M.Sc. (Microbiology) (CBCS Pattern) Third Semester **PSMBT-10 - Recombinant DNA Technology Paper-II**

	ages: 1 e: Three Hours * 3 3 9 5 *	GUG/W/18/11292 Max. Marks : 80
	Notes: 1. All questions are compulsory and carry equal marks.	
1.	Describe different types of restriction endonucleases.	16
	OR	
	Describe the followings. a) Ligation.b) DNA polymerase.	8 8
2.	Discuss different types of cloning vectors. OR	16
	Write note on followings. a) Genomic library. b) cDNA library.	8 8
3.	Describe the production of Insulin by rDNA technology.	16
	OR	
	Describe the followings. a) Artificial chromosome. b) Genetically modified organisms.	8 8
4.	Describe the principle and procedure of PCR.	16
	OR	
	Write note on followings.a) Dideoxy method of DNA sequencing.b) Automated sequencing.	8 8
5.	Write short note on followings.a) Reverse transcriptase.b) Cosmids.c) Promoter probe vectors.	4 4 4
	d) Immune PCR.	4
