

اجوبة مادة التتميط العملي / المرحلة الثالثة القسم الطبي

Q1//A. The quantity and molecular weight of the DNA

B. The purity required for application

C. The time and expense

Q2//1- Precipitating the DNA with an alcohol

2- The DNA is soluble in water but insoluble in the presence of salt and alcohol.

Q3// The samples will often appear as brighter, clearer bands when photographed or viewed using a gel documentation system, by Ethidium Bromide Solution in RAPD and RFLP technique

Q4// (two only)

- 1- Methylene blue
- 2-biorad-bio-safe DNA stain
- 3-wards – QUIKVIEW DNA stain
- 4-carolina BLU stain

Q5//A- stock solution/ Recipe (1 liter of 10X stock solution)

108 g of Tris base, 55 g of boric acid, 40 ml of 0.5 M EDTA (pH 8.0)= 5.8 g,
Adjust pH to 8.3 by HCl. and Dissolve the ingredients in 600ml of distilled water and make up to 1000ml

B- (0.5X)Working solution

To make a 200ml of 0.5x TBE solution, just dilute 200ml of 10x-TBE solution in 10ml of distilled water.

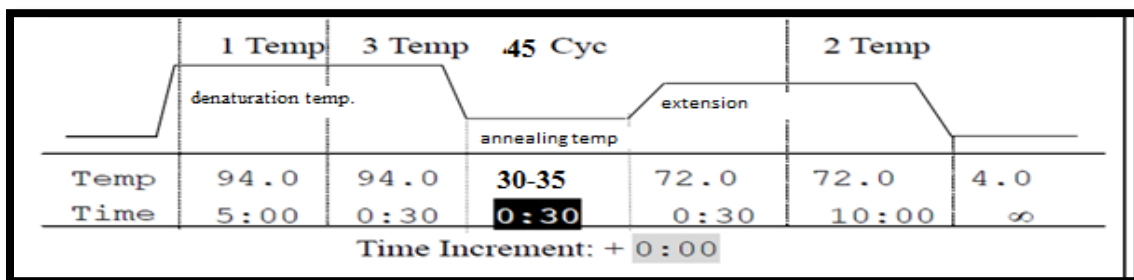
Q6//

- Strength of the electrical field
- buffer type
- density of agaros gel
- size of the DNA, the Small DNA move faster than large DNA

Q7// 1- Annealing temperatures are generally very low, around 36 °C - This allows very short primers to anneal to template DNA

2. More thermal cycles are used, typically 45 - This compensates for the inefficiency which results from using such short primers.

Q8//



Q9// the finger printer are -----1,2,6

Q10// The term restriction fragment length polymorphism or RFLP refers to a difference between two or more samples of homologous DNA molecules arising from differing locations of restriction by which these segments can be distinguished.

Q11//

- 1- The SLP is more sensitive.
- 2- Easier to interpret.
- 3- Capable of analyzing mixed- DNA samples.

Q12//

- 1- P2 ---finger printer , P7---- negative
- 2- P2 ---finger printer , P7---- finger printer
- 3- P2 ---finger printer , P7---- finger printer
- 4- P2 --- negative , P7---- finger printer