

Class: XIIth Date:

Solutions

Subject : BIOLOGY DPP No. : 10

Topic :- Biotechnology Principles & Processes

1.	First hormone prepared by genetic engineering is:					
	a) Insulin	b) Oxytocin	c) Adrenaline	d) Somatotropin		
2.	Retroviruses in animals including humans are able to change normal cells into					
	a) Germ cell	b) Cancerous cells	c) Cosmid	d) Vector		
3.	The restriction enzyme responsible for the cleavage of following sequence is $5'-G-T-C-G-A-C-3'$ $3'-C-A-G-C-T-G-5'$					
	a) $AluI$	b) <i>Bam</i> HI	c) <i>Hind</i> II	d) <i>Eco</i> RI		
	a) Alu i	o) Dani III	c) iiiiu ii	uj <i>Eto</i> Ki		
4.	pBR322 was the first artificial cloning vector developed inA byB andC from <i>E.coli</i> plasmid. Here A, B and C can be a) A-1976, B-Boliver, C-Rodriquez b) A-1975, B-Tiselius, C-Rodriquez					
	c) A-1977, B-Boliver, C-Ro <mark>driqu</mark> ez		d) A-1978, B-HO Smith, C-KW Wileox			
	ej ii 1977, B Bonver, a ra	Juliquez	dj 11 157 0, B 110 billidii, d	TIV WHEON		
5.	Transfer of any gene into a completely different organism can be done through					
	a) Genetic engineering	b) Tissue culture	c) Transformation	d) None of these		
6.	An environmental agent that triggers transcription from an operon is a: a) Depressor b) Inducer c) Regulator d) Controlling element					
_	D. II. DWAI	16				
7.	Recombinant DNA have integrated fragment of a) Antibiotic resistant gene		b) Diseases resistant gene			
	c) Allergy resistant gene		d) All of these			
	-, a,					
8.	In plants, the tumour inducing plasmid (Ti) of $Agrobacterium\ tumefaciens$ is used as a cloning vector. This statement is					
	a) True		b) False			
	c) Sometimes (a) and sometimes (b)		d) Neither (a) nor (b)			
9.	If recombinant DNA carrying antibiotic resistance (<i>e.g.</i> , ampicillin) is transferred into <i>E.coli</i> cell, the ho cell is transformed into ampicillin-resistant cells. The ampicillin resistant gene in this case is called a a) Vectors b) Plasmid c) Selectable marker d) Cloning sites					
	-	-	•	,		

10.	Boviene spongiform encephalopathy disease is equal to:					
	a) Kala Azar		b) Parkinson's disease	b) Parkinson's disease		
	c) Creutzfeldt-Jacob disease		d) None of the above			
11.	Known sequence of DNA that is used to find complementary DNA strand is:					
	a) Vector	b) Plasmid	c) DNA probe	d) Recombinant DNA		
12.	Proteins are removed by t					
	a) Ribonuclease	b) Chitinase	c) Cellulase	d) Protease		
12	Which of the following key factors, makes plasmid, the vector in genetic engineering?					
13.				=		
	c) Its ability to carry a foreign gene		-	b) It is resistant to restriction enzymesd) Its ability to cause infection in the host		
	e, its ability to carry a foreign gene		uj its ability to cause if	a, 1.5 ability to cause infection in the nost		
14.	I. <i>Ori</i> also controls the copy numbers of the linked DNA					
	II. If a foreign DNA ligates at the <i>Bam</i> HI site of tetracycline resistance gene in the vector pBR322, the					
	recombinant plasmid loses the tetracycline resistance due to insertion of foreign DNA					
	Choose regarding the above statements					
	a) I is true, II is false	b) II is true, I is false	c) Both are true	d) Both are false		
15.	When scientists make an a <mark>nimal</mark> super <mark>ior by</mark> view of genotype, introducing some foreign genes in it, the					
	phenomenon is called:					
	a) Tissue culture	b) Biotechnology	c) Genetic engineering	d) Immunisation		
16.						
	a) Polymerase chain reaction (PCR)			b) Molecular chain reaction (MCR)		
	c) Ephemeral chain reaction (ECR)		d) All of them			
17	Producing a 'giant mouse' in the laboratory was possible through:					
17.		b) Gene duplication	c) Gene synthesis	d) Gene manipulation		
	a) delic illutation	b) defic duplication	ej dene synthesis	a) delle mampulation		
18.	Downstream process includes					
	I. Separation of the product from the reactor					
	II. Purification of the product					
	III. Formation of the product with suitable preservatives					
	IV. Quality control testing and clinical trials in case of drugs					
	Which of the statements g	iven above are correct	?			
	a) I, II and III	b) I, II and IV	c) II, III and IV	d) I, II, III and IV		
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19.	More advancement in gene			L) Downer to the control of the		
	a) Restriction endonuclease		_	b) Reverse transcription		
	c) Protease		uj zymase	d) Zymase		

- 20. Plasmid are suitable vectors for gene cloning because
 - a) These are small circular DNA molecules, which can integrate with host chromosomal DNA
 - b) These are small circular DNA molecules with their own replication origin site
 - c) These can shuttle between prokaryotic and eukaryotic cells
 - d) These often carry antibiotic resistance genes

