B.Sc. Part-III Semester-VI Examination ZOOLOGY

(Molecular Biology and Biotechnology)

lim	e : 1	nree	Hou	ırsj			[Maximum Marks	80	
Note	:	(i)	All questions are compulsory						
		(ii)	Que	estion No.1 carries only 8	marks.				
(iii) Question No. 2 to 7 carry 1					marks each.				
		(iv)	Illus	Illustrate your answer with suitable diagrams wherever necessary.					
1.	(A)	, ,	in the blanks:						
	` '			is the longest RNA.					
				ne as unit of recombinati	on is called as	;	·		
		(iii)		in RNA replaces thyr	nine of DNA.				
		(iv)	Mut	tation which occurs due	to mutagenic a	ag	gent is called mutation.	2	
	(B)	Cho	ose	correct alternative from t	the following.				
		(i)		is found at the 3' end	l of an mRNA				
			(a)	Cap	(b))	Poly (A) tail		
			(c)	Non-coding Region 1	(d))	None of these.		
		(ii)	Wh	ich of the following enzy	ymes is used t	0	join bits of DNA?		
			(a)	DNA ligase	(b))	DNA polymerase		
			` ′	Primose	` ')	Endonuclease.		
		(iii)	The	termination codons are					
				UAA, UAG, UGA			AUGUAG, UGA		
				UAC, AUG, UAG)	AUG,ACG, GAG.		
		(iv)		somy of chromosome 21					
				Klinefelter syndrome	- ,		Down's syndrome	•	
	(0)		•	Turner's syndrome	(d))	None of these.	2	
	(C)			in one sentence :					
				at is lagging strand?					
		, ,		ine antibody.					
		` '		at is nucleotide? at is full form of ELISA	2			4	
2.	Des	• ′			. •			7	
۷.	Describe the following: (a) Messenger RNA (mRNA).								
	(b)		_	al composition of DNA.					
	(c)			s experiment of genetic i	material				
	(-)	J.11		s compensations or Boulette	OR				

OR

OR

Describe the structure, types and functions of antibodies.

7.

(v) Plasmid as vector.

(w) Somatic cell hybridization.(x) Restriction endonuclease.

Describe types of immunity.

12

12