GALGOTIAS UNIVERSITY

ADMISSION NUMBER

School of Biomedical Science

Bachelor of Science in Medical Biotechnology
Semester End Examination - Jun 2024

Duration : 180 Minutes
Max Marks : 100

Sem II - Q1UG202T - Cell and Tissue cuture

General Instructions
Answer to the specific question asked
Draw neat, labelled diagrams wherever necessary
Approved data hand books are allowed subject to verification by the Invigilator

1)	Identify the difference between a primary cell culture and a secondary cell culture.	K1(2)
2)	Describe the principle of IVF (in vitro fertilisation).	K2(4)
3)	Summarize the sigmoid curve of growth with an appropriate graphical representation.	K2(6)
4)	Analyse the value of 'n' if a cell culture experiment started with 4 numbers of cells and after 'n' generation, number of cells became 128.	K3(9)
5)	Calculate: A lung cancer cell culture with a doubling time of 20 min reaches cell density of 2 x 108 cells/ml in 3 hrs. How much time would it take to reach the cell density of 1 x 108 cells/ml?	K3(9)
6)	Compare between decimal reduction time and thermal death time with suitable examples.	K5(10)
7)	Illustrate the principles and methods for artificial insemination.	K4(12)
8)	Formulate three strategies how you can achieve faster confluence while culturing cells and explain.	K5(15)
9)	Evaluate and discuss the method s of using coronavirus culture in lab for drug screening and vaccine development.	K5(15)
10)	Elaborate the principles of virus isolation and in vitro drug testing using cell culture.	K6(18)