INDIAN SCHOOL NIZWA - WORKSHEET

BIOLOGY

CH-11 BIOTECHNOLOGY – PRINCIPLES AND PROCESSES

Name: _____ Date:_____ Class: XII-A

1 Difference between traditional and modern biotechnology

2. What is conventional biotechnology?

3. Expand IVF &EFB

4 What is recombinant DNA technology?

5 How was first rDNA developed?

6 At what stage of meiosis a recombinant DNA is made?

7 Bring out the disadvantages in conventional hybridization as compare to rDNA technology

8 Give an example of palindromic DNA sequence

9 What is a plasmid and Ti plasmid?

10 Explain restriction enzyme .

11 Why restriction enzyme is given the name restriction?

12 Name the first endonuclease and it source

13 write the naming convention of E.coli

14 Name any four restriction enzymes

15 Explain electrophoresis

16 Compound used to stain the isolated DNA

17 Define microinjection and gene gun method

18 Why Taq polymerase is needed in amplification or in genetic engineering?

19 Explain a bioreactor with neat diagram.

20 Deference between gene therapy and gene cloning

21 Selection markers and their advantages

22 How is the gene z(for β galactosidase)used as a marker?

23 How a host cell is made competent in introducing recombinant DNA?

24 Major difference between simple stirred tank bioreactor and sparged stirred tank bioreactor? What is its advantages.

25 Draw E.Coli cloning vector β PBR322

26 Diagrammatic representation to construct recombinant DNA
Explain PCR

27 What is insertional inactivation ? explain

28 What is continuous culture?