

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 : 14BI2001
Sub. Name : ANALYTICAL BIOINFORMATICS

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.	Define Bioinformatics	CO1	2
	b.	Write down the format used in nucleic acid data bases submission or reading any information	CO1	1 8
(OR)				
2.	a.	Write a note on protein structure database and its format.	CO1	2 0
3.	a.	Discuss the methods used to study protein protein interactions.	CO1	1 5
	b.	Mention the databases used for analysing protein protein interaction networks.	CO1	5
(OR)				
4.	a.	What are scoring matrix	CO2	4
	b.	Make a note on local and global alignment strategies for sequence alignment	CO2	1 6
5.	a.	Explain in detail the molecular phylogenetic algorithms in bioinformatics analysis	CO2	2 0
(OR)				
6.	a.	Define multiple sequence alignment and mention the algorithms involved in it.	CO2	1 6
	b.	Define motifs and domains	CO2	4
7.	a.	Write down the steps involved in smith waterman algorithm for sequence alignment.	CO2	2 0
(OR)				
8.	a.	Mention the importance of gene expression data bases in molecular biology studies	CO3	2 0
<u>Compulsory:</u>				
9.	a.	Mention the databases and steps involved in promoter prediction	CO3	1 0
	b.	Write the steps involved gene prediction. Make a note on databases used for gene prediction in prokaryotes or eukaryotes.	CO3	1 0

ALL THE BEST