

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 : 14BI2004**  
**Sub. Name : GENOMICS AND PROTEOMICS**

**Semester : 2016-17 ODD**  
**Duration : 3hrs**  
**Max. marks : 100**

**ANSWER ALL QUESTIONS (5 x 20 = 100 Marks)**

Q. No.	Sub Div.	Questions	Course Outcome	Marks
1.	a.	Describe the way eukaryotic genomes are organized.	OC1	10
	b.	Differentiate prokaryotic and eukaryotic genomes.		10
(OR)				
2.	a.	Describe the types of Genetic Markers used for mapping genomes.	OC1	20
3.	a.	Describe software and algorithms deployed to identify the presence of genes in a DNA sequence.	OC1	20
(OR)				
4.	a.	Explain how one would carry out restriction mapping on a short sequence of DNA.	OC1	20
5.	a.	Describe in detail the principles used to separate proteins on 2DPAGE.	OC2	20
(OR)				
6.	a.	Describe the parts of a MALDI-TOF instrument and its working.	OC2	20
7.	a.	Explain about the types of mass analysers used in ESI tandem MS.	OC2	20
(OR)				
8.	a.	Describe how protein sequencing is performed using Peptide Mass Fingerprinting	OC2	20
<b><u>Compulsory:</u></b>				
9.	a.	Explain how the Human Genome Project was instigated. Discuss its applications.	OC1	20

ALL THE BEST