



✓ **Congratulations! You passed!**

TO PASS 70% or higher

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GRADE
100%

Lecture 8 Quiz

LATEST SUBMISSION GRADE

100%

1. What module can we use to run BLAST over the internet in Biopython:

1 / 1 point

- ☒ 1 Bio.Blast.NCBIWWW
- ☐ 1 WWW
- ☐ 1 Bio.Blast.NCBIXML
- ☐ 1 NCBIXML

✓ Correct

2. Which one of the following modules is not part of the Bio.Blast package in Biopython:

1 / 1 point

- ☐ 1 Applications
- ☐ 1 Record
- ☒ 1 FastaIO
- ☐ 1 NCBIStandalone

✓ Correct

3. Using Biopython find out what species the following unknown DNA sequence comes from:

1 / 1 point

```
1 TGGGCTCATATTTATCCTATATACCATGTTCTGATGGTGGCGGATGTTCTACGTGAATCCACGTTCTGAAGGACATCATACCAAAGTCGTAC
2 AATTAGGACCTCGATATGGTTTATTCTGTTTATCGTATCGGAGGTATGTTCTTTTGGCTCTTTTCGGGCTTCTCTCATTCTCTTTGGC
3 CTACGGTAGAG
```

Hint. Identify the alignment with the lowest E value.

- ☐ Viburnum dentatum
- ☐ Sambucus canadensis
- ☒ Nicotiana tabacum
- ☐ Rhazya stricta

✓ Correct

4. Seq is a sequence object that can be imported from Biopython using the following statement:

1 / 1 point

from Bio.Seq import Seq

If my_seq is a Seq object, what is the correct Biopython code to print the reverse complement of my_seq?

Hint. Use the built-in function help you find out the methods of the Seq object.

- ☐ 1 print('reverse complement is %s' % reverse(my_seq.complement()))

- ☐ 1 `print('reverse complement is %s' % complement(my_seq))`
- ☐ 1 `print('reverse complement is %s' % complement(my_seq.reverse()))`
- ☒ 1 `print('reverse complement is %s' % my_seq.reverse_complement())`

✓ Correct

5. Create a Biopython Seq object that represents the following sequence:

1 / 1 point

```
1 TGGGCCTCATATTTATCCTATATACCATGTTCTGTATGGTGGCGCGATGTTCTACGTGAATCCACGTTTGAAGGACATCATACCAAAGTCGTAC
2 AATTAGGACCTCGATATGGTTTATTCTGTTTATCGTATCGGAGGTTATGTTCTTTTGTCTTTTTCGGGCTTCTTCTCATTCTCTTTGGC/
3 CTACGGTAGAG
```

Its protein translation is:

- ☐ 1 `FWPHIYPIYHVRMVARCSTSIHVRRTSYQSRITRTSIWFYCLSYRRLCSFLLFFGLLLILLWHLR*`
- ☐ 1 `ILASYLSYIPCSYGGAMFYVNPVRKDIIPKSYN*DLDMLLLFIVSEVMFFALFRASSHSSLAPTV`
- ☐ 1 `NFGLIFILYTMFVWVRDLRQSTFEGHHTKVQLGPRYGFIVYRIGGYVLCFSFGFSFFFGTYG`
- ☒ 1 `WASYLSYIPCSYGGAMFYVNPVRKDIIPKSYN*DLDMLVFLCLSYRRLCSFLLFFGLLLILLWHLR*`

✓ Correct