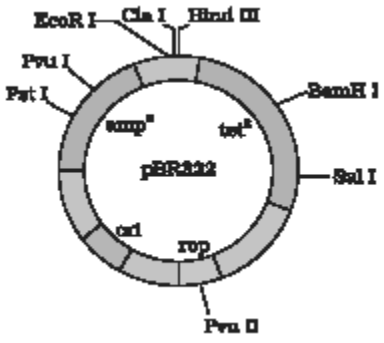
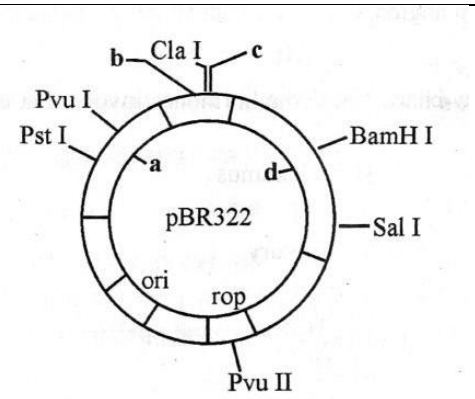
CLASS12	TOPIC:- BIOTECHNOLOGY- PRINCIPLES AND PROCESSES
	ONE MARK QUESTIONS
1	Name the technique used for separating DNA fragments in the laboratory.
2	DNA isolation involves many enzymes. Identify the enzyme used for digesting a fungal cell wall.
	2 MARK QUESTIONS
3	How can DNA segments, separated by gel electrophoresis, be visualised and isolated?
4	Why is *Agrobacterium tumefaciens* a good cloning vector? Explain.
5	Explain the contribution of *Thermus aquaticus* in the amplification of a gene of interest.
	3 MARK QUESTIONS
6	a) What are molecular scissors? Give one example. b) Explain their role in recombinant DNA technology.
7	Explain the importance of a) ori b) amp^R and c) rop in the *E.coli* vector shown below 

8	 a) Identify the selectable markers in the diagrams of *E.coli* vector shown above. b) How is the coding sequence of α-galactosidase considered a better marker than ones identified by you in the diagram? Explain.
9	Name and explain the techniques used in the *separation* and *isolation* of DNA fragments to be used in recombinant DNA technology?
10	a) What is Eco RI? What does 'R' represent in this? b) Give the palindromic nucleotide sequence recognized by it. c) Explain its action.
11	a) Why are engineered vectors preferred by biotechnologists for transferring the desired genes into another organism? b) Explain how do " *ori*"., " *selectable markers*" and " *cloningsites*" facilitate cloning into a vector.
	5 MARK QUESTIONS
12	Diagrammatically explain the steps involved in r –DNA technology.