This document provides the structure of the Higher Biology questions in Section 1 and Section 2 by Knowledge/Skill (key for abbreviations below); Key area; Maximum Mark; intended grade A marks.

Key

dKU	demonstrating knowledge and understanding of biology by making statements, describing information, providing explanations and integrating knowledge
aKU	applying knowledge and understanding of biology to new situations, interpreting information and solving problems
PLAN	planning and designing experiments/investigations
SEL	selecting information from a variety of sources
PRES	presenting information appropriately in a variety of forms
PROC	processing information/data (using calculations and units, where appropriate)
PRED	making predictions and generalisations based on evidence/information
CONC	drawing valid conclusions and giving explanations supported by evidence/justification
EVAL	evaluating experiments/investigations and suggesting improvements
*	Intended grade A mark

Section 1				
Question	**KU/Skill**	**Key Area**	**Key Area**	**Grade A mark**
1	dKU	1.6(c)	mutation	
2	dKU	1.1(b)	DNA organisation	
3	dKU	1.3(b)	RNA splicing	
4	dKU	1.5	genome	
5	aKU	1.3(c)	gene expression	*
6	aKU	1.7(b)	selection	
7	aKU	1.8(b)	phylogenetics	*
8	aKU	2.2(b)	membrane proteins	
9	dKU	2.1(c)	activation energy	
10	dKU	2.4(b)	conformers	
11	dKU	2.3(b)	hearts	
12	dKU	2.6(b)	growth phases	*
13	PROC	2.4(b)	conformers	*
14	CONC	2.3(a)	respiration rte	
15	PLAN	2.3(a)	heart rate	
16	aKU	2.5(a)	dormancy	
17	SEL	2.6(b)	semilog graph	
18	PLAN	3.1(b)	photosynthesis	
19	dKU	3.1(b)	photosynthesis	
20	PROC	1.3(c)	amino acids	
21	aKU	3.2(e)	GM maize	
22	aKU	3.3(c)	bioaccumulation	
23	aKU	3.2(d)	animal breeding	
24	dKU	3.6(a)	cooperative hunting	
25	dKU	3.6(c)	social insects	

Section 2					
Question	**KU/Skill**	**Key Area**	**Key Area**	**Maximum mark**	**Grade A mark**
1(a)	aKU	1.2(a)	DNA replication/ PCR	1	
1(b)(i)	dKU	1.2(a)		1	
1(b)(ii)	aKU	1.2(a)		1	
1(b)(iii)	dKU	1.2(a)		1	
1(c)(i)	aKU	1.2(b)		2	
1(c)(ii)	PROC	1.2(b)		1	*
1(d)	dKU	1.2(b)		1	
2(a)	PROC	1.7(b)	Natural selection/ speciation	1	
2(b)	aKU	1.7(b)		2	*
2(c)(i)	aKU	1.7(c)		1	
2(c)(ii)	dKU	1.7(c)		1	*
3(a)	dKU	2.2(b)	Electron transport chain	2	
3(b)	dKU	2.2(b)		2	
3(c)	dKU	2.2(b)		2	*
4A	dKU	2.2(a)	Glycolysis	4	*
4B	dKU	2.7(b)	Plasmids	4	*
5(a)(i)	PROC	2.4(d)	Thermoregulation	1	*
5(a)(ii)	EVAL	2.4(d)		1	*
5(b)(i)	dKU	2.4(d)		2	
5(b)(ii)	dKU	2.4(e)		1	
6(a)	dKU	2.5(a)	Hibernation/ migration	1	
6(b)(i)	PROC	2.5(a)		1	*
6(b)(ii)	aKU	2.5(a)		1	
6(c)	dKU	2.5(a)		1	
7(a)(i)	PLAN	2.6(a)	Anti cancer drug trial	1	
7(a)(ii)	PLAN	2.6(a)		1	
7(b)	PLAN	2.6(a)		1	*
7(c)	PRES	2.6(a)		3	*
7(d)	CONC	2.6(a)		1	*
8(a)(i)	SEL	2.6(b)	Microbial growth	1	*
8(a)(ii)	PROC	2.6(b)		1	*
8(a)(iii)	PRED	2.6(b)		1	*
8(b)(i)	aKU	2.6(b)		2	*
8(b)(ii)	aKU	2.6(b)		1	
8(c)(i)	dKU	1.3(c)		1	
8(c)(ii)	dKU	2.6(a)		1	
9(a)(i)	PROC	2.1(c)	Enzyme Inhibition	1	
9(a)(ii)	aKU/SEL	2.1(c)		2	*
9(b)(i)	dKU	2.1(c)		2	*
9(b)(ii)	dKU	2.1(c)		1	

Section 2 (continued)					
10(a)	dKU	3.1(b)	Photosynthesis	1	
10(b)(i)	dKU	3.1(b)		1	*
10(b)(ii)	aKU	3.1(b)		2	*
10(c)	dKU	3.1(b)		1	
11(a)(i)	SEL	3.1(a)	Seeds investigation	2	
11(a)(ii)	SEL	3.1(a)		1	
11(b)(i)	CONC	3.1(a)		2	
11(b)(ii)	PROC	3.1(a)		1	*
12(a)(i)	aKU	3.3(a)	Weed Control	1	
12(a)(ii)	aKU	3.3(c)		1	*
12(b)	EVAL	3.2(b)		2	*
13(a)	aKU	3.6(b)	Kin selection meerkats	1	
13(b)	dKU	3.6(b)		1	
13(c)	SEL	3.6(a)		2	
13(d)(i)	dKU	3.6(a)		1	
13(d)(ii)	dKU	3.6(a)		1	
14(a)	aKU	3.7	Species diversity/ parasitism/ animal welfare	1	
14(b)(i)	aKU	3.5(a)		1	
14(b)(ii)	aKU	3.5(a)		1	
14(b)(iii)	aKU	3.5(a)		2	*
14(c)	dKU	3.4		1	
14(d)	dKU	3.4		1	
15(a)	dKU	3.8(b)	Habitat fragmentation/ food production	2	*
15(b)(i)	aKU	3.8(a)		1	
15(b)(ii)	dKU	3.8(b)		1	
15(b((iii)	dKU	3.8(b)		1	
15(c)	dKU	3.1(a)		1	*
16A	dKU	1.4(b)	Stem cells	8	**
16B	dKU	1.6(b)	Single gene mutations	8	**