Paper: BI-522 & 526 Programming in PERL for Bioinformatics

CO1   Students will know the importance and effectiveness of PERL in handling biological data as compared to other programming languages

A1   Write comparison of PERL with other popular languages such as C++, JAVA, C etc.

A2   Write features of the PERL Language make it effective for handling biological data

	Roll No	Assignment1	Assignment2	Total marks of attempted questions	Total Marks	Percentage	Score (3,2,1)	Target >= 60% (Y/N)
Marks		5	5	10	10			
	25201	5	5	10	10	100	3	Y
	25202	4	4	8	10	80	3	Y
	25203	4	5	9	10	90	3	Y
						Average		**3**

%age	score
>=60	3
50-59.9	2
40-49.0	1

CO2   Students will be able to retrieve a specific data from a large text files of different formats

GD1   Group discussion on File Handling

CA2   Retrive a genome sequence from NCBI in fasta format and read it using the File hadling feature of PERL

	Roll No	GD1	CA2	Total marks of attempted questions	Total Marks	Percentage	Score (3,2,1)	Target
Marks		10	10	20	20			
	25201	9	9	18	20	90	3	Y
	25202	8	7	15	20	75	3	Y
	25203	9	8	17	20	85	3	Y
						Average		**3**

CO3   Students will be able to select, install and use various BIOPERL Libraries for analysis of biological data

A1   Write a short note on Bioperl and its applications

CA2   Install BIOPERL, show reading of sequence files in Genbank format using Bioperl and Do local BLAST using it

	Roll No	Assignment1	Class Activity 1	Total marks of attempted questions	Total Marks	Percentage	Score (3,2,1)	Target
Marks		10	10		20			
	25201	10	9	19	20	95	3	Y
	25202	8	8	16	20	80	3	Y
	25203	8	9	17	20	85	3	Y
						Average		**3**

CO4   Students will be able to write programs to analyze biological data

T1   Write a program to count Number of Positively charged, negatively charged, hydrophobic and polar amino acids in a given sequence download from Swissprot

T2   Write a program to read atoms information from PDB file

	Roll No	Test1	Assignment1	Total marks of attempted questions	Total Marks	Percentage	Score (3,2,1)	Target
Marks		10	10			20		
	25201	10	8	18	20	90	3	Y
	25202	7	8	15	20	75	3	N
	25203	7	8	15	20	75	3	Y
						Average	3	