

Feedback — Week 4 Quiz

[Help Center](#)

You submitted this quiz on **Sun 4 Oct 2015 9:45 AM PDT**. You got a score of **7.50** out of **10.00**.

Question 1

True or False: **RandomizedMotifSearch** performs poorly when given a uniform profile matrix.

Your Answer		Score	Explanation
<input checked="" type="radio"/> True	✓	2.00	
<input type="radio"/> False			
Total		2.00 / 2.00	

Question 2

True or False: **RandomizedMotifSearch** and **GibbsSampler** are usually run on many choices of initial k -mers.

Your Answer		Score	Explanation
<input checked="" type="radio"/> True	✓	2.00	
<input type="radio"/> False			
Total		2.00 / 2.00	

Question 3

True or False: it is not possible for **RandomizedMotifSearch** to move from a collection of motifs with lower score to a collection of motifs with higher score.

Your Answer		Score	Explanation
-------------	--	-------	-------------

☐ True

☒ False



0.00

Total

0.00 / 2.00

Question 4

Which of the following motif-finding algorithms is guaranteed to find an optimum solution? In other words, which of the following are *not* heuristics? (Select all that apply.)

Your Answer	Score	Explanation
<input checked="" type="checkbox"/> MedianString	✓ 0.50	
<input type="checkbox"/> GreedyMotifSearch (with pseudocounts)	✓ 0.50	
<input type="checkbox"/> RandomizedMotifSearch	✓ 0.50	
<input type="checkbox"/> GibbsSampler	✓ 0.50	
Total	2.00 / 2.00	

Question 5

Assume we are given the following strings *Dna*:

TGACGTTT
TAAGAGTT
GGACGAAA
CTGTTTCG

Then, assume that **RandomizedMotifSearch** begins by randomly choosing the following 3-mers *Motifs* of *Dna*:

TGA
GTT
GAA
TGT

What are the 3-mers after one iteration of **RandomizedMotifSearch**? In other words, what are the 3-mers $Motifs(Profile(Motifs), Dna)$? Please enter your answer as four space-separated strings.

You entered:

TGA GTT GGA TGT

Your Answer		Score	Explanation
TGA	✓	0.50	
GTT	✗	0.00	
GGA	✓	0.50	
TGT	✓	0.50	
Total		1.50 / 2.00	