

Q1/Choose the correct answer:

(10 Marks)

- 1- ----- is a DNA sequence that can change its relative position within the genome of a single cell.
a- Plasmid b- Transposone c- Operon d- non of above
- 2- plasmid replicate ----- of the host cell
a- dependently b- frequently c- independently d- significantly
- 3- ----- is the direct transmission of DNA from donor cell to recipient bacterial cell.
a- Transformation b- Replication
c- Gene organization d- Conjugation
- 4- The method of replication has become known as ----- replication.
a- conservative b- semiconservative c- traditional d- no one
- 5- ----- were protecting the DNA from an unusual type of enzyme.
a- G+C b- plasmid c- methyl group d- restriction enzymes
- 6- Type I restriction enzymes contain both-----
a- ligase and methylase b- methylase and nuclease
c- ligase and nuclease d- endo and exonuclease
- 7- ----- is a short sequence of RNA that acts like a switch for replication beginning.
a- repressor b- primer
c- promoter d- polymerase
- 8- The name of restriction enzyme that extract from *Moraxella bovis* is-----.
a- Mob b- Mbo c- Mbr d- Mbv
- 9- ----- refers to the number of copies of plasmid present in a cell.
a- plasmid profile b- bacterial plasmid c- copy number d- extra chromosome
- 10- The structural genes Z in lac operon codes for -----enzyme.
a- lactose permease b- β -galactosidase c- RNA polymerase d- TAase

Q2/ Define five of the following:

(10 Marks)

- 1-Ori 2-ligase 3-template 4-recognition site 5-plasmid 6-promotor

Q3/Explain the regulation mechanism of Lac. Operon.

(10 Marks)

Q4/Enumerate the following:


(10 Marks)

A/Features of modern plasmids.

B/The types of restriction enzymes .

Best wishes


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