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SUBJECT CODE NO:- B-2091
FACULTY OF SCIENCE & TECHNOLOGY
B.Sc. T.Y (Sem-VI)
Examination November/December- 2022
Elective Paper
Zoology Paper-XX
Bio Technology-II

[Time: 1:30 Hours]

[Max. Marks: 50]

Please check whether you have got the right question paper.

- N.B
- 1) Attempt all questions.
 - 2) Illustrate your answer with suitable labeled diagrams.
- Q. 1
- A. Describe contamination. Explain sterilization of laboratory in detail. 20
- OR**
- A. What are transgenic animal? Explain nuclear transplantation in dolly sheep in detail. 20
- Q. 2
- A. Define gene theory? Describe methods and applications of DNA fingerprinting. 20
- OR**
- B. Short notes (any four) 20
- a) In vitro fertilization
 - b) Limitations of Cell Culture
 - c) Disease detection.
 - d) Liver Transplantation
 - e) Application of cell culture
 - f) Application of agriculture biotechnology
- Q. 3
- Choose the correct answer 10
1. What do you mean by sterilization?
 - a) Purification of products
 - b) Recovery of products
 - c) Elimination of contamination
 - d) Formulation of media

2. Agar agar is added to tissue culture media as
- a) Carbon source
 - b) A growth regulator
 - c) Nitrogen source
 - d) Solidifying agent
3. Transgenic animals those which are
- a) Foreign DNA in all its cell
 - b) Foreign RNA in all its cell
 - c) Foreign DNA in some of its cells
 - d) Both B&C
4. The most important advantage that retroviral vectors offer is their ability to transform their
- a) Single stranded RNA genome into a double stranded DNA
 - b) Double stranded DNA into single stranded RNA
 - c) Both A & B
 - d) None of the above
5. Electrophoresis, a technique used in DNA fingerprinting helps to separate
- a) DNA segments
 - b) Cell from DNA
 - c) Tissues
 - d) RNA from DNA
6. Site directed mutagenesis
- a) Oligonucleotide directed mutagenesis
 - b) Nucleotide directed mutagenesis
 - c) directed mutagenesis
 - d) PCR mutagenesis
7. The technology used for production of monoclonal antibodies is_____
- a) Mass culture technology
 - b) Hybridoma technology
 - c) Suspension culture
 - d) None of these
8. Which enzyme is used to degrade starchy materials?
- a) Proteases
 - b) Amylases
 - c) Lipases
 - d) Nucleases

9. Embryo therapy was devised by handy side et al to cure
- a) Cystic fibrosis
 - b) Haemophila
 - c) Thalassemia
 - d) Severe combined immunodeficiency disease
10. Which of the method is useful in treatment of cancer
- a) Ex vivo therapy
 - b) In vivo therapy
 - c) Antisense therapy
 - d) All of the above