



## BIOLOGY

### BOOKS - TRUEMAN BIOLOGY

### APPLICATION OF BIOTECHNOLOGY

#### Multiple Choice Questions

1. Flavr Savr is the transgenic variety of

A. wheat

B. tomato

C. rice

D. cotton

**Answer: B**



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2. A strain of "golden" rice contains high contents of

A. vitamin A

B. vitamin K

C. vitamin E

D. vitamin C

**Answer: A**



3. Which of the following combinations of risk are associated with genetically modified food?

I. Toxicity

II. Allergic reaction

III. Antibiotic resistance in microorganisms present in alimentary canal

A. I and II

B. I, II and III

C. I and III

D. II and III

**Answer: B**



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4. Human insulin has 51 amino acids in two chains. Mark the correct statement.

- A. A chain with 21 and B chain with 30 amino acids.
- B. A chain with 20 and B chain with 31 amino acids.
- C. A chain has 31 and B chain has 20 amino acids.
- D. A chain has 30 and B chain has 21 amino acids.

**Answer: A**



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5. The first genetically engineered human insulin (Humulin) which is a protein, was launched on 5th July 1983 by an American company named

A. Columbus

B. Biotech

C. Eli Lilly

D. Hoechst

**Answer: C**



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6. Genetically engineered human insulin is synthesized with the help of

A. Rhizopus

B. Rabbit/Guinea pig

C. E. coli

D. Pseudomonas

**Answer: C**



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7. It is beneficial to have insulin by biotechnology, because

- A. it is less expensive
- B. it is non-allergic
- C. it can be produced in mass
- D. all of the above.

**Answer: D**



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**8.** Transgenic crops developed to tolerate herbicides are

- A. tomato and rice
- B. rice and wheat

C. maize and sugarcane

D. tomato and tobacco

**Answer: D**



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9. Escherichia coli is used in biological researches because

A. it is easily available

B. it can be easily cultured

C. it is easy to handle

D. it can easily multiply in the host.



**Answer: B**



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**10.** The organisms that carry foreign genes, combination of genetic material obtained through the use of modern biotechnology are called

A. mutant

B. genotype

C. transgenic

D. recombinant

**Answer: C**



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11. *Bacillus thuringiensis* (Bt) is a bacterium of

A. small intestine

B. dirty water

C. skin of dog

D. soil

**Answer: D**



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12. Enzyme polygalacturonase is responsible for

- A. vegetable softening
- B. fruit softening
- C. sugar cane
- D. both (1) & (2)

**Answer: B**



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13. Which is not transgenic plant?

- A. Soyabean

B. Maize

C. Golden rice

D. Cucumber

**Answer: D**



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**14.** Example/Examples of transgenic animals is/are

A. cow

B. mouse

C. pig

D. all

**Answer: D**



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**15. The transgenic food may cause**

A. benign tumour

B. syphilis

C. allergies

D. none of these

**Answer: C**



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16. Genetically modified plants can pose.....and risk.

A. chemical

B. biological

C. ecological

D. both (2) and (3)

**Answer: D**



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17. Which institute established the Recombinant  
Advisory Committee (RAC)?

A. National Institute of Nutrition (NIN)

B. Central Institute of Medicinal and Aromatic Plants  
(CIMAP)

C. Central Research Institute (CRI)

D. National Institute of Health (NIH)

**Answer: D**



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**18.** In February 1975, a historic international meeting of Recombinant Advisory Committee (RAC) was convened at

A. Sofia, Bulgaria

B. Paris, France

C. Bertin, Germany

D. Asilomar, California

**Answer: D**



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**19.** The first transgenic commercial crop, an insect cotton variety (Bt cotton), in India was grown in

A. 1990

B. 2004



C. 2001

D. 2002

**Answer: D**



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**20.** Introduction of food plants developed by genetic engineering is not desirable because

A. economy of developing countries may suffer

B. these products are less tasty as compared to the already existing products

C. this method is costly

D. there is danger of introduction viruses and toxins  
with introduced crop

**Answer: A**



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21. The most likely reason for the development of resistance against pesticides in insect damaging a crop is

- A. random mutations
- B. genetic recombination
- C. directed mutations

D. acquired heritable changes

**Answer: A**



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**22. Which is/are transgenic plant/plants?**

A. Potato

B. Corn

C. Brinjal

D. All

**Answer: D**



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23. Which transgenic variety had to be withdrawn due to severe allergic reaction in some people in Mexico?

A. Wheat

B. Pea

C. Soybean

D. Potato

**Answer: C**



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**24.** Which country has decided to 'label' those GM foods that are found to be 'safe'?

A. Brazil

B. China

C. Japan

D. South

**Answer: C**



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25. Which of the following has adopted legislation requiring mandatory labelling to all GM food?

A. U.S. Food and Drug Administration

B. European Union

C. Canada

D. Australia

**Answer: B**



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**26.** Blindness is prevented by use to which crop in poor countries?

A. Wheat

B. Flavr Savr

C. Golden rice

D. Pea

**Answer: C**



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27. Banting and Macleod won the Nobel Prize in Medicine or Physiology in

A. 1923

B. 1920

C. 1935

D. 1937

**Answer: A**



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28. Tsan synthesized



A. insulin of dog

B. human insulin

C. cow insulin

D. sheep insulin

**Answer: B**



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**29.** Reverse transcriptase is also called

A. RNA-dependent DNA polymerase

B. DNA-dependent RNA polymerase

C. DNA-dependent DNA polymerase

D. RNA-dependent RNA polymerase.

**Answer: A**



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**30.** The transgenic animals are those which have

- A. foreign DNA in some of their cells
- B. foreign DNA in all of their cells
- C. foreign RNA in all of their cells
- D. both (1) and (3)

**Answer: B**



31. Genetic engineering is possible because

A. phenomenon of transduction in bacteria is well understood

B. we can see DNA by electron microscope

C. we can cut DNA at specific sites by endonucleases like DNAase.

D. restriction endonucleases purified from bacteria can be used in vitro.

**Answer: D**





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32. Addition of phase DNA into genetic material of host is called

A. Lysogeny

B. Lysis

C. Prophase

D. None of these

**Answer: A**



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33. The molecular structure of insulin was described by

A. Korenberg

B. Swaminathan

C. Richardson

D. Sanger

**Answer: D**



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34. Which vitamin was first to be produced by using biotechnology?

A. Vitamin A

B. Vitamin  $B_1$

C. Vitamin  $B_2$

D. Vitamin C

**Answer: D**



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**35.** Steroids are crystallisable lipids. Utility of *Rhizopus stolonifer* fungus for steroid conversion was shown by

A. Kohler and Milstein

B. Murray and Peterson

C. Waksman

D. Pasteur and Joubert

**Answer: B**



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**36.** Vitamin  $B_2$  (riboflavin) is obtained from

A. *Aspergillus niger*

B. *Penicillium notatum*

C. *Acetobacter lacti*

D. *Ashbua gossypii*

**Answer: D**



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**37.** A 'giant mouse' in the laboratory can be produced by gene:

- A. mutation
- B. synthesis
- C. duplication
- D. manipulation

**Answer: D**



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**38.** An important objective of biotechnology in agriculture section is to

- A. increase plant weight
- B. produce pest resistant varieties of plant
- C. decrease seed number
- D. increase nitrogen content

**Answer: B**



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39. An example of gene therapy is

A. production of injectable hepatitis B vaccine

B. production of vaccines in food crops like potatoes which can be eaten

C. introduction of gene for adenosine deaminase in persons suffering from Severe Combined Immuno Deficiency (SCID)

D. production of test tube babies by artificial insemination and implanatation of fertilized eggs

**Answer: C**



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40. A fragment of DNA, cut by a restriction enzyme, forms bonds with other DNA molecules that have

- A. been fragmented by the same restriction enzyme
- B. sticky ends
- C. plasmid components
- D. attached

**Answer: A**



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**41.** Which of the following is effective against virus?

- A. Penicillin
- B. Interferon
- C. Tetracycline
- D. All of these

**Answer: B**



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**42.** Which of the following is used in developing transgenic plants?

A. Rhizopium sp

B. Agrobacterium tumefaciens

C. Bacillus subtilis

D. Pseudomonas denitry ficans

**Answer: B**



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**43.** Which Bt crop is recently recommended for cultivation in India?

A. Cotton

B. Wheat

C. Soyabean

D. Rice

**Answer: A**



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**44.** The slow ripening transgenic tomato was developed in USA by using

A. antisense RNA technology

B. ribozyme technology

C. casuppression silencing approach

D. transgene silencing approach

**Answer: A**



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**45.** The sheep 'Dolly' was cloned by using somatic cells from donor's

A. Udder

B. Skin

C. Tongue

D. Ear lobe

**Answer: A**



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**46.** Interferons are

A. carbohydrates

B. proteins

C. glycoproteins

D. lipids

**Answer: C**



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47. A transgenic mice that carries a desired gene replaced by other gene is called

A. knock out mice

B. clone

C. chimera

D. surrogate

**Answer: A**



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48. One of the following pairs is incorrect

- A. Plasmid-small piece of extrachromosomal DNA in bacteria
- B. interferon-an enzyme that interferes with DNA replication
- C. cosmid-a vector for carrying large DNA fragments into host cells.
- D. myeloma-antibody producing tumor cells.

**Answer: B**



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**49.** Which one is a neem product used as insect repellent?

A. Rotenone

B. Azadirachtin

C. Parathion

D. Endrin

**Answer: B**



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**50.** A bioreactor is

A. fermentation tank

B. culture of bacteria

C. hybridoma

D. culture for synthesis of new chemicals.

**Answer: A**



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**51.** The restriction enzyme Hind II was isolated from bacterium

A. *E. coli*

B. *Haemophilus indica*

C. *Haemophilus influenzae*

D. *Hibiscus indicus*.

**Answer: C**



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**52. Which G.M. plant produces protein hirudin**

A. *Brassica oleracea*

B. *Brassica rapa*

C. *Brassica napus*

D. *Brassica campestris*.

**Answer: C**



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**53.** How many nucleotides are used for the synthesis of A chain and B chain of insulin?

A. 90 for A and 63 for B

B. 63 for A and 93 for B

C. 92 for A and 61 for B

D. 60 for A and 61 for B

**Answer: B**



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54. Bt toxin is obtained from a prokaryote and is

- A. intracellular lipids
- B. intracellular crystalline protein
- C. extracellular crystalline protein
- D. lipid

**Answer: B**



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55. Strains of *Bacillus thuringiensis* (Bt) are used in producing

- A. bioinsecticidal plants
- B. biomineralisation
- C. biometallurgical techniques
- D. biofertilizers

**Answer: A**



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56. Who are the first two scientists to fuse cells of mouse and man?

- A. Beadle and Tatum
- B. Borlaugh and Calvin
- C. Steward and Benson
- D. Harris and nils

**Answer: D**



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57. A fusion product arising out of a fusion between a protoplast containing nucleus and a protoplast without nucleus, is known as

A. hybrid

B. cybrid

C. nucleoid

D. monohybrid

**Answer: B**



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58. Which of the following has been covered under the broad patent category?

A. Wheat (Triticum)

B. Rice (Oryza)

C. Pea (Pisum)

D. Mustard (Brassica)

**Answer: B**



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59. What happened when wheat field is inoculated with Rhizobium?

A. No increase in production/nitrogen contents of soil

B. Fertility of soil increases

C. Fertility of soil decreases

D. Increase in production and nitrogen contents of soil

**Answer: A**



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60. Match the items in Column I with Column II and choose the correct alternative.

*Column I*

*Column II*

A. Calcitonin

(i) Treatment of viral infection

B. Gonadotropin

(ii) Treatment of rickets

C. Erythropoietin

(iii) Enhancement of immune action

D. Interferon

(iv) Formation of erythrocytes

A. A-(iii), B-(i), C-(iv), D-(ii), E-(v)

B. A-(iii), B-(ii), C-(i), D-(v), E-(iv)

C. A-(iv), B-(iii), C-(ii), D-(i), E-(v)

D. A-(ii), B-(v), C-(iv), D-(i), E-(ii)

**Answer:**



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61. Golden rice is a

- A. Hybrid
- B. GM plant
- C. Transgenic plant
- D. Both (2) and (3)

**Answer: D**



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62. *Pseudomonas putida* carries plasmids for hydrolyzing

- A. hydrocarbons
- B. petroleum products
- C. crude oil
- D. All of these

**Answer: D**



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**63.** Nif-genes are represented by a cluster of 17 genes and their transfer is carried out through

- A. E.coli
- B. Agrobacterium

C. Aerobacter

D. Pseudomonas

**Answer: B**



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**64.** Nif-genes are associated with

A. nitrification

B. nitrogen fixation

C. ammonification

D. deamination



**Answer: B**



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**65. Nif-genes are introduced in**

A. legumes

B. pulses

C. pea or grams

D. Nicotiana

**Answer: D**



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66. Who discovered 'Superbug'?

A. Dr. Lal Ji Singh

B. Dr. Anand Mohan Chakrabarty

C. Dr. M.S. Swaminathan

D. Dr. Har Govind Khorana

**Answer: B**



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67. Vaccines produced through recombinant DNA technology are

- A. vaccines for hepatitis
- B. vaccines for polio
- C. vaccines for food and mouth disease
- D. all of the above.

**Answer: D**



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**68.** Which of the following is used in biowar?

- A. A pathogen
- B. Toxin from a pathogen
- C. A delivery system for the bioweapon agent

D. All of the above.

**Answer: D**



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**69.** Chemically, insulin is a

A. lipid

B. steroid

C. peptide

D. oligonucleotide

**Answer: C**



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70. A sheep named Dolly became famous because of

- A. embryo rescue
- B. in vitro fertilization
- C. cloning
- D. transgenic animal

**Answer: C**



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71. The protein toxin producing bacteria, used to control biological pest, is

A. *E. coli*

B. *Agrobacterium*

C. *Mycobacterium sp.*

D. *B. thuringiensis*

**Answer: D**



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72. AFLP stands for

- A. arbitrary file length polymorphism
- B. amplified factor late product
- C. amplified fragment length polymorphism
- D. amplified fragment length polyp

**Answer: C**



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**73.** Which one of the following is a correct statement?

- A. Br' in 'Br cotton' indicates that it is a genetically modified organism produced through biotechnology

B. Somatic hybridization involves fusion of two complete plant cells carrying desired genes

C. The anticoagulant hirudin is being produced from transgenic *Brassica napus* seeds

D. Flavr savr' variety of tomato has enhanced the production of ethylene, which improves its taste

**Answer: C**



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**74. Most widely used bioweapon is**

A. *Bacillus subtilis*



B. *Pseudomonas putida*

C. *Bacillus anthracis*

D. None of these

**Answer: C**



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**75.** Biopiracy is related to which of the following?

A. Traditional knowledge

B. Biomolecules and regarding bioresources

C. Bioresources

D. All of the above

**Answer: C**



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**76. Modified antibiotics are produced by the technique**

- A. tissue culture
- B. hybridoma
- C. genetic engineering
- D. ultrafiltration

**Answer: C**



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77. Reverse transcriptase is also called

- A. RNA-dependent DNA polymerase
- B. DNA-dependent RNA polymerase
- C. DNA-dependent DNA polymerase
- D. RNA-dependent RNA polymerase

**Answer: A**



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78. Study the following columns and choose the correct option

*Column I*

*Column II*

A. Synthetic seeds

1. Anther culture

B. Gene cloning

2. Interspecific hybridization

C. Haploid plants

3. Polymerase chain reaction

D. Transgenic plants

4. Recombinant DNA technology

5. Somatic embryogenesis

A. 

	<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>
	5	3	1	4

B. 

	<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>
	1	2	5	3

C. 

	<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>
	4	1	3	2

D. 

	<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>
	2	5	4	1

**Answer: A**



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**79.** Which of the following is/are true?

I. Biowar is the use of biological weapons against humans and/or their crops and animals

II. Bioethics is the unauthorised use of bioresources and traditional knowledge related to bioresources for commercial benefits

III. Biopatent is exploitation of bioresources of other nations without proper authorisation

A. II only

B. I only

C. I and II

D. I and III

**Answer: B**



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**80.** Which of the following is used as genetic vector in plants?

- A. *Bacillus thuringiensis*
- B. *Agrobacterium tumefaciens*
- C. *E.coli*
- D. Yest

**Answer: B**



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81. DNA is acidic due to

A. sugars

B. phosphoric acid

C. purines

D. pyrimidiness

**Answer: B**



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82. Genetic material of retroviruses is

A. DNA

B. RNA

C. Proteins

D. None of these

**Answer: B**



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**83.** Cultivation of Bt cotton has been much in the news.

The prefix Bt means

A. barium-treated cotton seeds



B. bigger thread variety of cotton with better tensile strength

C. produced by biotechnology using restriction enzymes and ligases

D. carrying an endotoxin gene from *Bacillus thuringiensis*

**Answer: D**



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**84.** Golden rice is a transgenic crop of the future with which of the following improved trait?

A. High lysine (essential amino acid) content

B. Insect resistance

C. High protein content

D. High vitamin-A content

**Answer: A**



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**85.** Human insulin is being commercially produced from a transgenic species of

A. *Escherichia coli*

B. *Mycobacterium*

C. Rhizobium

D. Saccharomyces

**Answer: A**



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**86.** The construction of the first recombinant DNA was done by using the native plasmid of

A. E.coli

B. Salmonella typhimurium

C. Bacillus thuringiensis

D. Yeast

**Answer: A**



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**87.** A drug obtained through genetic engineering and useful for treating infertility is

- A. calcitonin
- B. chorionic gonadotropin
- C. interleukin
- D. tissue plasminogen activator

**Answer: B**



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**88.** The bacterium *Bacillus thuringiensis* is widely used in contemporary biology as a/an

- A. indicator of water pollution
- B. insecticide
- C. agent for production of dairy products
- D. source of industrial enzyme

**Answer: B**



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**89.** The genetic defect-Adenosine Deaminase deficiency may be cured permanently by

- A. periodic infusion of genetically engineered lymphocytes having functional ADA C-DNA
- B. administering adenosine deaminase activators
- C. introducing bone marrow cells producing ADA into cells at early embryonic stages
- D. enzyme replacement therapy

**Answer: A**



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90. What is true about Bt toxin?

- A. The inactive protoxin gets converted into active form in the insect gut
- B. Bt protein exists as active toxin in the Bacillus
- C. The activated toxin enters the ovaries of the pest to sterilise it and thus, prevent its multiplication.
- D. The concerned Bacillus has antitoxins

**Answer: A**



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**91.** Blood stains are found at the site of a murder. If DNA profiling technique is to be used for identifying the criminal. Which of the following is ideal for use

A. Serum

B. Erythrocytes

C. Leucocytes

D. Platelets

**Answer: C**



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**92.** Some of the characteristics of Bt cotton are

A. long fibre and resistance to aphids

B. medium yield, long fibre and resistance to beetle  
pests

C. high yield and production of toxic protein  
crystals which kill dipteran pests

D. high yield and resistance to bollworms

**Answer: D**



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**93.** An improved variety of transgenic basmati rice

A. does not require chemical fertilizers and growth hormones

B. gives high yield and is rich in vitamin A

C. is completely resistant to all insect pests and diseases of paddy

D. gives high yield but has no characteristic aroma

**Answer: B**



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94. Which of the following is a transgenic plant?

A. Hirudin

B. Flavr savr

C. Triticale

D. All of these

**Answer: B**



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95. The problem of blindness in poor countries can be taken care of by using which of the following?

- A. Golden rice
- B. Transgenic tomato
- C. Transgenic maize
- D. Bt brinjal

**Answer: A**



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**96.** Alec Jeffreys developed the DNA fingerprinting technique. The probe he used was

- A. SNP
- B. sex chromosomes

C. rDNA

D. VNTR

**Answer: D**



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**97. Which of the following is correctly matched ?**

A. *Agrobacterium tumefaciens* - tumour

B. *Thermus aquaticus* - Bt-gene

C. pBR 322 -enzyme

D. Ligase- molecular scissors

**Answer: A**



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**98.** Maximum number of existing transgenic animals is of

A. fish

B. mice

C. cow

D. pig

**Answer: B**



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99. *Bacillus thuringiensis* forms protein crystals which contain insecticidal protein. This protein:

A. does not kill the carrier bacterium which is itself resistant to this toxin

B. binds with epithelial cells of midgut of the insect pest ultimately killing it

C. is coded by several genes including the gene cry

D. is activated by acid pH of the foregut of the insect pest

**Answer: B**



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100. Silencing of mRNA has been used in producing transgenic plants resistant to:

- A. bollworms
- B. nematodes
- C. white rusts
- D. bacterial blights

**Answer: B**



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**101.** Thermostable enzymes 'Taq and Pfu' isolated from thermophilic bacteria are

- A. RNA polymerases
- B. DNA polymerases
- C. restriction endonucleases
- D. DNA ligases

**Answer: B**



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**102.** During the processing of the prohormone "proinsulin" into the mature "insulin"

- A. C-peptide is added to proinsulin
- B. C-peptide is removed from proinsulin
- C. B-peptide is added to proinsulin
- D. B-peptide is removed from proinsulin

**Answer: B**



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**103.** Basic principle for developing transgenic plants and animals is to introduce the gene of interest into nucleus of

- A. somatic cell

B. vegetative cell

C. germ cell

D. body cell

**Answer: C**



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**104.** In plant tissue culture, the callus tissues can be regenerated into complete plantlets primarily by altering the concentration of

A. sugars

B. vitamins

C. amino acids

D. hormones

**Answer: D**



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**105.** The first clinical gene therapy was given for treating :

A. diabetes mellitus

B. chicken pox

C. rheumatoid arthritis

D. adenosine deaminase deficiency

**Answer: D**



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**106.** Tobacco plants resistant to a nematode have been developed by the introduction of DNA that produced (in the host cells):

- A. both sense and anti-sense RNA
- B. a particular hormone
- C. an antifeedant
- D. a toxic protein

**Answer: A**



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**107.** In genetic engineering, the antibiotics are used

- A. as selectable markers
- B. to select healthy vectors
- C. as sequences from where replication starts
- D. to keep the culture free of infection

**Answer: A**



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**108.** Gene encoding Bt protein specific for cotton bollworm is

- A. Cry I AC
- B. Cry II Abc
- C. Cry II Ac
- D. Cry II Ab

**Answer: D**



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**109.** RFLP analysis is a technique that

- A. uses hybridization to detect specific DNA restriction fragments in genomic DNA
- B. measures the transfer frequency of genes during conjugation
- C. is used to detect genetic variations at protein loci
- D. is used to amplify genes for producing useful products

**Answer: A**



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**110.** Which of the following pairs of microbes can be grown on nutrient media

- A. Viruses and single celled algae
- B. Protozoa and viroids
- C. Bacteria and fungi
- D. Prions and yeast

**Answer: C**



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**111.** First transgenic plant released for commercial use was

- A. Bt-cotton
- B. Golden rice
- C. Tobacco
- D. Solan gola

**Answer: C**



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**112.** Which of the following Bt crops is being grown in India by the farmers ?

A. Brinjal

B. Soybean

C. Maize

D. Cotton

**Answer: D**



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**113.** The first human hormone produced by recombinant DNA technology is

A. Progesterone

B. Insulin

C. Estrogen

D. Thyroxin

**Answer: B**



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**114.** The crops engineered for glyphosate are resistant/tolarant to

A. Bacteria

B. Insects

C. Herbicides

D. Fungi

**Answer: C**



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**115.** In Bt cotton, the Bt toxin present in plant tissue as pro-toxin is converted into active toxin due to

- A. Acidic pH of the insect gut
- B. Action of gut micro-organisms
- C. Presence of conversion factors in insect gut
- D. Alkaline pH of the insect gut

**Answer: D**



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**116.** which body of the government of india regulates GM reserch and safety of introducing GM organisms of public services ?

- A. Indian Council of Agricultural Research
- B. Genetic Engineering Approval Committee
- C. Research Committee on Genetic Manipulation
- D. Bio-safety committee

**Answer: B**



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**117.** The two polypeptides of human insulin are linked together by

- A. Phosphodiester bond
- B. Covalent bond
- C. Disulphide bridges
- D. Hydrogen bonds

**Answer: C**



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**118.** Which part of the tobacco plant is infected by *Meloidogyne incognita*?

A. Leaf

B. Stem

C. Root

D. Flower

**Answer: C**



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**119.** Which kind of therapy was given in 1990 to a four year old girl with adenosine deaminase (ADA) deficiency?

- A. Gene therapy
- B. Chemotherapy
- C. Immunotherapy
- D. Radiation therapy

**Answer: A**



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**120.** A new variety of rice was patented by a foreign company, though such varieties have been present in india for a long time. This is related to

A. Basmati

B. Lerma Rojo

C. Sharbati Sonora

D. Co-667

**Answer: A**



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**121.** In india organisation responsible for assessing the safety of introducing genetically modified organisms for public use is

- A. Genetic Engineering Appraisal Committee (GEAC)
- B. Research Committee on Genetic Manipulation (RCGM)
- C. Council for Scientific and Industrial Research (CSIR)
- D. Indian Council of Medical Research (ICMR)

**Answer: A**



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