

Unit 3 - Week 1

Course outline

How does an NPTEL online course work?

Prerequisite Assignment

Week 1

Concepts and importance of Bioinformatics

Complexities in biological systems

DNA sequence analysis

Sequence based parameters

Database

Database categories

Quiz : Assignment 1

Week 1 Feedback Form : Bio-Informatics:Algorithms and Applications

Week 2

Week 3

Week 4

Week 5

Week 6

Week 7

Week 8

Week 9

Week 10

Week 11

Week 12

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Assignment 1

The due date for submitting this assignment has passed.
As per our records you have not submitted this assignment.

Due on 2020-02-12, 23:59 IST.

1) Which of the following describe bioinformatics

1 point

- Prediction of protein three-dimensional structures
- Determination of protein three-dimensional structures
- Sanger sequencing
- Gel electrophoresis

No, the answer is incorrect.
Score: 0

Accepted Answers:
Prediction of protein three-dimensional structures

2) Next generation sequence analysis requires

1 point

- DNA structures
- DNA sequences
- RNA structures
- Protein-DNA interactions

No, the answer is incorrect.
Score: 0

Accepted Answers:
DNA sequences

3) In drug design, role of Bioinformatics is to

1 point

- Identify drugs
- Identify potential lead molecules
- Measure IC50 values
- Estimate toxicity

No, the answer is incorrect.
Score: 0

Accepted Answers:
Identify potential lead molecules

4) Purines in RNA are

1 point

- Adenine and guanine
- Adenine and Thymine
- Adenine and Uracil
- Adenine and cytosine

No, the answer is incorrect.
Score: 0

Accepted Answers:
Adenine and guanine

5) DNA sequences are formed with

1 point

- Peptide bond
- Hydrogen bond
- Disulfide bond
- Phosphodiester bond

No, the answer is incorrect.
Score: 0

Accepted Answers:
Phosphodiester bond

6) The complementary strand 5'AGCGAG3' is

1 point

- 5'TAGCTC3'
- 5'CTCGCT3'
- 5'ATCGAG3'
- 5'GAGCTA3'

No, the answer is incorrect.
Score: 0

Accepted Answers:
5'CTCGCT3'

7) Stop codon is

1 point

- CGA
- CCC
- UGA
- UUU

No, the answer is incorrect.
Score: 0

Accepted Answers:
UGA

8) Average hydrogen bonding energy for the sequence ATAGC is (AT: -7; TA: -7; AG: -9; GC: -12; GA: -9; CG: -12)

1 point

- 8.75
- 7
- 14
- 17.5

No, the answer is incorrect.
Score: 0

Accepted Answers:
-8.75

9) Logical structure of a database is called

1 point

- Ontology
- Schema
- Format
- Tables

No, the answer is incorrect.
Score: 0

Accepted Answers:
Schema

10) Commonly used literature database for biologists is

1 point

- Science citation index
- PUBMED
- Biological abstract
- SCOPUS

No, the answer is incorrect.
Score: 0

Accepted Answers:
PUBMED