



ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION



WORKSHEET – 60

Class: XII

Sub: Biological Science

Date: 18.01.2021

Topic: Ch 11 (part 2) Biotechnology : Principles and processes - Vectors

F.M. : 15

Choose the correct option:

(1x15=15)

1. A DNA molecule which carries foreign DNA Segment to a suitable host is called:
a) Vector DNA b) Transporter DNA c) carrier DNA d) All of these
2. The newly formed DNA with foreign DNA and host DNA is called:
a) Recombinant DNA b) Chimaeric DNA c) vector DNA d) All of these
3. The circular double stranded autonomously replicating DNA found in the bacterial cell other than the single circular bacterial chromosome is called:
a) nucleoid b) Plasmid c) phagmid d) nucleus
4. The following is not the chief characteristics of plasmid:
a) extrachromosomal in nature b) carries genes for antibiotic resistance c) carries all the vital genes d) autonomously replicating
5. The most common plasmid DNA used as vector is:
a) pBR322 b) pBIN19 c) BR32 d) Both (a) and (b)
6. Lambda phages are used as vectors because of the following feature:
a) infecting nature b) can transfer big fragments inspite of being small in size c) can be easily detected d) all of these
7. Cosmids are restructured vectors formed by joining:
a) Cos site of plasmid and phage DNA b) Cos site of phage DNA and bacterial plasmid c) cos site of phage DNA and bacterial Single stranded DNA d) none of these
8. Cosmids transfer foreign gene of size Kb.
a) 40-45 b) 3 c) 300 d) 20
9. Phasmids are vectors consisting of:
a) cos site of Phage DNA ,Attachment site and bacterial DNA b) attachment site of Phage DNA and plasmid c) cos site ,attachment site and plasmid d) attachment site of plasmid and phage DNA
10. Selectable marker is used for:
a) Detection of transformed cells b) elimination of non transformed cells c) isolation of transformed cells d) all of these
11. The following is not used as a selectable marker:

- a) Kanamycin resistant gene b) tetracycline resistant gene c) chloramphenicol resistant gene
d) Copper resistant gene
- 12. The vector YAC stands for:
 - a) Yeast eukaryotic chromosome b) Yeast artificial chromosome c) Yeast autonomous chromosome d) Yeast attachment chromosome
- 13. YACs are specially constructed for the following purpose:
 - a) transfer of eukaryotic DNA b) transfer of prokaryotic DNA c) transfer of phage DNA
d) fermenting sugar into alcohol
- 14. The vector must have:
 - a) origin of replication b) selectable marker c) high transfer ability d) both (a) and (b)
- 15. Enzyme used to dissolve bacterial cell wall in biotechnology:
 - a) cellulase b) lysozyme c) protease d) chitinase

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