



**Objective Tests 2010
Data Booklet**



Biology Intermediate 1 2010

Section A

Number of persons in test : 5,633
 Average test score : 14.74
 Average facility value : 58.94
 Reliability : 0.74

Item	Key	Content Area	Ability	Fac	Disc	% Choosing Option			
						A	B	C	D
1	B	2 (2) (i)	KU	73	25	5	73*	5	12
2	A	2 (4) (i)	KU	53	32	53*	19	18	9
3	B	2 (1) (iii)	KU	44	36	21	44*	7	26
4	D	1 (i)	PS	84	19	3	2	11	84*
5	C	2 (4) (ii)	PS	64	32	9	13	64*	14
6	B	2 (4) (iii)	PS	44	29	12	44*	13	30
7	A	2 (1) (i)	KU	37	6	37*	4	12	46
8	B	2 (3) (i)	KU	78	29	12	78*	7	4
9	D	1 (3) (i)	KU	28	26	13	16	43	28*
10	C	1 (2) (ii)	KU	75	34	8	5	75*	11
11	D	1 (4) (iii)	KU	44	30	36	14	5	44*
12	A	1 (3) (ii)	PS	48	29	48*	10	18	23
13	D	1 (3) (ii)	PS	73	32	7	12	8	73*
14	A	1 (4) (i)/(ii)	KU	79	29	79*	7	8	4
15	B	1 (3) (ii)	PS	51	14	15	51*	26	7
16	C	1 (2) (iv)	KU	82	19	3	9	82*	6
17	A	3 (1) (i)	KU	80	27	80*	6	5	8
18	A	3 (1) (iv)	KU	50	33	50*	18	3	28
19	C	3 (1) (ii)	KU	51	31	12	21	51*	16
20	C	3 (1) (i)	PS	60	36	15	9	60*	16
21	B	3 (2) (i)	KU	33	23	7	33*	20	38
22	C	3 (2) (ii)	PS	79	29	3	8	79*	9
23	D	3 (1)	PS	88	29	3	5	4	88*
24	A	3 (1)	PS	46	29	46*	31	8	13
25	D	3 (3) (ii)	KU	27	25	10	33	30	27*



Biology Intermediate 2 2010

Section A

Number of persons in test : 7,306
 Average test score : 16.93
 Average facility value : 67.83
 Reliability : 0.77

Item	Key	Content Area	Ability	Fac	Disc	% Choosing Option			
						A	B	C	D
1	B	1 (d) (2)	KU	91	28	5	91*	2	2
2	A	1 (b) (iv)	PS	75	24	75*	13	3	8
3	C	1 (c) (1) (i)	KU	62	44	12	21	62*	6
4	B	1 (c) (1) (iii)	KU	67	39	10	67*	14	8
5	D	1 (c) (iii)	KU	79	33	15	3	3	79*
6	B	1 (b) (iv)	KU	43	33	16	43*	31	10
7	A	1 (d) (2) (ii)	KU	95	21	95*	1	1	3
8	D	1 (d) (2) (i)	PS	70	28	2	8	19	70*
9	C	1 (e) (1) (ii)	PS	69	30	7	15	69*	8
10	A	2 (a) (2) (i)	KU	87	27	87*	7	3	4
11	B	2 (b) (2) (xi)	PS	84	31	12	84*	2	1
12	D	2 (b) (1) (i)	KU	88	27	0	6	6	88*
13	B	2 (b) (1) (ii)	KU	89	19	6	89*	4	1
14	C	2 (b) (1) (i)	PS	71	32	23	2	71*	4
15	A	2 (b) (2) (i)	KU	60	16	60*	1	35	3
16	C	2 (b) (2) (ix)	KU	59	38	15	19	59*	7
17	A	2 (b) (2) (xiv)	KU	83	24	83*	9	4	3
18	C	3 (a) (1) (iii)	PS	38	33	51	6	38*	5
19	B	3 (c) (2)	PS	66	39	7	66*	26	1
20	D	3 (c) (2) (ii)	KU	35	29	4	41	19	35*
21	D	3 (c) (3) (ii)	PS	31	41	3	53	13	31*
22	B	3 (c) (3) (iii)	KU	67	36	5	67*	17	11
23	C	3 (d) (1) (i)	KU	54	28	7	24	54*	14
24	A	3 (d) (2) (ii)	KU	84	28	84*	7	3	6
25	D	3 (d) (2) (iv)	KU	47	28	18	13	21	47*



Biology Higher Level 2010

Section A

Number of persons in test : 9,310
 Average test score : 18.98
 Average facility value : 63.25
 Reliability : 0.78

Item	Key	Content Area	Ability	Fac	Disc	% Choosing Option			
						A	B	C	D
1	D	1 (a) (ii) 1 (d)(2)(i)**	KU	54	45	13	12	21	54*
2	B	1 (a) (ii)	KU	48	36	10	48*	8	34
3	C	1 (a) (ii) 1 (d)(2)**	PS	60	43	32	5	60*	2
4	B	1 (b)(1)(i)	KU	71	32	13	71*	5	11
5	C	1 (c) (ii)**	KU	76	29	12	2	76*	10
6	D	1 (a) (ii)	PS	69	30	17	4	9	69*
7	A	1 (c) 1 (c) (ii/iii/iv)**	KU	79	29	79*	13	5	3
8	D	1 (d) (i)	KU	79	33	4	10	6	79*
9	D	1 (d) (ii) 1 (b)(2)(i)**	PS	81	21	3	3	13	81*
10	D	1 (e)(1)(i) 1 (e) (v)**	KU	67	36	8	2	23	67*
11	A	2 (a)(1)(ii)	KU	59	35	59*	12	10	18
12	B	2 (a)(1)(iii)	PS	65	33	10	65*	4	20
13	C	1 (f)(2)(i)**	PS	48	14	10	8	48*	34
14	B	2 (a)(2)(i)	KU	37	17	25	37*	28	9
15	B	2 (a)(3)(iv)	PS	58	15	8	58*	25	8
16	C	2 (b)(2)(ii)	KU	91	20	2	3	91*	4
17	D	2 (c)(2)(ii)	KU	58	20	3	14	24	58*
18	D	2 (c)(1)(iii)	PS	35	30	1	59	5	35*
19	A	2 (c)(2)	PS	80	33	80*	13	5	2
20	B	2 (c)(2)	KU	80	35	11	80*	5	4
21	C	3 (a)(1)(ii)	KU	27	-11	62	3	27*	8
22	C	3 (a)(2)(i)	KU	76	38	4	12	76*	7
23	A	3 (a)(4)(iv)	PS	43	29	43*	19	27	10
24	D	3 (a)(4)(iii)	KU	58	16	5	22	15	58*
25	A	3 (b) (iii) 2 (f) (ii)**	KU	74	37	74*	8	13	5
26	B	3 (b) (ii)	KU	62	34	14	62*	8	16
27	C	2 (f) (ii)**	PS	52	41	11	22	52*	14
28	A	3 (c) (i)	PS	49	38	49*	3	44	3
29	C	3 (b) (v)	PS	73	22	6	3	73*	19
30	A	3 (c) (iv)	KU	88	29	88*	3	2	7

** Content area relates to Human Biology Higher



Biology Advanced Higher 2010

Section A

Number of persons in test : 2,137
 Average test score : 17.56
 Average facility value : 70.24
 Reliability : 0.68

Item	Key	Content Area	Ability	Fac	Disc	% Choosing Option			
						A	B	C	D
1	C	1 (a) (i)	KU	96	16	0	0	96*	3
2	D	1 (a) (i)	KU	53	29	6	36	5	53*
3	C	1 (b)	KU	82	18	5	5	82*	8
4	A	1 (a) (ii)	PS	58	28	58*	16	8	17
5	A	1 (b) (iv)	KU	84	19	84*	2	3	11
6	C	1 (d) (ii)	PS	68	21	4	6	68*	22
7	B	1 (b) (v)	KU	83	20	3	83*	13	1
8	C	1 (c) (i)	KU	72	31	11	3	72*	15
9	A	1 (c) (i)	KU	50	14	50*	11	34	5
10	B	1 (c) (iii)	KU	77	22	13	77*	5	6
11	D	1 (d) (i)	KU	87	27	2	4	7	87*
12	D	1 (d) (i)	PS	36	24	15	32	16	36*
13	A	1 (d) (i)	PS	65	26	65*	21	8	6
14	C	2 (a)(1)(ii)	KU	63	26	7	9	63*	21
15	B	2 (a)(1)(ii)	PS	70	13	9	70*	7	15
16	D	2 (b)(1)(i)	PS	80	22	10	1	9	80*
17	B	2 (a)(2)(ii)	KU	74	17	4	74*	3	20
18	B	2 (b)(3)(i)	KU	93	16	2	93*	3	3
19	D	2 (b)(1)(iii)	PS	71	30	10	5	14	71*
20	C	2 (b)(3)(ii)	KU	78	34	10	7	78*	5
21	D	2 (b)(3)(ii)	KU	72	31	14	3	10	72*
22	D	2 (c) (i)	KU	60	22	22	11	7	60*
23	A	2 (c) (iv)	KU	79	29	79*	13	2	5
24	B	2 (c) (iv)	PS	34	15	25	34*	11	30
25	B	2 (c) (i)	KU	71	23	18	71*	8	3



Biotechnology Intermediate 2 2010

Section A

Number of persons in test : 107
 Average test score : 14.68
 Average facility value : 58.73
 Reliability : 0.66

Item	Key	Content Area	Ability	Fac	Disc	% Choosing Option			
						A	B	C	D
1	C	2 (a) (iii)	KU	72	26	20	4	72*	5
2	A	2 (a) (i)	KU	43	41	43*	8	2	46
3	D	2 (a) (iii)	KU	93	7	1	6	0	93*
4	C	2 (a) (i)	KU	31	29	0	42	31*	27
5	D	2 (a) (iii)	KU	48	-13	1	43	8	48*
6	D	2 (b) (i)	KU	92	13	0	4	5	92*
7	C	2 (b) (i)	PS	65	32	7	18	65*	8
8	B	1 (a) (iv)	PS	26	16	21	26*	3	50
9	C	1 (b) (v)	KU	54	16	40	5	54*	1
10	D	1 (a) (iii)	KU	32	13	6	53	9	32*
11	B	1 (c) (ii)	KU	81	28	6	81*	8	5
12	A	1 (c) (ii)	KU	57	27	57*	15	4	22
13	C	3 (e)	KU	81	10	14	3	81*	2
14	D	3 (d) (iii/iv)	KU	59	29	13	18	10	59*
15	A	3 (d) (i)	KU	50	21	50*	29	17	5
16	B	1 (b) (i)	PS	48	31	2	48*	21	29
17	D	1 (b) (i)	PS	68	32	8	14	8	68*
18	B	1 (b) (iii)	PS	63	5	8	63*	28	1
19	A	3 (b) (i)	KU	78	27	78*	1	5	17
20	B	1 (b) (iv)	KU	58	37	12	58*	20	10
21	D	3 (d) (iii)	KU	32	14	24	4	40	32*
22	C	2 (a) (iv)	PS	53	11	7	3	53*	37
23	A	1 (b) (ii)	PS	51	30	51*	8	5	36
24	A	1 (b) (iii)	PS	79	31	79*	8	5	7
25	C	3 (a) (i)	PS	54	23	18	18	54*	10



Biotechnology Higher 2010

Section A

Number of persons in test : 27
 Average test score : 21.33
 Average facility value : 71.11
 Reliability : 0.74

Item	Key	Content Area	Ability	Fac	Disc	% Choosing Option			
						A	B	C	D
1	A	1 (a) (ii)	KU	100	0	100*	0	0	0
2	C	2 (b)(1)	PS	48	-4	19	26	48*	7
3	D	1 (a) (iv)	KU	89	6	4	4	4	89*
4	D	1 (b)(3)(i)	KU	85	56	15	0	0	85*
5	B	1 (d)	PS	89	35	0	89*	4	7
6	B	1 (d)	PS	89	20	4	89*	0	7
7	A	1 (a) (ii)	KU	56	58	56*	7	26	11
8	C	1 (b)(3)(i)	KU	81	24	4	11	81*	4
9	C	1 (b)(3)(v)	KU	48	49	15	30	48*	7
10	D	1 (c) (ii)	KU	81	55	11	4	4	81*
11	C	1 (d) (ii)	KU	70	48	26	4	70*	0
12	C	1 (d) (iv)	KU	63	-2	37	0	63*	0
13	C	1 (d) (iii)	KU	85	22	4	11	85*	0
14	B	1 (a) (ii)	PS	67	17	7	67*	15	11
		2 (a)(1)(i)							
15	D	2 (a)(2)(i)	KU	48	34	11	26	15	48*
16	D	2 (a)(2)(iii)	PS	33	38	15	33	19	33*
17	D	2 (a)(2)(iii)	KU	85	30	4	7	4	85*
18	A	2 (b)(2)(iii)	KU	85	20	85*	7	4	4
19	C	1 (a) (iv)	PS	37	17	0	11	37*	52
		2 (a)(2)(iii)							
20	A	3 (a)(2)(ii)	KU	78	42	78*	15	4	4
21	D	2 (a)(2)(ii)	PS	63	39	30	4	4	63*
		3 (a)(3)							
22	A	3 (a)(2)(i)	KU	78	37	78*	4	15	4
23	C	3 (a)(2)(ii)	PS	70	33	15	4	70*	11
24	B	3 (b)(1)(i)	KU	81	13	4	81*	7	7
25	B	3 (a)(5)(ii)	KU	89	46	7	89*	4	0
26	A	3 (a)(1)(i)	KU	74	0	74*	11	11	4
27	B	3 (b)(2)(v)	PS	78	11	11	78*	11	0
28	D	3 (a)(4)(iii)	KU	93	23	0	7	0	93*
29	B	3 (b)(3)(i)	PS	44	9	22	44*	33	0
30	A	3 (b)(3)(i)	KU	44	4	44*	11	4	41



Chemistry Intermediate 1 2010

Section A

Number of persons in test : 2,857
Average test score : 12.98
Average facility value : 64.89
Reliability : 0.53

Item	Key	Content Area	Ability	Fac	Disc	% Choosing Option			
						A	B	C	D
1	B	1 (a) (i)	PS	74	21	10	74*	5	10
2	D	1 (b) (ii)	KU	83	26	6	2	8	83*
3	C	1 (c) (iii)	PS	55	26	7	17	55*	21
4	A	1 (d) (ii)	KU	41	13	41*	28	6	25
5	D	1 (d) (i)	KU	77	28	16	2	5	77*
6	A	2 (a) (iv)	PS	72	13	72*	8	12	6
7	D	2 (b) (i)	PS	59	16	24	8	9	59*
8	A	2 (b) (i)	PS	67	26	67*	4	5	23
9	D	2 (b) (ii)	PS	90	14	0	8	1	90*
10	B	2 (c) (iii)	KU	63	3	25	63*	8	5
11	B	2 (c) (v)	PS	17	-1	11	17*	6	66
12	A	2 (d) (i)	PS	48	6	48*	18	4	30
13	C	2 (d) (ii)	PS	81	24	2	14	81*	2
14	B	3 (a) (i)	KU	77	21	6	77*	4	13
15	B	3 (a) (iii)	KU	66	28	10	66*	13	11
16	C	3 (b) (ii)	KU	84	25	9	2	84*	5
17	C	3 (c)	PS	66	11	17	16	66*	1
18	A	3 (c) (i)	KU	76	27	76*	2	21	1
19	C	3 (d) (i)	PS	75	3	17	2	75*	6
20	B	3 (d)	PS	28	7	15	28*	34	23



Chemistry Intermediate 2 2010

Section A

Number of persons in test : 4,290
Average test score : 20.95
Average facility value : 69.83
Reliability : 0.81

Item	Key	Content Area	Ability	Fac	Disc	% Choosing Option			
						A	B	C	D
1	A	1 (a) (ii)	KU	89	19	89*	2	4	5
2	D	1 (b) (i)	KU	75	32	1	4	19	75*
3	C	1 (d) (i)	PS	57	31	11	7	57*	25
4	D	1 (d) (i)	KU	70	43	11	4	16	70*
5	C	1 (d) (ii)	KU	73	37	10	10	73*	6
6	D	1 (d) (iv)	PS	63	35	21	10	6	63*
7	B	1 (e) (i)	KU	79	29	9	79*	10	2
8	B	1 (e) (iii)	KU	89	33	5	89*	5	2
9	C	1 (f) (i)	PS	86	31	6	3	86*	5
10	A	2 (a) (i)	PS	70	33	70*	12	11	7
11	A	2 (a) (ii)	KU	83	30	83*	6	2	8
12	D	2 (b) (i)	PS	82	41	8	7	2	82*
13	B	2 (e) (iii)	PS	37	39	40	37*	14	9
14	D	2 (d) (i)	KU	59	21	4	6	31	59*
15	B	2 (d) (ii)	KU	87	25	3	87*	2	8
16	C	2 (d)	KU	72	34	14	8	72*	6
17	A	3 (a) (i)	KU	47	23	47*	36	16	2
18	A	3 (a) (i)	KU	74	28	74*	3	5	18
19	B	3 (a) (i)	KU	79	37	8	79*	12	1
20	C	3 (a) (ii)	PS	63	40	5	10	63*	21
21	C	3 (a) (iii)	KU	64	39	6	21	64*	8
22	D	3 (b) (i)	KU	58	32	13	20	9	58*
23	A	3 (b) (i)	KU	88	31	88*	3	6	2
24	A	3 (b) (i)	KU	60	22	60*	20	12	8
25	C	3 (b) (iv)	PS	77	39	5	7	77*	11
26	A	3 (b) (v)	KU	84	36	84*	4	5	6
27	B	3 (c) (i)	PS	91	30	3	91*	3	3
28	A	3 (c) (ii)	KU	35	39	35*	25	31	9
29	D	3 (c) (iv)	KU	59	17	13	20	8	59*
30	C	3 (c) (v)	PS	44	25	12	12	44*	31



Chemistry Higher Level 2010

Section A

Number of persons in test : 10,115
 Average test score : 25.56
 Average facility value : 63.90
 Reliability : 0.85

Item	Key	Content Area	Ability	Fac	Disc	% Choosing Option			
						A	B	C	D
1	B	Standard Grade	KU	80	25	8	80*	8	3
2	C	Standard Grade	KU	74	33	9	6	74*	11
3	C	Standard Grade	PS	35	23	26	33	35*	5
4	B	1 (a) (ii)	KU	67	34	17	67*	3	13
5	B	Standard Grade	PS	43	28	27	43*	14	15
6	D	1 (a) (i)	PS	26	24	58	11	5	26*
7	C	1 (a) (iv)	KU	59	37	9	10	59*	23
8	B	1 (b) (i)	KU	62	32	13	62*	13	11
9	A	1 (c)	KU	82	29	82*	5	6	6
10	D	1 (c)	PS	39	32	16	23	21	39*
11	B	1 (d) (i)	KU	79	34	4	79*	4	13
12	A	1 (d) (ii)	KU	72	38	72*	19	5	4
13	B	1 (d) (ii)	PS	54	34	12	54*	17	17
14	D	1 (d) (iv)	PS	67	25	8	21	4	67*
15	D	1 (e) (i)	PS	62	41	22	9	6	62*
16	C	1 (e) (i)	PS	34	27	36	21	34*	8
17	D	1 (e) (iii)	PS	48	32	29	11	12	48*
18	A	2 (a) (ii)	KU	84	24	84*	13	2	1
19	A	2 (c) (iii)	KU	89	36	89*	5	3	4
20	B	2 (c) (ii)	KU	87	36	5	87*	2	6
21	C	2 (c) (i)	KU	84	31	6	3	84*	8
22	C	2 (c) (i)/(ii)	PS	67	32	15	5	67*	13
23	A	2 (d)	KU	69	32	69*	6	23	2
24	C	2 (e) (ii)	KU	75	37	4	14	75*	7
25	A	2 (e) (i)	KU	61	34	61*	7	20	12
26	D	2 (e) (i)	KU	81	32	6	2	11	81*
27	D	2 (e) (i)	PS	69	39	8	15	8	69*
28	C	2 (f) (i)	KU	80	30	6	8	80*	5
29	D	2 (f) (i)	KU	76	31	6	7	10	76*
30	D	2 (f) (ii)	KU	57	49	10	18	15	57*
31	B	3 (a)	KU	52	33	25	52*	15	7
32	A	3 (b)	KU	71	39	71*	16	8	5
33	B	3 (c) (ii)	KU	58	41	3	58*	12	26
34	C	3 (c) (ii)	PS	44	40	12	27	44*	16
35	B	3 (d) (ii)	KU	82	22	5	82*	2	12
36	C	3 (d) (i)	KU	67	27	8	15	67*	10
37	B	3 (d) (ii)	KU	52	33	20	52*	17	11
38	D	3 (d) (ii)	KU	56	33	9	16	18	56*
39	D	3 (e) (i)	KU	28	27	38	14	20	28*
40	A	3 (f)	PS	85	32	85*	9	5	2



Chemistry Advanced Higher 2010

Section A

Number of persons in test : 2,186
 Average test score : 27.26
 Average facility value : 68.15
 Reliability : 0.79

Item	Key	Content Area	Ability	Fac	Disc	% Choosing Option			
						A	B	C	D
1	D	1 (a) (ii)	KU	86	28	1	10	3	86*
2	C	1 (a) (ii)	KU	61	23	33	5	61*	1
3	D	1 (a) (ii)	KU	89	20	1	1	9	89*
4	B	1 (a) (ii)	PS	77	19	11	77*	8	5
5	B	1 (a) (iii)	KU	56	10	4	56*	8	32
6	D	1 (b) (ii)	KU	53	29	13	19	14	53*
7	A	1 (b) (iii)	PS	78	28	78*	3	16	3
8	B	1 (c) (i)	KU	75	31	19	75*	4	2
9	D	1 (c) (i)	PS	67	18	4	1	28	67*
10	C	1 (c) (i)	PS	56	18	11	3	56*	29
11	C	2 (b) (i)	PS	75	33	11	7	75*	7
12	A	2 (b) (ii)	PS	85	29	85*	5	5	5
13	B	2 (b) (iii)	KU	89	27	6	89*	2	4
14	A	2 (b) (iii)	PS	70	27	70*	15	10	4
15	D	2 (c) (i)	KU	49	31	14	17	20	49*
16	A	2 (c) (i)	PS	56	32	56*	16	11	17
17	D	2 (c) (i)	KU	60	25	14	18	8	60*
18	B	2 (c) (ii)	KU	74	36	12	74*	6	8
19	C	2 (c) (iii)	KU	76	35	1	19	76*	3
20	D	2 (c) (iii)	PS	58	34	21	5	16	58*
21	D	2 (c) (iii)	PS	76	21	6	10	7	76*
22	C	2 (d) (ii)	PS	79	27	5	7	79*	10
		2 (e)							
23	C	2 (e)	PS	83	31	6	6	83*	5
24	A	2 (e)	PS	33	15	33*	24	5	38
25	C	3 (a) (i)	KU	77	29	8	7	77*	8
26	D	3 (a) (ii)	KU	75	36	10	13	2	75*
		3 (b) (i)							
27	C	3 (a) (iii)	PS	75	33	6	16	75*	3
28	B	3 (b) (i)	KU	87	25	3	87*	9	1
29	A	3 (b) (i)	PS	51	19	51*	20	24	5
30	B	3 (b) (i)	PS	49	20	30	49*	15	5
31	D	3 (b) (i)	KU	55	34	27	11	7	55*
32	B	3 (b) (ii)	KU	83	25	2	83*	4	11
33	A	3 (b) (ii)	PS	58	34	58*	6	21	15
34	B	3 (b) (iii)	KU	48	14	38	48*	11	3
35	D	3 (b) (iii)	PS	70	33	7	6	17	70*
36	A	3 (b) (v)	KU	69	33	69*	9	17	4
37	C	3 (b) (v)	KU	64	32	13	8	64*	14
38	B	3 (c)	PS	75	28	14	75*	4	7
39	A	3 (d) (i)	KU	42	16	42*	2	7	48
40	C	3 (d) (ii)	PS	88	27	4	5	88*	3



Human Biology Higher Level 2010

Section A

Number of persons in test : 4,045
 Average test score : 19.16
 Average facility value : 63.85
 Reliability : 0.77

Item	Key	Content Area	Ability	Fac	Disc	% Choosing Option			
						A	B	C	D
1	C	1 (a) (ii)	KU	74	37	5	2	74*	20
2	D	1 (a) (i)	KU	54	32	27	6	12	54*
3	D	1 (d) (ii)	PS	72	27	4	3	21	72*
4	B	1 (b)(2)(ii)	KU	57	43	27	57*	7	8
		1 (d) (iii)**							
5	D	1 (b)(2)(iii)	KU	53	33	18	7	22	53*
6	A	1 (d)(2)(iii)	KU	74	28	74*	5	9	12
		1 (a) (ii)**							
7	C	1 (a) (ii)**	PS	65	38	25	7	65*	3
8	D	1 (e) (v)	KU	64	36	5	4	27	64*
		1 (e) (i)**							
9	C	1 (f)(1)(v)	KU	62	36	5	17	62*	16
		2 (a)(1)(ii)**							
10	D	1 (f)(2)(i)	KU	64	19	5	15	16	64*
11	A	1 (f)(3)(iii)	KU	77	29	77*	3	12	8
		2 (a)(3)(iii)**							
12	A	1 (f)(2)(ii)	KU	55	44	55*	9	19	17
13	C	1 (f)(2)(i)	PS	60	33	15	12	60*	12
14	A	2 (a) (ii)	KU	52	18	52*	43	1	3
15	B	2 (a) (i)	KU	89	20	3	89*	3	5
16	D	2 (a) (iii)	PS	70	31	6	2	22	70*
17	B	2 (b) (i)	KU	76	26	9	76*	6	8
18	C	2 (c) (ii)	KU	49	32	22	9	49*	18
19	A	2 (d) (i)	KU	51	29	51*	1	17	31
20	B	2 (f) (i)	PS	61	21	6	61*	19	14
21	A	2 (c) (iii)	KU	76	28	76*	13	7	4
22	B	2 (d) (i)	KU	54	6	14	54*	20	11
23	C	2 (f) (iii)	KU	76	25	9	7	76*	8
		3 (b) (iv)**							
24	B	2 (f) (iii)	PS	39	14	10	39*	7	43
25	C	3 (a) (i)	KU	66	20	17	2	66*	15
26	A	3 (a) (i)	PS	61	24	61*	15	5	19
27	D	3 (a) (ii)	KU	74	34	13	6	7	74*
28	D	3 (b)(2)(iv)	KU	62	25	36	1	1	62*
29	B	3 (b)(3)(ii)	KU	60	26	9	60*	19	12
30	C	3 (c)(1)(i)	PS	70	32	14	11	70*	4
		3 (c) (i)**							

** Content area relates to Biology Higher



Mathematics Higher Level 2010

Section A

Number of persons in test : 20,680
 Average test score : 27.98
 Average facility value : 69.96
 Reliability : 0.75

Item	Key	Content Area	Fac	Disc	% Choosing Option			
					A	B	C	D
1	A	G 5	72	28	72*	10	17	1
2	C	A 11	98	17	1	1	98*	0
3	D	G 20	97	16	0	2	0	97*
4	A	T 4	85	27	85*	7	7	1
5	B	A 5	86	35	3	86*	6	5
6	D	A 18	81	39	10	3	6	81*
7	C	A 13	85	33	3	6	85*	5
8	B	G 11	78	33	17	78*	3	2
9	C	C 13/23	78	32	3	12	78*	7
10	B	G 27	73	38	8	73*	9	9
11	D	T 3 / A 4	59	41	5	15	20	59*
12	A	C 3	73	34	73*	8	12	7
13	B	A 15	63	34	24	63*	2	11
14	C	C 17	67	32	3	3	67*	27
15	C	C 7	73	23	11	7	73*	9
16	A	A 19	46	37	46*	9	27	17
17	B	C 6	74	41	1	74*	24	1
18	B	A 16	45	32	22	45*	21	12
19	C	A 2	41	40	39	7	41*	13
20	A	A 3	24	16	24*	12	30	34



Physics Intermediate 1 2010

Section A

Number of persons in test : 2,550
 Average test score : 11.21
 Average facility value : 56.03
 Reliability : 0.66

Item	Key	Content Area	Ability	Fac	Disc	% Choosing Option				
						A	B	C	D	E
1	D	1.1.4	KU	69	14	25	1	3	69*	2
2	D	1.1.3/5 1.5.7	KU	48	14	5	29	3	48*	15
3	B	1.1.6	PS	13	10	13	13*	43	27	3
4	C	2.3.4	KU	54	25	22	15	54*	6	4
5	B	2.3.3	KU	75	28	16	75*	5	1	4
6	D	2.3.17	PS	38	25	16	23	15	38*	8
7	C	2.1.4/9/16	PS	35	18	19	9	35*	18	18
8	B	3.2.1	KU	92	24	3	92*	1	3	1
9	A	3.4.7	PS	65	29	65*	1	4	2	28
10	B	3.3.6	PS	73	29	17	73*	1	5	3
11	C	3.1.5	PS	94	18	2	1	94*	1	1
12	D	4.2.1	PS	61	20	11	4	11	61*	11
13	E	4.3.3/4	PS	45	30	7	23	9	16	45*
14	E	5.1.10/11/12	PS	31	16	7	6	3	52	31*
15	B	5.2.4	KU	64	28	9	64*	7	10	10
16	E	5.1.2	KU	32	31	27	37	3	1	32*
17	A	6.1.8	KU	68	35	68*	2	1	26	3
18	E	6.2.2	KU	40	25	8	26	13	12	40*
19	A	6.1.10/11	KU	81	30	81*	5	4	6	4
20	D	6.2.6	PS	43	33	6	26	12	43*	13



Physics Intermediate 2 2010

Section A

Number of persons in test : 3,890
 Average test score : 11.95
 Average facility value : 59.73
 Reliability : 0.79

Item	Key	Content Area	Ability	Fac	Disc	% Choosing Option				
						A	B	C	D	E
1	E	1.1.5	KU	67	37	8	13	5	7	67*
2	D	1.1.4	PS	52	46	4	8	33	52*	2
3	B	1.2.16	KU	68	41	2	68*	8	20	2
4	D	1.2.21	PS	66	28	5	2	7	66*	20
5	D	1.4.5	PS	34	39	13	26	19	34*	6
6	C	1.3.8	PS	13	0	3	64	13*	15	6
7	E	2.1.10/11/12	KU	41	42	13	8	26	12	41*
8	C	2.1.15	PS	68	42	3	6	68*	8	15
9	D	2.2.5	KU	87	29	2	9	1	87*	1
10	D	2.2.9/10	KU	44	42	5	1	45	44*	5
11	B	2.3.3	KU	90	20	6	90*	2	1	2
12	B	2.4.16	PS	62	40	16	62*	10	5	8
13	C	3.1.5	PS	45	40	27	12	45*	6	10
14	A	3.1.8	KU	84	31	84*	6	7	1	2
15	A	3.3.6	PS	54	24	54*	21	7	14	3
16	D	3.3.7	PS	43	43	34	12	4	43*	6
17	C	4.1.1	KU	81	33	2	7	81*	4	6
18	E	4.2.4	KU	77	21	2	15	1	5	77*
19	A	4.2.1/3/6/7	PS	58	49	58*	9	9	11	12
20	E	4.4.3	KU	63	43	15	8	6	8	63*



Physics Higher Level 2010

Section A

Number of persons in test : 9,025
 Average test score : 12.88
 Average facility value : 64.39
 Reliability : 0.74

Item	Key	Content Area	Ability	Fac	Disc	% Choosing option				
						A	B	C	D	E
1	E	1.2.1	KU	71	21	6	4	3	16	71*
2	E	1.2.3	PS	59	29	5	14	2	20	59*
3	D	1.3.4	KU	75	26	5	4	14	75*	2
4	A	1.5.4	KU	41	30	41*	5	16	25	12
5	D	1.5.9	KU	85	29	1	9	3	85*	2
6	B	1.6.5	KU	82	30	1	82*	2	14	0
7	C	2.1.4	KU	66	32	8	15	66*	3	8
8	B	2.1.1 3.4.2	PS	67	42	16	67*	6	8	4
9	A	2.1.18	PS	69	33	69*	5	7	10	9
10	D	2.1.15	PS	56	21	6	16	12	56*	9
11	D	1.3.13	KU	56	22	0	5	26	56*	12
12	C	2.3.9	PS	60	36	28	5	60*	3	4
13	E	2.4.5	PS	73	38	11	4	5	6	73*
14	A	3.3.10	KU	69	41	69*	17	5	7	3
15	B	3.3.15	KU	19	18	52	19*	8	5	17
16	D	3.3.29	KU	44	39	6	21	15	44*	14
17	E	3.3.35	KU	58	19	8	5	24	4	58*
18	D	3.4.8	KU	86	32	2	2	3	86*	6
19	B	3.5.7	PS	68	35	19	68*	5	3	4
20	C	3.5.17	KU	84	34	4	2	84*	8	2



Scottish Qualifications Authority

Guidance on interpreting the information given in the Data Booklet

1 Item

This is the number of the question in the question paper.

2 Key

This is the correct option for the question.

3 Content Area

This is the section shown in the appropriate published arrangement documents. It is appreciated that in the case of some items more than one content area might be considered appropriate.

4 Ability

An attempt has been made to classify each item according to the educational ability being tested although the limitations of this exercise are fully recognised. Two abilities are presently used: KU for Knowledge and Understanding and PS for Problem Solving. Please note that this information is not provided for Mathematics.

5 Fac

This is the facility value of the question; i.e. the fraction of candidates in the sample choosing the correct option.

6 Disc

This is the Discrimination for an item. It is the ability of an item to tell high scoring and low scoring candidates apart. The result ranges from –100 through 100 and a high value means that able candidates (high total test score) tend to answer the question correctly and candidates with a low total test score tend to answer the question incorrectly. The item is then said to be consistent with the test. With zero Discrimination there is no relationship between the performance on the item and the performance on the test as a whole. A negative Discrimination means able candidates tend to answer the item incorrectly and persons with a low total test score tend to answer the items correctly.

7 Percentage choosing option

This shows, for each option, the percentage of candidates selecting it. Percentages have been corrected to the nearest whole number. Correct options are asterisked.