This question paper contains 2 printed pages]

AA-60-2019

FACULTY OF COMPUTER STUDIES

B.Sc. (Sixth Semester) EXAMINATION OCTOBER/NOVEMBER, 2019

(Revised Pattern)

COMPUTER SCIENCE

(Bioinformatics)

(Tue	esday,	, 19-11-2019) Time : 10.00 a.m. to 1.00	Time: 10.00 a.m. to 1.00 p.m. Maximum Marks—80	
\overline{Tim}	e—3 E	Hours Maximum Mark		
N.B.	. :—	(i) All questions are compulsory.		
	((ii) Figures to the right indicate full marks.		
	(i	iii) Assume suitable data, if required.		
1.	Atte	mpt the following:	20	
	(a)	Explain genetic and physical maps of genome.		
	(b)	Explain any one method of sequence alignment.		
	(c)	Explain applications of bioinformatics.		
200	(d)	Write in short about data retrievel tools.		
2.	(a)	Explain the drug discovery technology.	8	
	(b)	Explain any three databases used in bioinformatics.	7	
998 98 4		Or Or		
	(c)	What is genome analysis? Explain in detail genome analysis.	. 8	
	(d)	Explain in detail genetic maps.	7	
3.	(a)	Explain biological motivation of alignment problems.	8	
333	(b)	Distinguish between FASTA and BLAST algorithm.	7	
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(c) Explain use of searching matrices for sequence alignments. (d) What is searching on web? Explain any one tool for searching. 4. (a) Explain the role of computer in drug designing method. (b) Discuss the areas which are influencing drug discovery. Or (c) Explain G-protein coupled receptors as drug target. (d) Explain in detail data mining of biological databases. 5. Write short notes on (any three): (i) Gene family (ii) Physical maps (iii) Protein data banks (iv) STS maps (v) Data mining.	WT		(2) AA $-60-20$	019
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(iii) Protein data banks (iv) STS maps		(i)	Gene family	
(iv) STS maps		(ii)	Physical maps	
		(iii)	Protein data banks	
(v) Data mining.		(iv)	STS maps	
		(v)	Data mining.	