Questions BT 207 29/03/23 and 30/3/2023

1-How do you circularize the phage vector having gene of interest?

2- where you will grow the recombinant phage vector with insert after packaging?

3- How to make bacterial cell competent? Or what are the types to make bacterial cell competent?

4- what is transfection? How it is used in the process of packed phage vector insertion?

5- what is the use of LacZ gene in the vector?

6- what type of selection system used in bacteriophage vector system?

7- why do we need to clone large size of DNA? Or what are the occasion where you will clone large size DNA?

8- where are the COS sites are present in phage vectors? What is the use of cos sites?

9-what are conjugate plasmids?

10- what are the different types of plasmids present in bacteria?

11-what are F plasmids? What are advantages for using them in cloning?

12- what are the functions of ParA,ParB,ParC genes in Fosmids vectors?

13- what are insertional phage vector? What are replacement phage vectors?

Questions BT 207   30/03/23

1 what are MCS (Multiple hcloning site)?

2 what are difference between plasmids, Cosmids, Fosmids?

3- what kind of backbone are plasmids, cosmids , Fosmids are made up of?

4- what are BAC? Where are they derived from?

5 what are F plasmids? What are they responsible for?

6 what is plasmid partitioning?

7 what are advantages of BAC in cloning?

8 what is requirement to develop YAC?

9 what are component of YAC?

10 what are shuttle vectors?

11 what form YAC will have in bacteria and yeast ?

12 what is the function of centromere and telomere in YAC?

13 what do URA3 and His in YAC refer to ?

14 what is the function of URA3 gene?

15 how URA3 has been utilized as a screening marker?

16 how do you construct a YAC plasmid?

17 how to deliver transformed DNA into host?

18 what is electroporation?

19 what is similarities and differences between PAC and YAC ?

20 what does pueR and kan R represent in vector?

21 what is the additional advantages YAC have?

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