

## Topic :- Biotechnology & It's Applications

- Consider the following statements  
I. *Bt* toxin gene has been cloned from the bacteria  
II. Genetic engineering works only on animals and has not yet been successfully used on plants  
III. Strains of *Bacillus thuringiensis* are used in producing bioinsecticidal plants  
Which of the statements given above are correct?  
a) I and II                      b) I and III                      c) II and III                      d) I, II and III
- There is a restriction endonuclease called Eco RI. What does 'co' part in it stand for?  
a) Coelom                      b) Coenzyme                      c) *Coli*                      d) Colon
- Animals whose DNA is manipulated to possess and express an extra (foreign) gene are known as  
a) Transgenic animal                      b) Hybrid animal                      c) Transversion animal                      d) All of these
- Which of the following terms is used to describe the component isolated from a plant, for in vitro culturing in the specific medium?  
a) Callus                      b) Embryoid                      c) Synthetic seeds                      d) Explant
- Which of the following is a transgenic plant?  
a) Hirudin                      b) *Flavr savr*                      c) *Triticale*                      d) All of these
- Bt* cotton is resistant to  
a) Herbicides                      b) Drought                      c) Cold                      d) Insects
- A doctor, while operating on an HIV<sup>+</sup> patient accidentally cut himself with a scalpel. He comes to you, suspecting himself to have contacted the virus. Which test will you advise him to rule out/confirm his suspicion?  
a) PCR  
b) Routine urine examination  
c) TLC  
d) DLC
- Golden rice is a promising transgenic crop. When released for cultivation, it will help in  
a) Producing a petrol like fuel from rice                      b) Alleviation of vitamin-A deficiency  
c) Pest resistance                      d) Herbicide tolerance



17. Which of the following enzymes are used to join bits of DNA?  
a) Ligase                      b) Primase                      c) DNA polymerase                      d) Endonuclease
18. Consider the following statements  
I. Transgenic animals are more sensitive to the toxic substance than non-transgenic animals  
II. Useful biological products can be produced by introducing into transgenic animals the portion of DNA which codes for a particular product  
III. Brazzein is a protein produced by a west African plant, *Pentadiplandra brazzeana* which is approximately 2000 time as sweet as sugar  
Which of the statements are given above are correct?  
a) I, II and III                      b) I and II                      c) I and III                      d) None of these
19. The construction of the first recombinant DNA was done by using the native plasmid of  
a) *E. coli*                      b) *Salmonella typhirmurium*  
c) *Bacillus thuringiensis*                      d) Yeast
20. Satellite DNA is useful tool in  
a) Organ transplantation                      b) Sex determination  
c) Forensic science                      d) Genetic engineering

A large, stylized graphic consisting of the letters 'P' and 'E'. The letter 'P' is pink and the letter 'E' is blue. They are positioned in the center of the page, partially overlapping the text area.