



BIOLOGY

BOOKS - CBSE COMPLEMENTARY MATERIAL BIOLOGY (HINGLISH)

BIOTECHNOLOGY AND ITS APPLICATIONS

Vsa

1. Which recombinant vaccine is currently being used in vaccination programme?



View Text Solution

2. Name the technique based on the principal of antigen-antibody interaction used in detection of virus(HIV).



View Text Solution

3. The first transgenic cow, produced human protein- enriched milk. Name the cow and the protein found in milk.



[View Text Solution](#)

4. The insulin produced using recombinant DNA trchnolgy is more advantageous than the insulin ectrated from pancreas of cattle and pis.How?



[View Text Solution](#)

1. Can a disease be detected before the appearance of its symptoms?



[View Text Solution](#)

2. How does a probe help molecular diagnosis.



[View Text Solution](#)

3. GEAC is one of the organization set up by Indian government. Write its full form. Give its two objectives.



[View Text Solution](#)

Sa li

1. Some multinational companies and other organisations are using bioresources for commercial benefits, without proper authentication and compensation to

concernet authorities.

(a) Give the trem for this unauthorised act.



[View Text Solution](#)

2. Some multinational companies and other organisation are using bioresources for commercial benefits, Without proper authentication and compensaition to concernet authorities.

(b) suggest any two ways to gets rid of this.



[View Text Solution](#)

3. A bacterium *Bacillus thuringiensis* produces a toxic protein named Cry protein that is lethal to certain insects but not to bacterium.

(a) Why this toxic does not kill the bacteria?



[View Text Solution](#)

4. A bacterium *Bacillus thuringiensis* produces a toxic protein named Cry protein that is lethal to certain insects but not to bacterium.

(b) What type of changes occur in the gut of insects on consuming this protein?



[View Text Solution](#)

5. A bacterium *Bacillus thuringiensis* produces a toxic protein named Cry protein that is lethal to certain insects but not to bacterium.

(c) how man has exploited this protein for his benefit?



[View Text Solution](#)

6. Given below is an incompleter flow chart showing the process of producation of nematode resistant tobacco plants based on RNAi technique.

(a) Write the missing step in proper sequence.



[View Text Solution](#)

7. Given below is an incomplete flow chart showing the process of producation of nematode resistant tobacco plants based on RNAi technique.

(b) At which level RANi silence the gene?

(a) Splicing of a specific mRNA



(b)



(c) Formation of sense and antisense RNA in host cell



(d)



(e) Initiate RNA interference



(f)



(g)

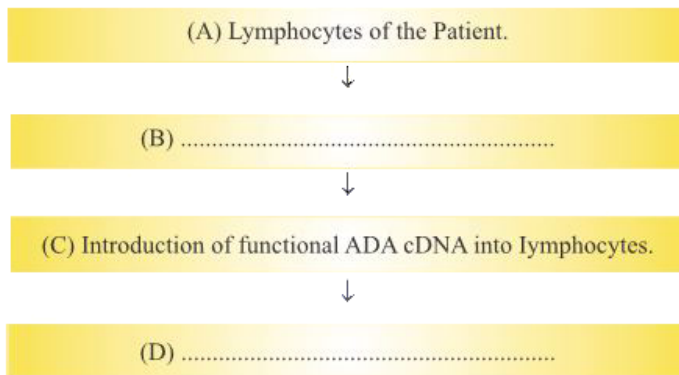


(h) Transgenic plant got protected from parasite.



[View Text Solution](#)

1. The clinical gene therapy is given to a 4 years old patient for a enzyme which is curcial for the immune system to function.Observe the therpeutical flow chat and give the answer of the following:

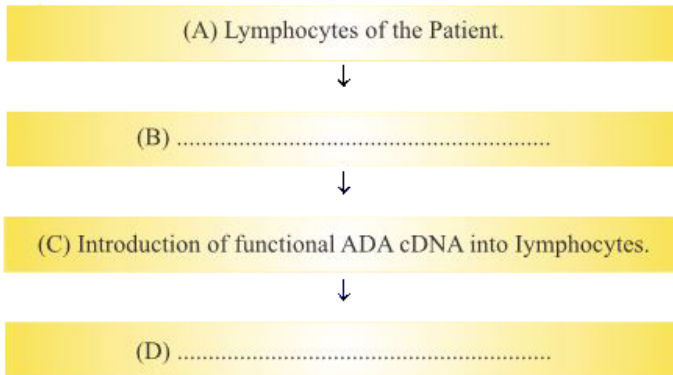


(a) Complete the mising step(B) and (D).



[View Text Solution](#)

2. The clinical gene therapy is given to a 4 years old patient for a enzyme which is crucial for the immune system to function.



Observe

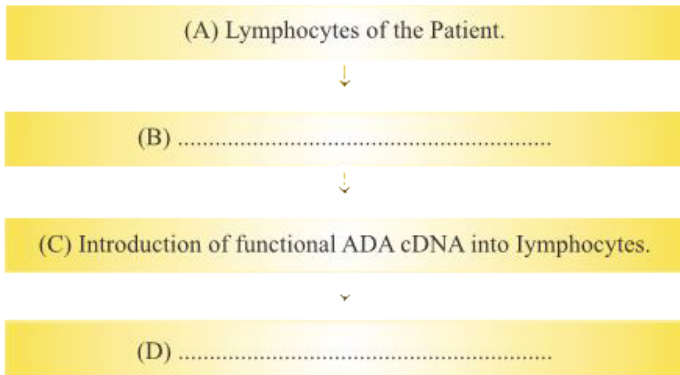
the therapeutical flow chat and give the answer of the following:

(b) Identify the disease to be cured.



[View Text Solution](#)

3. The clinical gene therapy is given to a 4 years old patient for a enzyme which is crucial for the immune system to function.



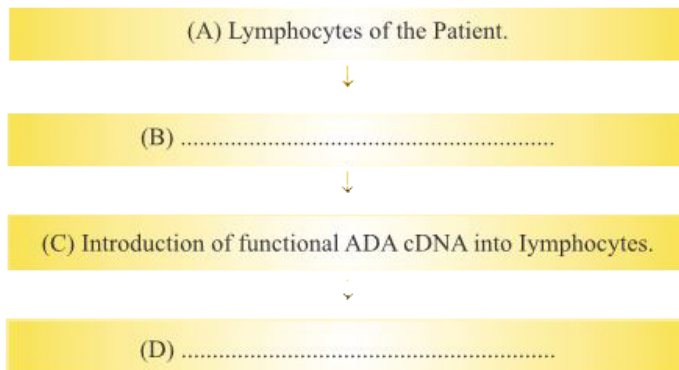
Observe

the therpeutical flow chat and give the answer of the following:

(c) Why the above method is not a complete solution to the problem?

 [View Text Solution](#)

4. The clinical gene therapy is given to a 4 years old patient for a enzyme which is crucial for the immune system to function.



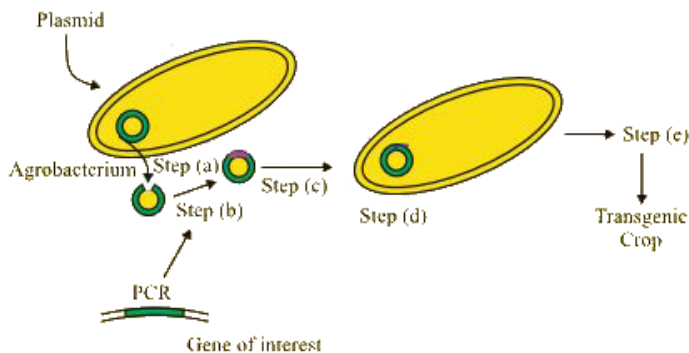
Observe the therapeutical flow chat and give the answer of the following:

(4) Scientists have developed a method to cure this disceas permanently.How?



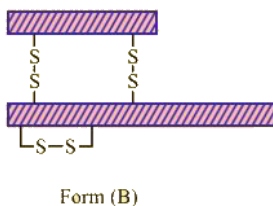
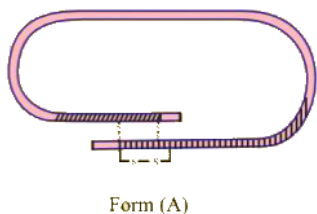
[View Text Solution](#)

5. In the given figure, *Agrobacterium* is utilized for the production of a transgenic crop. Explain the steps a,b,c,d and e shown in the figure.



[View Text Solution](#)

6. in the given figure, Form (A) and Form (B) represents different forms of a proteinaceous hormone secreted by pancreas in mammals.

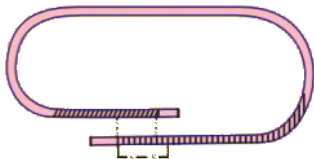


(a) Name the hormone. What type of bonding is present between chains of this hormone?

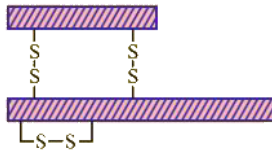


[View Text Solution](#)

7. in the given figure, From (A) and from(B) resreresents differt from of a proteninaceous hormone secretred by pancreas in mammals.



Form (A)



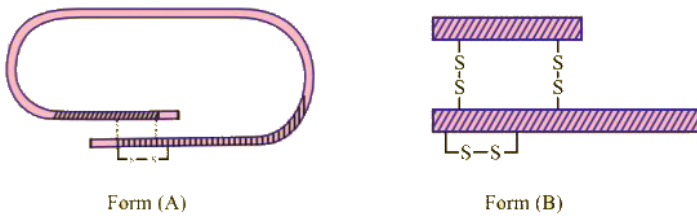
Form (B)

(b) What are these From(a) anf from(b)? How these froms differ from each other?



[View Text Solution](#)

8. in the given figure, Form (A) and Form (B) represents different forms of a proteinaceous hormone secreted by pancreas in mammals.



(c) Explain how was this hormone produced by Eli Lilly, an American company using rDNA technology.



[View Text Solution](#)