

BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI  
(END SEMESTER EXAMINATION)

CLASS: M Sc  
BRANCH: BIOTECH

SEMESTER: II  
SESSION: SP/2023

SUBJECT: BT423 ANIMAL BIOTECHNOLOGY

TIME: 3 Hours

FULL MARKS: 50

**INSTRUCTIONS:**

1. The question paper contains 5 questions each of 10 marks and total 50 marks.
  2. Attempt all questions.
  3. The missing data, if any, may be assumed suitably.
  4. Before attempting the question paper, be sure that you have got the correct question paper.
  5. Tables/Data hand book/Graph paper etc. to be supplied to the candidates in the examination hall.
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		CO	BL
Q.1(a)	Define primary culture. Explain How to obtain a primary culture.	[5] 1	2
Q.1(b)	Describe different available methods for disaggregation of animal tissue as a prerequisite for animal tissue culture.	[5] 2	1
Q.2(a)	Comment on the cell and tissue engineering and how does it differ from gene therapy? Discuss advances already made in the field of tissue engineering.	[5] 3	2
Q.2(b)	Discuss the different causes of infertility in human couples. How far it can be dealt with through in vitro fertilization and embryo transfer. Discuss.	[5] 4	3
Q.3(a)	Provide a concise account of the nature of vaccines. Discuss the role of biotechnology in the development of new method for vaccine production.	[5] 1	4
Q.3(b)	Describe the baculovirus system for expressing foreign genes in insects	[5] 2	1
Q.4(a)	Analyze the significance of gene therapy and its types?	[5] 3	5
Q.4(b)	Evaluate various methods of production of transgenic animal.	[5] 4	5
Q.5(a)	Explain the method of transfection for foreign DNA introduction into host cell by microinjection method.	[5] 3	3
Q.5(b)	Evaluate the ethical issues related to the biological processes.	[5] 4	6

.....28/04/2023.....E