

Topic :- Biotechnology Principles & Processes

- 1 (c)
Stanley Cohen and Herbert Boyer generated first recombinant DNA molecule by combining a gene from a bacterium with plasmid of *Escherichia coli*
- 10 (c)
Thermophilic bacterium.
Thermostable enzymes '*Taq* and '*Vent*' isolated from thermophilic bacteria are DNA polymerase
Taq polymerase, isolated from a *Thermophilic bacterium*, *Thermus aquaticus* and *vent* polymerase, isolated from a thermophilic bacterium *Thermococcus litoralis*
- 12 (b)
Agrobacterium tumefaciens is used as a best genetic vector in plants
- 13 (d)
Plants in comparison to animals are more rapidly manipulated by genetic engineering reasons are
(i) Totipotency (having the ability to differentiate into all cell types) shown by plant cells
(ii) Single somatic cell can regenerate a whole plant body
(iii) Genetic engineering is supplemented with plant tissue culture techniques
- 17 (b)
Vector is a plasmid or virus DNA used to introduce genes into a host cell, where the genes may be amplified (gene cloning) or otherwise manipulated
- 20 (a)
Digestion with restriction enzyme
↓
Electrophoresis
↓

Ethidium bromide



Radioactive probe



X-ray film

ANSWER-KEY										
Q.	1	2	3	4	5	6	7	8	9	10
A.	C	A	C	B	B	C	D	A	A	C
Q.	11	12	13	14	15	16	17	18	19	20
A.	D	B	D	B	A	C	B	C	C	A

PE