Daffodil International University

Class Test

Student ID : 241-15-218 Program : ..... Semester : Spring/ Summer/ Year : .....

Course Code : ..... Course Title : ..... Section : ..... Date : .....

Class Test No. : ..... Signature of the Course Teacher : .....

Q1 In biology industries which accelerate the

Daffodil International University

Class Test

Student ID : 241-15-918 Program : CSE Semester : Spring ✓ Summer Year : 24

Course Code : CSE115 Course Title : Introduction to Biology and Chemistry Section : (K) Date : 18/02/24

Class Test No. : 01 Signature of the Course Teacher :

2) DCS means Distributed Control System. DCS is a tecnology that help to distribute the system for eaus very easly and step by step. In Biology and chemistry both field use DCS to inprove ther production with low cost and low need of energy.

DCS works in mainly five step.

central computer → coordinting computer → supervisert computer → Machine ↓ product

DCS is use for safety protocols, streamline products minimize waste, and facilitate predictive maintecance in a very safe and effecnt way. we can do simple things but when ae are in the complex landscape then is it is so impotent to use DCS for bettert result.

1)

Biologist and computer scientest both are deeply The field of science in biology and computer sci and information technology merge into a sing disciplane into the ~~Brief~~ Bioinformatics.

Biologist are collect molicular information, DNA structure, RNA structure for recharcee. And They use software to under stand the result or predict the result. To do this they use software, data base, super computer and this are the field of computer scie nce using in the field of Biology.

Biolosist are can not do there job with out useing algoricthoms, data base from different country and many many software app those are made by computer scien tist by use many kind of langoage like Forctan, C++, Java, phytone etc.

At last we can say that, The field of science in Biology and computer science,

ID: 241-15-918
Sec: K(K)

Daffodil International University

Faculty of Science & Information Technology

Quiz 1, Spring 2024

Course Code: CSE115

Course Title: Introduction to Chemistry and Biology for Computation

Level: 1 **Term: 1** **Batch:66**

Time: 40 minutes **Marks: 15**

Answer ALL Questions

[The figures in the right margin indicate the full marks and corresponding course outcomes, program outcomes. All portions of each question must be answered sequentially.]

1.	How would you define the captivating domain where biology, computer science, and information technology converge to forge new frontiers? Delve into the concept of this multidisciplinary fusion, exploring its potential to decipher the secrets of genetics, model intricate biological systems through algorithms, and revolutionize healthcare, agriculture, and beyond. **Define** The field of science in which biology, computer science and information technology merge into a single discipline	**[5]**	**CO1 PO2 L1**
2.	Envision a chemical industry where DCS (Distributed Control System) technology fuses seamlessly with computer systems. How might this innovative integration revolutionize chemical processes, ensuring real-time monitoring and precise adjustments? **Summarize** the diverse ways in which this advanced DCS-computer synergy could enhance safety protocols, streamline production, minimize waste, and facilitate predictive maintenance in the complex landscape of chemical manufacturing.	**[5]**	**CO2 PO4 L2**
3.	Imagine a convergence of technology and science in the chemical and biology industries. How can applications like 'BioChemSimulate,' powered by the 'GenoOpt Algorithm' and utilizing the 'BioData Nexus' database, revolutionize the process of drug discovery? **Explain** the algorithm, database name and purpose of 2 software of chemical and biology industries which accelerate the development of novel medicines while minimizing risks and costs?	**[5]**	**CO3 PO1 L1**

CC → CR → SI