

Name of Faculty	:	Faculty of Nursing
Name of Program	:	Post Basic B.Sc. Nursing
Course Code	:	1PBN07
Course Title	:	Microbiology
Type of Course	:	PC
Year of Introduction	:	2023-24

Pre requisite	:	Basic Knowledge regarding various organism
Course Objective	:	This course reorients the students to the fundamentals of Microbiology and its various sub-divisions. It provides opportunities to gain skill in handling and use of microscope for identifying various micro-organisms. It also provides opportunities for safe handling of materials containing harmful bacteria and methods of destroying microorganisms.
Course Outcomes	:	On completion of the course, the students will be able to
	CO1	Identify common disease producing micro-organisms.
	CO2	Explain the basic principles of microbiology and their significance in health
	CO3	Demonstrate skill in handling specimens.
	CO4	Explain various methods of dis-infection and sterilization.
	CO5	Identify the role of the nurse in hospital infection control system.

Teaching and Examination Scheme

Teaching Scheme (Contact Hours)			Credits	Examination Marks				
				Theory Marks		Practical Marks		Total Marks
L	T	P	C	YEE	CIA	YEE	CIA	
2	0	2	4	75	25	0	0	100

Legends: L-Lecture; T-Tutorial/Teacher Guided Theory Practice; P – Practical, C – Credit, YEE – year End Examination, CIA - Continuous Internal Assessment (It consists of Assignments/Seminars/Presentations/MCQ Tests, etc

Course Content

Unit No.	Topics	Teaching Hours	Weightage	Mapping With COs
I.	<ul style="list-style-type: none"> Structure and classification of microbes Morphological types Size and form of bacteria Motility. Classification of Microorganisms. 	04	6.66%	CO1
II.	<ul style="list-style-type: none"> Identification of Micro-organisms Discussion of laboratory methods Diagnosis of bacterial diseases 	04	6.66%	CO1, CO3
III.	<ul style="list-style-type: none"> Growth and Nutrition of Microbes Temperature Moisture Blood 	04	6.66%	CO2,CO1
IV.	<ul style="list-style-type: none"> Destruction of Micro-organisms. Sterilization and disinfection Chemotherapy and antibiotics Effects of heat and cold Hospital infection control procedure and role of nurses. 	06	10%	CO4
V	<ul style="list-style-type: none"> Disease producing micro-organisms Gram positive bacilli Tuberculosis and Leprosy Anaerobes Cocci Spirochaete Rickettsiae 	08	13.33%	CO2,
VI	<ul style="list-style-type: none"> Pathogenic Fungi Dermatophytes Systemic mycotic infection Laboratory diagnosis of mycotic infection 	06	10%	CO3

VII	<ul style="list-style-type: none"> • Immunity • Immunity and hypersensitivity –Skin test • Antigen and antibody reaction • Immunization in disease. 	06	10%	CO2
VIII	<ul style="list-style-type: none"> • Parasites and vectors. • Characteristics and classification of parasites • Protozoal infection including amoebiasis • Helminthes infection • Diagnosis of parasitic infection • Vectors and diseases transmitted by them. 	10	16.66%	CO2
IX	<ul style="list-style-type: none"> • Viruses. • Classification and general character of virus • Diseases caused by viruses in man and animal and their control . 	06	10%	CO1,CO2
X	<ul style="list-style-type: none"> • Micro-organisms transmitted through food. • Food poisoning. Food borne infections. 	6	10%	CO5

Suggested Distribution of Theory Marks Using Bloom's Taxonomy						
Level	Remembrance	Understanding	Application	Analyse	Evaluate	Create
Weightage	5	40	30	15	5	5

*NOTE: This specification table shall be treated as a general guideline for the students and the teachers.
The actual distribution of marks in the question paper may vary slightly from above table.*

Reference Books

Sr.No.	Name of Reference Books
1	Textbook of Microbiology, Anathanarayan and Paniker's, universities press pvt. Ltd., 8 th edition
2	A Textbook of Microbiology for nurses and allied science, Dr. arora, B. Arora, CBS publishers and distributors, 1 st edition, 2005
3	A Textbook of Microbiology, RL I chhpujani, Rajesh Bhatia, jaypee brothers medical publishers Ltd, 2 nd edition, 2007
4	A Textbook of Microbiology, BS Nagoba published by wolters Kluwer Pvt. Ltd, 3 rd edition
5	A Textbook of Applied Microbiology, Dr. preeti Agarwal, Vinod Gupta, Jain publication, 2022