

No.	Information of the subject	
1.	Unit name:	Medical Biotechnology
2.	Code:	BioT 41053
3.	Classification:	General subject
4.	Credit value:	3.5
5.	Semester/Year Offered:	1/4
6.	Pre-requisite:	BioT 31052&BioT 31052 BioT 21022&BioT 22022
7.	Mode of delivery:	Presentations, Lectures
8.	Assessment system and breakdown of marks:	MCQs, Fill in the blank, Short Q, Long Q, Classwork
	Active participation in Classwork and discussion	30%
	Mid-term exam	35%
	Final exam	35%
9.	Academic staff teaching unit:	Department of Biotechnology
10.	<p>Course outcome of unit:</p> <p>After completion of this course, students will be able to</p> <ol style="list-style-type: none"> <li>1. Recognize and Reproduce medical terms applied in medical Biotechnology</li> <li>2. Acquire broad knowledge of the principles and concepts of cell molecular biology associated with medical science.</li> <li>3. Acquire knowledge to pharmaceutical and diagnostic products using the cell and cell materials that help treat and prevent human disease</li> <li>4. Apply tools and technique used in medical Biotechnology</li> <li>5. Identify various types of medically important pathogenic microorganism and related diseases and various types of parasitic diseases (life-long learning)</li> </ol>	
11.	<p>Synopsis of unit:</p> <p>Medical Biotechnology covers the Pathogenic Microorganism, Classification and Identification of Pathogenic microbes, medically important bacteria, fungi, viruses ,parasites, zoonoses and zoonotic microbes. Knowledge to morphology , physiology, pathology, epidemiology of pathogenic microbes and their infectious diseases. Medical biotechnology is the use of living cells and cell materials to research and diagnostic products that help treat and prevent human diseases.</p>	
12.	<p>Topics</p> <ol style="list-style-type: none"> <li>1. Pathogenic Microorganisms</li> <li>2. Bacterial Pathogens and Related Diseases</li> </ol>	

	<p>3. Parasitic Diseases</p> <p>4. Pathogenic Viruses</p> <p>5. Fungal Pathogens and Mycoses</p> <p>6. Zoonosis and Zoonotic Microbes</p>
13.	<p>Main reference:</p> <ul style="list-style-type: none"> <li>• BioT 04012, Medical Biotechnology I&amp;II</li> </ul>
14.	<p>Additional references:</p> <ul style="list-style-type: none"> <li>• FridosAlam Khan Biotechnology in Medical Science</li> <li>• Text Book of Biotechnology</li> <li>• Chapter 10 Medical Microbiology Editor H.K.Das (4<sup>th</sup> Edition)</li> <li>• McGill Laboratory Biosafety Manual</li> <li>• Classification of Pathogens(3.1 Conventional Pathogens, 3.2 Unconventional link.com &gt;Microbiology&gt; Pathogens.htm</li> </ul>