

Class : XIIth
Date :

Subject : BIOLOGY
DPP No. : 1

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|----|--|---|---------|---------------------------|---------------|------------------|--|
| | | Biotechnolo | | | | | |
| 1. | The organism, which is used for gene transfer in higher organisms is | | | | | | |
| | a) Agrobacterium tumefa | ciens | | b) <i>E. coli</i> | | | |
| | c) Acetobacter aceti | | | d) Bacillus thuringiensis | | | |
| 2. | Which of the following statements are false? | | | | | | |
| 2. | I. Insulin for curing diabetes, used to be extracted from the pancreas of slaughtered pig and cattle | | | | | | |
| | II. Animal insulin is slighty different from the human insulin | | | | | | |
| | III. Animal insulin causes some undesirable side effects such as allergy | | | | | | |
| | IV. Bacteria cannot be made to synthesise insulin from its gene because of the presence of introns | | | | | | |
| | Choose the correct option | | | 8. | | r | |
| | a) I, II and III | b) I, III and IV | | c) II, III and | IV | d) None of these | |
| | , , , | ., | | , | | ., | |
| 3. | Which of the following ways are suitable for increasing food production? | | | | | | |
| | I. Agrochemical based agr | | | | | | |
| | II. Organic agriculture | | | | | | |
| | III. Genetically engineered | d crop-based agric | ulture | | | | |
| | Choose the correct option | • | | | | | |
| | a) I and II | b) I and III | | c) II and III | | d) I, II and III | |
| | , | , | | , | | , , | |
| 4. | Green revolution is related to the increase in production of | | | | | | |
| | | a) Better irrigation, fertilizers and pesticides facilities | | | | | |
| | b) Exploitation of high yielding varieties | | | | | | |
| | c) Intensive cultivation | G | | | | | |
| | d) All of the above | | | | | | |
| | • | | | | | | |
| 5. | Tobacco plant resistant to a nematode have been developed by the introduction of DNA that produces | | | | | | |
| | the host cells) | | | | | | |
| | a) An antifeedent | | | b) Both sens | se and antise | ense RNA | |
| | c) A particular hormone | | | d) Toxic protein | | | |
| | | | | | | | |
| 6. | Which one of the followin | · . | mes mea | | | • | |
| | , , | enome | | b) Codon | | Gene | |
| | c) Cistron – T | riplet | | d) DNA finge | erprinting – | DNA profiling | |
| | | | | | | | |

| 7. | At what temperature milk a) 58°C | k gets pasteurized? b) 60°C | c) 62°C | d) 68°C | | | | |
|-----|--|--|---|--------------------------|--|--|--|--|
| 8. | Continuous addition of su a) Obtain antibiotics | gars in 'fed batch' ferment b) Purify enzymes | tation is done to c) Degrade sewage | d) Produce methane | | | | |
| 9. | Genetic engineering has been successfully used for producing a) Transgenic mice for testing safety of polio vaccine before use in humans b) Transgenic models for studying new treatments for certain cardiac diseases c) Transgenic cow-Rosie, which produces high fat milk for making ghee d) Animals like bulls for farm work as they have super power | | | | | | | |
| 10. | Who discovered recombinant DNA (rDNA) technology? | | | | | | | |
| | a) Har Gobind Khurana | | b) James D Watson | | | | | |
| | c) Stanley Cohen and Her | bert Boyer | d) Walter Sutton and Ave | ery | | | | |
| 11. | In which of the following method, a probe is allowed to hybridise to its complementary DNA in the clone cells? | | | | | | | |
| | a) Gene therapy | | b) Recombinant DNA tec | 0,0 | | | | |
| | c) Polymerase chain reac | tion | d) Enzyme Linked Immu | no-Sorbent Assay (ELISA) | | | | |
| 12. | Which of the following is/are correct about Adenosine Deaminase (ADA) deficiency? I. In the absence of adenosine deaminase enzyme, purine metabolism is disturbed and T-lymphocytes fails to function II. ADA deficiency is caused by the deletion of the gene for ADA III. In some cases, it can be cured by bone marrow transplantation and enzyme replacement therapy. But in both approaches, the patients are not completely cured | | | | | | | |
| | IV. For permanent cure, genes isolated from the bone marrow cells producing ADA at early embryonic | | | | | | | |
| | stages can be a possible c Which of the above stater | | | | | | | |
| | a) I, II and III | b) II, III and IV | c) I, III and IV | d) I, II, III and IV | | | | |
| 13. | . Which variety of rice was patented by a US company even through the highest number of varieties rice is found in India? | | | | | | | |
| | a) Basmati | b) Parmal | c) Lerma Roja | d) CO-668 | | | | |
| 14. | DNA fingerprinting techn a) Jeffreys, Wilson and Th c) Schleiden and Schwann | nien | b) Boysen and Jensen d) Edward and Steptoe | | | | | |
| 15. | Both in callus and suspension cultures commonly used auxin is | | | | | | | |
| 10. | a) Napthalene acetic acid | | b) Indole-3 butyric acid | | | | | |
| | c) 2, 4, 5- trichlorophenoxy acetic acid | | d) Dichlorophenoxy acetic acid (2, 4,-D) | | | | | |

| 16. | A drug obtained through g a) Calcitonin c) Interleukin | enetic engineering and | useful for treating infertility is b) Chorionic gonadotropin d) Tissue plasminogen activator | | | | |
|-----|---|------------------------|--|--|--|--|--|
| 17. | According to NCERT text v patent them by Western n. I. Basmati rice II. Neem III. Turmic IV. Tulsi a) I and II | | | attempts have been made to d) I, II, III and IV | | | |
| 18. | 3. 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. | I. tobacco budworm and an II. beetles III. flies and mosquitoes Choose the correct option | • | | | | | |
| 20. | Somaclonal variation is sea a) Tissue culture grown pl c) Polyploids | | b) Apomicts d) Vegetatively propa | agated plants | | | |