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B.Tech. DEGREE EXAMINATION, JUNE 2022
Sixth Semester

18BTC203J – ANIMAL BIOTECHNOLOGY
(For the candidates admitted from the academic year 2018-2019 to 2019-2020)

- Note:**
- (i) **Part - A** should be answered in OMR sheet within first 40 minutes and OMR sheet should be handed over to hall invigilator at the end of 40th minute.
 - (ii) **Part - B** should be answered in answer booklet.

Time: 2½ Hours Max. Marks: 75

PART – A (25 × 1 = 25 Marks)		Marks	BL	CO	PO
Answer ALL Questions					
1. Which of the following techniques is associated with crossing between dam and son?		1	1	1	2,9,12
(A) Inter breeding	(B) Intra breeding				
(C) Close breeding	(D) Line breeding				
2. In animal diseases, the lethal white overo genetic disorder is related to		1	1	1	2,9,12
(A) Brain disease	(B) Vascular disease				
(C) Liver disease	(D) Intestinal disease				
3. Which of the following is first cloned mammal?		1	1	1	2,9,12
(A) Goat	(B) Dog				
(C) Sheep	(D) Buffalo				
4. _____ sugar is present in milk.		1	1	1	2,9,12
(A) Glucose	(B) Lactose				
(C) Fructose	(D) Galactose				
5. The transgenic fish is produced by		1	1	1	2,9,12
(A) Microinjection	(B) Electroporation				
(C) Gene gun	(D) Agroinfection				
6. In human, fertilization occurs in fallopian tube. In animals, fertilization occurs in _____		1	1	2	2,3,7
(A) Ovary	(B) Fallopian tube				
(C) Uterus	(D) Cervical region				
7. In native bread, the ovum gets fertilized within _____ hours after ovulation.		1	1	2	2,3,7
(A) 4 – 24	(B) 12 – 24				
(C) 8 – 16	(D) 4 – 8				
8. _____ is not a reason for infertility in Kangeyam breed.		1	1	2	2,3,7
(A) Endometriosis	(B) Problem with ovulation				
(C) Hormone imbalance	(D) Genetic disease				

9. Which type of ampules used for cryopreservation?	1	1	2	2,3 ,7
(A) Nylon			(B) Polypropylene	
(C) Polycarbonate			(D) Polyethylene	
10. The first embryo transfer was successfully performed in	1	1	2	2,3 ,7
(A) Sheep			(B) Horse	
(C) Goat			(D) Cattle	
11. Which of the following statements is correct with respect to transformation?	1	1	3	3,4 ,5
(A) Change in phenotype			(B) Uptake of naked DNA	
(C) Gene transferred using virus			(D) Introduced gene using microinjection	
12. Which of the following is NOT a frequent contamination in animal cell culture?	1	1	3	3,4 ,5
(A) Fungi			(B) Yeast	
(C) Bacteria			(D) Virus	
13. _____ is NOT used as a buffer in cell culture laboratory.	1	1	3	3,4 ,5
(A) PBS			(B) HEPES	
(C) HBSS			(D) IMDM	
14. During cell passaging, EDTA helps in	1	1	3	3,4 ,5
(A) Trypsin activity			(B) Cell proliferation	
(C) Regulating pH			(D) Regulating temperature	
15. Which of the following is an example of suspension cells?	1	1	3	3,4 ,5
(A) CALU-1			(B) SW-48	
(C) HMC-1			(D) HeLa	
16. Which of the following is related to bird flu?	1	1	4	3,5 ,7
(A) A(H5N1)			(B) A(H3N2)	
(C) A(H1N2)			(D) A(H1N1)	
17. The term "scrapie" is related to	1	1	4	3,5 ,7
(A) Liver disease			(B) Neural disease	
(C) Kidney disease			(D) Skin disease	
18. The asymptol is associated with	1	1	4	3,5 ,7
(A) Inactivated vaccine			(B) Conjugate vaccine	
(C) Anti-idiotypic vaccine			(D) DNA vaccine	
19. The causative agent for foot rot disease in goat is	1	1	4	3,5 ,7
(A) <i>Corynebacterium pyogenes</i>			(B) <i>Clostridium chauvoei</i>	
(C) <i>Bacillus anthracis</i>			(D) <i>Fusobacterium necrophorum</i>	
20. In cattle disease, the term "mastitis" is related to	1	1	4	3,5 ,7
(A) Eyes			(B) Udder	
(C) Foot			(D) Tongue	

21. Which of the following is not associated with ionophore?	1	1	5,6	2,7 ,9
(A) Nystatin			(B) Doxorubicin	
(C) Quercetin			(D) Chloroquine	
22. _____ is NOT a ruminant animal.	1	1	5,6	2,7 ,9
(A) Deer			(B) Goat	
(C) Sheep			(D) Rabbit	
23. The term "somatomedins" is associated with	1	1	5,6	2,7 ,9
(A) Brain			(B) Kidney	
(C) Liver			(D) Intestine	
24. Which of the following statement is NOT related to probiotics?	1	1	5,6	2,7 ,9
(A) Induce macrophage			(B) Stimulate IgA production	
(C) Decrease TNF expression			(D) Decrease IL-10 expression	
25. _____ is NOT an example of rumen microbes.	1	1	5,6	2,7 ,9
(A) Fungi			(B) Bacteria	
(C) Protozoa			(D) Algae	

PART – B (5 × 10 = 50 Marks)

Answer ALL Questions

	Marks	BL	CO	PO
26. a. Identify the breeding technique proposed for utilizing Heterosis in both dam and progeny. Explain it with neat illustration.	10	2	1	2,9 ,12
(OR)				
b. Outline in detail about the factors that affect breeding efficiency.	10	2	1	2,9 ,12
27. a. Highlight the methods involved in the artificial insemination.	10	2	2	2,3 ,7
(OR)				
b. Illustrate the steps involved in producing the transgenic animal.	10	2	2	2,3 ,7
28. a. Discuss about contamination in animal cell culture.	10	2	3	3,4 ,5
(OR)				
b. Write a description about different parameters that control bioreactor.	10	2	3	3,4 ,5
29. a. Write an essay on the different diseases that occur in cattles.	10	2	4	3,5 ,7
(OR)				
b. Explain the steps involved in vaccine production with examples.	10	2	4	3,5 ,7
30. a. Justify, how probiotics act as a growth promoters for animals.	10	2	5,6	2,7 ,9
(OR)				
b. Illustrate the steps involved in the manipulation of lactation.	10	2	5,6	2,7 ,9

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