

**SARDAR PATEL UNIVERSITY**  
**Programme: BSC (BIOTECHNOLOGY)**  
**Semester: IV**  
**Syllabus with effect from: November 2012**

<b>Paper Code:</b> US04CBIT03	<b>Total Credit: 3</b>
<b>Title Of Paper:</b> Biotechnology Practical	

Unit	Description in detail	Weighting (%)
1	Screening of amylase producing microorganisms from soil	
2	Screening of protease producing microorganisms from soil	
3	Screening of gelatinase producing microorganisms from soil	
4	Isolation of pigment producing bacteria(Serratia marcescens,	
5	Isolation and characterization of Rhizobia from root nodules	
6	Biochemical tests for Micro organisms ( E coli and Bacillus subtilis)	
7	Blood group analysis	
8	Alkaline phosphatase assay	
9	Estimation of cellulase activity using CMC & filter paper	
10	Gram staining	
11	Endospore staining	
12	Cell wall staining	
13	Preparation of MS media	
14	Plant embryo culture ( monocot & Dicot)	
15	Seed exercise to calculate segregation ratio for mono- and di-hybrid crosses.	
16	Special types of chromosomes from permanent slide <ul style="list-style-type: none"> <li>• Lampbrush chromosome</li> <li>• Polytene chromosome</li> </ul>	
17	Separation of amino acids by paper chromatography	

**Basic Text & Reference Books: -----**

