

Reg.No. _____



Karunya UNIVERSITY

(Karunya Institute of Technology & Sciences)
(Declared as Deemed-to-be University under Sec.3 of the UGC Act, 1956)

End Semester Examination – Nov/Dec – 2016

Code	:	14BT2040	Semester	:	2016-17 ODD
Sub. Name	:	Animal Biotechnology and Cell Culture Techniques	Duration	:	3hrs
			Max. marks	:	100

ANSWER ALL QUESTIONS (5 x 20 = 100 Marks)

Q. No.	Sub Div.	Questions	Course Outcome	Marks
1.	a.	Write in detail about the medium used in cell culture and discuss in detail about the use of serum in medium	CO1	20
(OR)				
2.	a.	Draw the Animal cell culture layout plan and discuss the instruments used in cell culture laboratory	CO1	20
3.	a.	Write in detail about the trypsinization process for the preparation of primary cell culture	CO2	10
	b.	Steps involved for sub culturing the cell line		10
(OR)				
4.	a.	Describe in detail about Micromanipulation technique used for In vitro fertilization	CO2	20
5.	a.	Write the applications of scaling up process in cell culture system	CO3	5
	b.	Explain Synthetic Hollow fiber, Opticel culture		5
	c.	Explain Bead Bead reactor and Micro carrier culture		10
(OR)				
6.	a.	Describe the protocols for cell viability assays	CO2	20
7.	a.	Explain in detail about transgenic cows that produce recombinant human lactoferrin	CO4	20
(OR)				
8.	a.	Discuss in detail about the Purification and quality control tests involved in the Rabies Vaccine production	CO3	20
<u>Compulsory:</u>				
9.	a.	Define Tissue Engineering and discuss their importance in the field of Medicine	CO4	10
	b.	Protocol for Human Dermal Fibroblast(hdf) seeding with collagen sponges		5
	c.	Urothelial cell seeding on collagen sponges		5

ALL THE BEST