M.Sc. - I (Microbiology) (CBCS Pattern) Semester - I **PSMBT-104 - Paper-IV : Commercial Microbiology**

P. Pages: Time: Thi			GUG/S/23/11174 Max. Marks : 80
1.	a)	Microbiological exploration of petroleum deposits.	8
	b)	Evidence regarding biogenesis of petroleum.	8
		OR	
	Des	scribe in detail microbial solubilization of coal.	16
2.	Pro	duction of hyaluronic acid and Kojic acid and their use in cosmetic prepar	rations. 16
		OR	
	a)	Write a short note in space microbiology in context to ESA STONE exp	eriment. 8
	b)	Biological potential of samples returned from planetary satellites and sm system bodies.	nall solar 8
3.	Des	scribe paper microbiology with suitable examples.	16
		OR	
	a)	Antimicrobial fabric.	8
	b)	Antimicrobial colorant.	8
4.	Des	scribe rubber microbiology in details.	16
		OR	
	a)	Antimicrobial and antiseptic plastics.	8
	b)	Methods for producing antimicrobial plastics.	8
5.	Wri	ite a note.	
	a)	Indicators of petroleum biodegradation.	4
	b)	Skin whitening compositions.	4
	c)	Antimicrobial currency.	4
	d)	Casein plastic.	4
