## M.Sc. (Biotechnology) (CBCS Pattern) Sem-III **PSBIT112 - Applied Biotechnology Paper-IV**

P. Pages: 1 Time: Three Ho		Hours	* 1 9 7 3 *	<b>GUG/W/22/11239</b> Max. Marks : 80
	Notes:	1. 2.	All questions are compulsory and carries equal marks.  Draw the diagram wherever it is necessary.	
1.	Describe the processing of recombinant protein in detail			16
			OR	
	a)	Gi	ve the brief account on expression of foreign genes in insect.	8
	b)	$\mathbf{W}_{1}$	rite a note on changing protease activity in protein engineering.	8
2.	De	escrib	e in detail germline gene therapy.	16
			OR	
	a)	$\mathbf{W}_{1}$	rite a note on gene correction.	8
	b)	Ex	plain the retrovirus gene transfer system.	8
3.	Describe the role of r DNA technology in production of insulin.		16	
			OR	
	a)	Ex	plain in brief production of polio vaccine by r DNA technology.	8
	b)	Ex	plain the role of r DNA technology in production of penicillin.	8
4.	Explain the plant secondary metabolites add a note on shikimate pathway.		16	
	۵)	337	OR	o
	a)		hat are therapeutic proteins? Explain in brief.	8
	b)	Gi	ve the principal and application of green house technology.	8
5.	Write a short note on-			
	a)	Sa	lient features of expression vector.	4
	b)	Ge	ene Silencing.	4
	c)	Ro	ole of r DNA technology in oxytocin.	4
	d)	Ly	sosomal enzyme.	4

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