		Dr. N.R. Gandham
11	Mycology		Dr. S.V. Jadhav
12	Virology -I		Dr. R.N. Misra
13	Virology -II		Dr. N.S. Gupta
14	Parasitology- I		Dr. K.M. Angadi
15	Parasitology- II		Dr. Shahzad Mirza



Dr. D. Y. Patil Medical College, Hospital & Research Centre

DEPARTMENT OF MICROBIOLOGY

Pimpri, Pune-18.

List of Integrated teaching Lectures

Lectures

Sr. No	Topic	Semester	Teacher
1	Pyelonephritis	II/I	Dr. S. V. Jadhav
2	Pneumonia	II/II	Dr. R.N. Misra
3	Tuberculosis	II/II	Dr. N.R. Gandham
4	HIV	II/II	Dr. R.N. Misra
5	Enteric fever	II/III	Dr. N.K. Das