[41/A19]

EMAT No.____

NO. OF PRINTED PAGES: 02

or Albert Land William William Res

SARDAR PATEL UNIVERSITY
B.Sc. V SEMESTER EXAMINATION
THURSDAY, 9TH NOVEMBER 2017
10:00 A.M TO 1:00 P.M
BIOTECHNOLOGY: USO5CBIT02
MOLECULAR TECHNIQUES

n tests of each sense of the same Total Marks: 70 for

Multiple Choice Questions.				11 - 47	[10]
The technique for separation of charg	ed molecules was devel	loped by		2434	
a) Tswett				4.1.14.	
b) Tiselius	d) Sanger	1,			
PCR provides the info	ormation about the activ	ity of tume	or cells and		
viruses.		•			
) Nested	4			+ 11 fb
	Anchored		10		:
In site directed mutagenesis the nick i	s sealed with				
 a) DNA polymerase 	c) Taq polymerase d) Restriction endon	*	i regentation	e suite	身头的
, ,	-, -, -, -, -, -, -, -, -, -, -, -, -, -	INCIOUS.		•	+ 1 "
The application of Southern blotting i	n genetic engineering ir	ncludes			
a) DNA fingerprinting	c) RFLPs	<		-	
b) Molecular mapping	d) All of these.			salata.	41 (4.47)
Northern blotting is commonly used f	or identification of	Distribution			11
 a) DNA-DNA interaction 	c) DNA-RNA intera	action			
b) RNA-RNA interaction			early gray of	11.77	1000
The range of micro satellite sequences	s in eukaryotes is				
a) 1-5bps b) 7-13 bps c) 14-20	bps d) 21-27 bps.		 -		
RFLP stands for					
a) Random fragment length poly	morphism		14 7		
b) Restriction fragment length po		٠.			
c) RNA fragment length polymon	rphism				
d) None of the above.			1, 1	egenekî i	1. H 4.4
Which of the following enzyme comn	nonly used for in vitro to	ranscrintio	n?	e selle	:
a) Prokaryotic RNA polymerase	,		•••		
b) Eukaryotic RNA polymerase					
c) Bacteriophage RNA polymera	se	e galadi			+ 4%
d) None of the above.		1			
DNA fingerprinting was developed by	V				
a) Francis Crick	c) Alec Jeffrey				
b) Khurana	d) James Watts	:			
Genomic library is normally made by					
a) α phage vector	c) β phage vector				
b) λ phage vector	d) γ phage vector.				
o, a pitago vottot	u) phage vector.				

Q.2	Answer the lollowing questions in short.	Attempt any 10)	[20]
i) ii) iii) iv) v) vi) vii) viii) ix) x) xi) xii)	Mention the role of SDS in SDS PAGE. How temperature affects the process of electrophores Which properties are essential for designing primers. Give a note on Oligonuc ectide mutagenesis. Write about Dot blot hybridization. Define the terms: a) Hybridization b) Blotting. Write different applications of DNA fingerprinting. Define Satellite DNA. Write a note on FISH and McFISH. Differentiate between cDNA library and genomic libration what do you mean by DNA sequencing? Write auton Give the basic principle of DNA foot printing.	for PCR?	And the second s
		ing diagram and the second	
Q.3 a) b)	Explain in detail Agarose Gel Electrophoresis. Give a detail note on RT-PCR.	i programa (1995) Programa (1995) Programa (1995)	[05] [05]
Q.3 a) b)	OR Give an account on SDS-PAGE. Explain basic methodology and applications of PCR.	er er er er vært vilk film. Skaper skal ett Handels er stangen skal	[05] [05]
		e en Maximum en primer en	
Q.4 a) b)	Give an account on Southern Hybridization. Explain Colony Hybridization.	e gapa destas el filologo escapi gressa e saniscelo resagna Allores e	[06] [04]
Q.4 a) b)	Write a short note Autoradiography. Explain: In situ hybridization.	Tamber (1975) (1976) Table (1976) (1976) (1976) Table (1976) (1976) (1976) (1976) Table (1976) (1976) (1976) (1976) Table (1976) (1976) (1976) (1976)	[06] [04]
Q.5 a) b)	What is molecular marker? Explain RFLP in detail. Write a note on SNPs.	ing in the second of the seco	[06] [04]
Q.5 a)	OR Explain in detail AFLP.	in i jaar systematik in Luci oka ayo Dojar s	10.67
	Give an account on construction of cDNA library.	in the spiral day has begin that the second of the spiral day of the second of the sec	[06] [04]
Q.6 a)	Explain in detail Chain termination method for DNA	sequencing.	[10]
	OR CONTRACTOR OF THE PROPERTY	The second state of the second state of the second	.3
Q.6 a)	Describe the Maxam and Gilbert method for DNA see		[10]
		ने किया है। अने का पूर्व प्रकार विकास स्थाप है। वारता का स्वर्धकुर्व की विकास कार्यक सम्बद्धि की विकास	