

INDUSTRIAL AND PHARMACEUTICAL MICROBIOLOGY

Semester	Subject code	Category	Lecture		Theory		Practical		Credits
			Total hrs	Hrs/ week	Total hrs	Hrs/ week	Total hrs	Hrs/ week	
III	21CPMB42	Practical V	0	0	0	0	75	5	5

1. Screening of antibiotics producing microbes from soil.
2. Production of microbial enzymes a). Solid state fermentation (Any one enzyme)
b). Submerged fermentation (Any one enzyme)
3. Assay of enzymes a). Amylase b). Protease c). Lipase
4. Microbial production of wine
5. Citric acid production using *Aspergillus niger*.
6. Minimal inhibitory concentration (MIC) determination of antibiotics – Broth Dilution
7. Minimal inhibitory concentration (MIC) determination of antibiotics – Filter paper disc assay
8. Evaluation of disinfectants – Filter paper disc assay
9. Phenol co – efficient test
10. Vitamin assay (B12/Nicotinic acid)
11. Sterility testing of pharmaceutical products (Membrane filter assay – Fluid thioglycollate medium)
12. Bacterial Endotoxin Test – Pyrogen testing (Demo).