Q. P. Code: 33983

2 ½ Hours

Total Marks: 75

- 1. Attempt all questions.
- 2. All questions carry equal marks.
- 3. Draw **neat labeled diagrams** wherever necessary.
- 4. Use of log tables and non-programmable calculator is allowed.
- 5. For **Q 2, Q 3 and Q 4** attempt A and B **OR** C and D.

Q 1		Do as directed (Any fifteen)
	1.	is not an input device.
	2.	a. Mouse b. Keyboard c. Stylus d. Printer is a finite, precise, unambiguous sequence of instructions capable
	3.	of being carried out by a machine in a finite time. a. Logarithm b. Flowchart c. Algorithm d. Recipe A memory cell which does not lose the bit stored in it when no power is supplied to the cell is known as a
	4.	a. non-volatile cell b. volatile cell c. battery cell d. permanent cell is an example of EEPROM.
	5.	a. CD-ROM b. Floppy disk c. Magnetic tape d. Flash drive AND, OR and NOT are examples of operators. a. computer b. Boolean c. Euclidean d. Newtonian
	6.	is not an internet protocol. a. http b. https c. ftp d. Newtonian d. Newtonian
	7.	is a specialized database for baker's yeast. a. Pubmed b. Taxonomy c. ProSite d. SGD.
	8.	Algorithm used to compute Local Alignment.
	No.	What is phylogenetic analysis?
	0.	Define Algorithm.
	19 19	What is a subsequence?
	2.	Define Noise with respect to bioinformatics.
	3.	What is E-value?
1	4.	What is a Probe?
	5. 5.	The value of coefficient of correlation is, if the two variables show perfect negative correlation.
	6.	If X is dependent variable and Y is independent variable, what is the regression line?
	7.	A contingency table in a chi-square test has 3 rows and 3 columns, what will be the degree of freedom?
	8.	How is type II error made in statistical hypothesis testing?

Paper / Subject Code: 79005 / Biostatistics and Bioinformatics

19. State true or false: Z-test is used when the sample size is more than 30.

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Q. 2 B Explain the need for classifying proteins based on a OR Q. 2 C Elaborate on the databases classifying proteins base Q. 2 D Comment on Rasmol as a protein visualization soft Q. 3 A Explain BLAST. Q. 3 B What do you understand by Dot plots? How does it programming? OR Q. 3 C PSI-BLAST is a popular program for exploring prorelationships. Discuss the areas of applications of the Adjoint of the Adjoint Programming? Q. 4 A Find Coefficient of correlation for the following data X	Elaborate on the databases classifying proteins based on str Comment on Rasmol as a protein visualization software. Explain BLAST. What do you understand by Dot plots? How does it differ for programming? OR PSI-BLAST is a popular program for exploring protein famorelationships. Discuss the areas of applications of this program How can you compute global alignment using the Needlem algorithm? Find Coefficient of correlation for the following data:	20.	What is null hypothesi	s?			2083 R				
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