## UNIVERSITY OF TORONTO NATIONAL BIOLOGY COMPETITION 2014

## **ANSWER KEY**

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	В
2	D
3	Е
4	A,D
5	С
6	Α
7	E
8	С
9	С
10	Α
11	E
12	Α
13	В
14	E
15	D
16	D
17	В
18	E
19	В
20	С
21	E
22	Α
23	B D E A,D C A E C C A E D D B E D D B E A B C E A B B C E A B
24	В
25	_

26	Е
26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50	E D C B A E C B B A B D C D D C D D D D D C D D D D D D D D
28	C
29	Α
30	В
31	D
32	С
33	Е
34	D
35	E
36	_
37	С
38	В
39	Α
40	Е
41	С
42	В
43	С
44	B,D
45	В
46	Α
47	В
48	D
49	С
50	D

## Note:

There were two correct responses for Questions 4 and 44: students received credit for answering 4A or 4D, and 44B or 44D. Questions 25 and 36 were omitted from the grading of the exam, therefore the highest possible score was 48 questions correct. Question 25: Very few students and teachers answered this question correctly (the correct response is A); a majority chose an incorrect response. Question 36: if the deletion occurs at position 23 it will cause a frameshift, resulting in loss of the TAG stop codon, which will result in a longer polypeptide (not a shorter one), hence there is no correct answer among the choices given.