

**Topic :- Biotechnology & It's Applications**

- The organism, which is used for gene transfer in higher organisms is
  - Agrobacterium tumefaciens*
  - E. coli*
  - Acetobacter aceti*
  - Bacillus thuringiensis*
- Which of the following statements are false?
  - Insulin for curing diabetes, used to be extracted from the pancreas of slaughtered pig and cattle
  - Animal insulin is slightly different from the human insulin
  - Animal insulin causes some undesirable side effects such as allergy
  - Bacteria cannot be made to synthesise insulin from its gene because of the presence of intronsChoose the correct option
  - I, II and III
  - I, III and IV
  - II, III and IV
  - None of these
- Which of the following ways are suitable for increasing food production?
  - Agrochemical based agriculture
  - Organic agriculture
  - Genetically engineered crop-based agricultureChoose the correct option
  - I and II
  - I and III
  - II and III
  - I, II and III
- Green revolution is related to the increase in production of
  - Better irrigation, fertilizers and pesticides facilities
  - Exploitation of high yielding varieties
  - Intensive cultivation
  - All of the above
- Tobacco plant resistant to a nematode have been developed by the introduction of DNA that produces (in the host cells)
  - An antifeedent
  - Both sense and antisense RNA
  - A particular hormone
  - Toxic protein
- Which one of the following pairs of term/names means one and the same thing?
  - Gene pool – Genome
  - Codon – Gene
  - Cistron – Triplet
  - DNA fingerprinting – DNA profiling



16. A drug obtained through genetic engineering and useful for treating infertility is  
a) Calcitonin  
b) Chorionic gonadotropin  
c) Interleukin  
d) Tissue plasminogen activator
17. According to NCERT text which Indian plants have either been patented or attempts have been made to patent them by Western nations for their commercial use?  
I. Basmati rice II. Neem  
III. Turmic IV. Tulsi  
a) I and II  
b) I and III  
c) I, II and III  
d) I, II, III and IV
18. Plants, bacteria, fungi and animals whose genes have been altered by manipulation are called  
a) Genetically modified organisms  
b) Hybrid organisms  
c) Pest resistant organisms  
d) Insect resistant organisms
19. *Bt* toxin gene have been expressed in plant in order to provide resistance against  
I. tobacco budworm and armyworm  
II. beetles  
III. flies and mosquitoes  
Choose the correct option  
a) I and II  
b) I and III  
c) II and III  
d) I, II and III
20. Somaclonal variation is seen in  
a) Tissue culture grown plants  
b) Apomicts  
c) Polyploids  
d) Vegetatively propagated plants

