SNS COLLEGE OF TECHNOLOGY

COIMBATORE – 35

DEPARTMENT OF INFORMATION TECHNOLOGY

IV –IT, VII SEM

2 Marks Question and Answer

Subject Code & Name: 19GET277 – BIOLOGY FOR ENGINEERS

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UNIT-5
BIOLOGY AND ITS INDUSTRIAL APPLICATION

1. What are transgenic plants?

Transgenic plants are genetically modified plants that have had foreign genes inserted into their DNA to express specific traits.

2. What are transgenic animals?

Transgenic animals are genetically modified animals that have had foreign genes inserted into their DNA to express specific traits.

3. What is stem cell and tissue engineering?

Stem cell and tissue engineering is the use of stem cells and other cellular and molecular techniques to develop replacement tissues or organs for the treatment of diseases.

4. What are recombinant vaccines?

Recombinant vaccines are vaccines that are made by genetically engineering organisms to express antigens that stimulate an immune response.

5. What is the difference between transgenic plants and traditional plant breeding methods?

Transgenic plants involve inserting specific genes from one organism into another, while traditional plant breeding relies on natural genetic variation and selective breeding.

6. What are some potential applications of stem cell and tissue engineering?

Stem cell and tissue engineering can be used to create replacement tissues and organs for transplantation, model diseases for drug discovery, and study developmental biology.

7. How do recombinant vaccines differ from traditional vaccines?

Recombinant vaccines use genetic engineering to produce a specific antigen, while traditional vaccines often use weakened or dead pathogens to stimulate an immune response.

8. What are some potential applications of biological neural networks in medicine?

Biological neural networks can be used to study brain function, develop new treatments for neurological disorders, and create artificial intelligence systems.

9. What are biopolymers and some examples of biopolymers?

Biopolymers are polymers that are produced by living organisms, and include proteins, nucleic acids, and polysaccharides.

*Biopolymers include DNA

*RNA

*Cellulose

10. What are some potential applications of biological neural networks in medicine?

Biological neural networks can be used to study brain function, develop new treatments for neurological disorders, and create artificial intelligence systems.

11. What are some common applications of biosensors?

Biosensors are used in medical diagnosis, environmental monitoring, food safety testing, and other fields where detection of biological molecules is important.

12.What is biofertilizer?

Biofertilizer is a type of fertilizer that is made from living organisms or their byproducts, and is used to improve soil fertility and plant growth.

13.What are some examples of basic biomedical instrumentation?

Basic biomedical instrumentation includes microscopes, centrifuges, spectrophotometers, and other devices used for laboratory analysis of biological samples.

14. What is cloning?

Cloning is the process of producing genetically identical copies of an organism.

15. What are the ethical concerns associated with cloning?

Cloning raises questions about the value and uniqueness of life, as well as potential risks to the cloned individual and to society as a whole.