

Question 4

Date:

	-	A	A	C	T
-	0	1	2	3	4
G	1	1	2	3	4
A	2	0	0	1	2
T	3	1	1	1	0

Insertion ~~or~~ vertical = 1

Deletion = horizontal = 1

Subst / ~~Match~~ Match = diagonal = 1

Match = -1

Optimal alignment as per the algorithm

H	A	A	C	T
V	G	A	-	T

So, the cost will be: $= 1 + (-1) + 1 + (-1)$
 $\boxed{1 = 0} \triangleright$