



# **Objective Tests 2008 Data Booklet**



Biology Intermediate 1 2008

Section A

Number of persons in test : 5478  
 Average test score : 14.13  
 Average facility value : 56.51  
 Reliability : 0.62

Item	Key	Content Area	Ability	Fac	Disc	% Choosing Option			
						A	B	C	D
1	B	1 1 (i)	KU	83	16	7	83*	5	5
2	A	1 3 (i)	KU	68	8	68*	5	4	23
3	A	1 2 (i)	KU	25	22	25*	16	33	26
4	D	1 4 (ii)	PS	96	10	1	2	1	96*
5	C	1 4 (ii)	KU	55	15	5	35	55*	5
6	A	1 2 (iv)	PS	31	25	31*	16	48	5
7	D	1 2 (iii)	KU	59	19	9	17	15	59*
8	B	1 4 (i)	PS	94	18	2	94*	3	2
9	C	3 1 (iv)	KU	61	28	14	24	61*	1
10	C	3 1 (ii)	PS	57	17	29	10	57*	4
11	A	3 1 (i)	PS	72	28	72*	13	7	8
12	B	3 2 (ii)	KU	68	29	7	68*	11	13
13	C	3 3 (ii)	KU	57	23	16	11	57*	16
14	B	3 3 (i)	KU	34	15	37	34*	19	10
15	C	3 (iii)	PS	25	2	28	26	25*	21
16	D	3 3 (i)	PS	39	22	16	8	37	39*
17	C	2 2 (i)	KU	48	30	15	28	48*	8
18	C	2 1 (ii)	KU	71	16	10	4	71*	15
19	A	2 1 (ii)	PS	66	20	66*	26	3	5
20	D	2 1 (i)	KU	29	23	18	35	18	29*
21	B	2 1 (iii)	KU	66	24	10	66*	20	4
22	A	2 1 (iv)	PS	72	13	72*	6	1	21
23	D	2 1 (iv)	PS	64	15	6	12	18	64*
24	D	2 4 (i)	KU	46	28	21	24	8	46*
25	C	2 3 (iii)	PS	26	14	65	4	26*	5



Biology Intermediate 2 2008

Section A

Number of persons in test : 6636  
 Average test score : 16.96  
 Average facility value : 67.85  
 Reliability : 0.74

Item	Key	Content Area	Ability	Fac	Disc	% Choosing Option			
						A	B	C	D
1	A	1 a (i)	KU	76	19	76*	14	3	6
2	C	1 b (ii)	KU	88	21	2	7	88*	3
3	B	1 b (i)	KU	68	36	8	68*	7	17
4	C	1 b (iv)	KU	55	35	23	3	55*	19
5	D	1 d (iii)	KU	49	39	21	7	24	49*
6	C	1 d (ii)	KU	42	24	17	29	42*	12
7	A	1 e 1 (i)	KU	72	26	72*	5	21	3
8	A	1 e 1 (ii)	KU	66	31	66*	15	10	9
9	C	2 b 2 (i)	KU	85	22	1	6	85*	8
10	D	2 b 2 (ii)	KU	61	19	21	8	9	61*
11	B	2 b 2 (iv)	KU	74	33	17	74*	3	5
12	C	2 b 2 (vi)	PS	60	32	9	15	60*	15
13	A	2 b 2 (v)	PS	91	15	91*	5	3	1
14	D	2 b 2 (ix)	PS	41	24	17	24	17	41*
15	B	2 b 2 (xii)	KU	60	32	22	60*	11	6
16	B	2 b 2 (xi)	PS	89	21	1	89*	3	6
17	D	2 b 2 (xii)	KU	56	26	10	22	12	56*
18	C	3 a 2 (iii)	PS	65	30	4	4	65*	27
19	B	3 a 1 (iii)	PS	93	16	1	93*	5	2
20	B	3 a 1 (iii)	PS	46	30	45	46*	3	5
21	A	3 a 2 (i)	KU	79	30	79*	4	14	3
22	B	3 a 1 (ii)	PS	64	34	8	64*	9	18
23	A	3 c 2 (i)	KU	55	31	55*	20	17	8
24	D	3 c 3 (ii)	PS	89	20	2	1	7	89*
25	D	3 d 1 (i)	KU	72	25	4	5	18	72*



Biology Higher Level 2008

Section A

Number of persons in test : 9046  
 Average test score : 20.83  
 Average facility value : 69.44  
 Reliability : 0.79

Item	Key	Content	Area	Ability	Fac	Disc	% Choosing Option			
							A	B	C	D
1	C	1 c	(ii)	KU	73	36	6	13	73*	7
2	A	1 c	(vi)	KU	70	29	70*	9	3	18
3	A	1 e	(ii)	KU	54	40	54*	7	16	23
4	A	1 a	(ii)	KU	75	26	75*	10	12	3
5	D	1 d	(i)	KU	87	27	4	5	4	87*
6	C	1 d	(ii)	KU	59	24	10	14	59*	17
7	B	1 a	(ii)	PS	59	18	15	59*	12	14
8	D	1 b 1	(iii)	PS	92	23	2	2	4	92*
9	A	1 e	(i)	KU	79	27	79*	8	5	9
10	D	1 e	(ii)	PS	54	37	1	5	40	54*
11	B	2 a 1	(ii)	KU	44	23	8	44*	29	19
12	D	2 a 1	(iii)	PS	62	26	4	3	31	62*
13	B	2 a 2	(iii)	PS	69	31	8	69*	6	16
14	C	2 b 1	(ii)	KU	79	38	11	7	79*	2
15	B	2 b 1	(v)	KU	53	35	26	53*	8	14
16	B	2 c 1 A	(i)	KU	72	32	18	72*	5	5
17	D	2 c 1 A	(iii)	KU	92	27	4	2	2	92*
18	C	2 c 1 P	(ii)	KU	69	37	13	5	69*	13
19	C	2 c 3 A	(i)	KU	80	33	9	5	80*	6
20	C	2 c 1 A	(ii)	PS	51	38	19	8	51*	21
21	D	2 b	(i)	PS	66	40	2	23	8	66*
22	A	3 a 1	(iv)	KU	94	20	94*	1	3	2
23	A	3 a 2	(iii)	KU	45	38	45*	28	10	17
24	C	3 a 3	(i)	KU	74	34	8	5	74*	14
25	B	3 b	(iv)	KU	81	17	3	81*	14	2
26	D	3 a 3	(ii)	KU	69	27	8	12	10	69*
27	D	3 c	(iii)	KU	95	15	2	1	1	95*
28	B	3 b	(iv)	PS	68	30	21	68*	7	4
29	A	3 c	(ii)	PS	63	28	63*	27	6	4
30	C	3 a 1	(iv)	PS	53	20	10	25	53*	12



Biology Advanced Higher 2008

Section A

Number of persons in test : 1915  
 Average test score : 19.50  
 Average facility value : 78.00  
 Reliability : 0.64

Item	Key	Content Area	Ability	Fac	Disc	% Choosing Option			
						A	B	C	D
1	C	1 a (ii)	KU	72	18	10	9	72*	9
2	D	1 a (ii)	KU	81	33	5	12	2	81*
3	C	1 b (i)	KU	78	32	8	12	78*	2
4	D	1 b (i)	KU	64	26	14	7	15	64*
5	B	1 b (iii)	KU	63	35	23	63*	7	7
6	A	1 b (iv)	KU	78	24	78*	3	5	14
7	D	1 b (iv)	PS	94	15	2	1	2	94*
8	A	1 c (ii)	KU	94	18	94*	0	6	0
9	B	1 b (vi)	KU	86	29	2	86*	8	4
10	A	1 d (i)	PS	81	22	81*	4	13	2
11	B	1 d (i)	KU	62	14	6	62*	22	10
12	D	1 d (iii)	PS	97	3	1	1	1	97*
13	A	2 a 2 (ii)	KU	73	22	73*	3	19	6
14	A	2 a 2 (ii)	KU	85	19	85*	5	4	5
15	D	2 c (iii)	PS	62	33	15	11	12	62*
16	D	2 a 1 (ii)	KU	90	13	1	6	3	90*
17	C	2 b 1	PS	85	18	2	12	85*	1
18	A	2 b (i)	KU	94	17	94*	2	2	2
19	A	2 b (i)	PS	61	16	61*	2	6	31
20	B	2 b 2 (i)	KU	94	12	2	94*	4	0
21	C	2 b 3 (ii)	KU	70	20	11	7	70*	12
22	B	2 b 3 (ii)	PS	69	24	2	69*	17	12
23	B	2 b 1 (iii)	KU	57	11	33	57*	6	4
24	A	2 b 1 (iii)	KU	80	17	80*	6	2	12
25	C	2 c (i)	PS	80	19	3	8	80*	8



Biotechnology Intermediate 2 2008

Section A

Number of persons in test : 97  
 Average test score : 15.38  
 Average facility value : 61.53  
 Reliability : 0.74

Item	Key	Content Area	Ability	Fac	Disc	% Choosing Option			
						A	B	C	D
1	A			93	29	93*	5	0	2
2	B			61	26	8	61*	16	14
3	A			71	26	71*	14	12	2
4	C			69	34	6	18	69*	7
5	D			40	33	4	44	11	40*
6	D			33	33	11	40	15	33*
7	A			35	28	35*	38	23	4
8	B			84	14	4	84*	7	4
9	C			78	32	18	1	78*	3
10	A			79	38	79*	2	16	2
11	C			66	25	6	19	66*	9
12	B			61	32	7	61*	8	24
13	A			80	30	80*	8	8	3
14	D			63	20	5	24	8	63*
15	D			13	39	7	23	57	13*
16	C			85	21	5	6	85*	3
17	D			68	21	13	12	5	68*
18	B			43	33	18	43*	27	12
19	A			88	24	88*	4	2	6
20	C			40	14	21	18	40*	22
21	A			38	44	38*	23	14	25
22	B			38	18	8	38*	46	6
23	D			64	19	1	32	2	64*
24	C			97	34	1	0	97*	2
25	D			51	39	16	25	7	51*

Content and ability areas to follow.



Biotechnology Higher Level 2008

Section A

Number of persons in test : 35  
 Average test score : 22.40  
 Average facility value : 74.67  
 Reliability : 0.74

Item	Key	Content Area	Ability	Fac	Disc	% Choosing Option			
						A	B	C	D
1	B	1 a (i)	KU	91	6	6	91*	3	0
2	A	1 b 1 (iv)	KU	71	30	71*	17	0	11
3	A	1 b 2 (ii)	PS	17	30	17*	20	60	3
4	D	1 b 2 (i)	PS	57	28	14	3	26	57*
5	C	1 b 3 (i)	KU	80	22	17	3	80*	0
6	A	1 b 3 (i)	KU	91	39	91*	0	3	6
7	B	1 b 3 (iv)	KU	74	19	11	74*	9	6
8	B	1 b 3 (vi)	KU	80	11	3	80*	14	3
9	D	1 c (i)	KU	74	55	17	0	9	74*
10	A	1 c (i)	KU	57	9	57*	31	6	6
11	D	1 d (iv)	PS	80	27	3	3	14	80*
12	A	2 a 2 (ii)	KU	89	52	89*	6	6	0
13	C	2 b 1 (i)	KU	69	59	9	9	69*	14
14	C	2 b 2 (i)	PS	74	9	9	9	74*	9
15	B	3 a 1 (iii)	KU	89	22	0	89*	0	9
16	D	3 a 2 (ii)	KU	71	1	14	14	0	71*
17	A	3 a 4 (i)	KU	71	19	71*	6	20	3
18	B	3 a 4 (ii)	KU	94	27	6	94*	0	0
19	A	3 a 4 (iii)	PS	74	14	74*	0	26	0
20	C	3 a 4 (iii)	PS	83	-8	17	0	83*	0
21	B	3 a 4 (iii)	PS	63	22	6	63*	3	29
22	D	3 a 6 (i)	KU	51	55	20	6	23	51*
23	A	3 b 1 (i)	KU	60	12	60*	29	9	3
24	B	3 b 1 (i)	KU	74	40	20	74*	0	6
25	C	3 b 2 (i)	KU	86	22	3	6	86*	6
26	C	3 b 2 (ii)	PS	100	0	0	0	100*	0
27	D	3 b 2 (ii)	PS	63	57	3	9	26	63*
28	D	3 b 2 (ii)	KU	97	27	0	0	0	97*
29	D	3 b 2 (iv)	KU	86	28	0	9	6	86*
30	C	3 b 2 (v)	PS	71	30	11	0	71*	17



Chemistry Intermediate 1 2008

Section A

Number of persons in test : 2675  
Average test score : 11.03  
Average facility value : 55.15  
Reliability : 0.62

Item	Key	Content Area	Ability	Fac	Disc	% Choosing Option			
						A	B	C	D
1	C	1 (a) (iv)	KU	85	21	9	3	85*	2
2	A	1 (b) (i)	KU	59	14	59*	3	11	26
3	D	1 (a) (ii)	PS	41	19	14	13	31	41*
4	B	1 (b) (ii)	KU	67	12	7	67*	3	23
5	C	1 (b) (ii)	PS	47	26	15	24	47*	13
6	A	1 (d) (iii)	PS	35	33	35*	10	14	40
7	A	1 (d) (iii)	KU	11	12	11*	9	52	28
8	D	2 (a) (i)	KU	32	20	33	8	26	32*
9	B	2 (a) (ii)	KU	65	26	12	65*	14	10
10	D	2 (a) (iii)	KU	86	28	2	6	6	86*
11	A	2 (a) (iv)	KU	58	15	58*	5	31	5
12	C	2 (b) (i)	KU	65	30	23	4	65*	9
13	A	2 (c) (iv)	KU	60	29	60*	24	4	12
14	C	2 (d) (i)	KU	62	18	5	1	62*	32
15	B	3 (b) (i)	KU	62	18	15	62*	13	9
16	D	3 (b) (ii)	KU	52	32	19	12	17	52*
17	B	3 (a) (ii)	KU	41	29	20	41*	23	16
18	D	3 (d) (i)	PS	45	22	8	30	17	45*
19	C	3 (d) (i)	PS	34	15	14	41	34*	11
20	A	3 (d) (i)	PS	97	7	97*	2	1	1





Chemistry Intermediate 2 2008

Section A

Number of persons in test : 3801  
 Average test score : 21.70  
 Average facility value : 72.32  
 Reliability : 0.79

Item	Key	Content Area	Ability	Fac	Disc	% Choosing Option			
						A	B	C	D
1	B	1 (b) (ii)	KU	86	29	3	86*	4	7
2	C	1 (a) (ii)	KU	67	34	25	1	67*	7
3	C	1 (a) (i)	KU	95	26	2	2	95*	1
4	D	1 (c) (ii)	PS	81	37	6	4	9	81*
5	D	1 (c) (ii)	PS	95	20	1	1	3	95*
6	A	1 (c) (ii)	PS	76	35	76*	17	5	3
7	A	1 (d) (ii)	PS	70	32	70*	7	16	7
8	D	2 (a) (i)	KU	65	38	8	3	23	65*
9	A	1 (f) (i)	PS	81	39	81*	10	5	4
10	C	1 (d) (iii)	KU	72	35	16	7	72*	6
11	D	2 (a) (ii)	KU	77	30	6	7	10	77*
12	C	2 (b) (i)	KU	32	15	11	53	32*	4
13	D	2 (b) (i)	PS	67	45	14	10	9	67*
		2 (c) (i)							
		2 (f)							
14	C	2 (b) (i)	PS	87	36	7	6	87*	1
15	B	2 (c)	PS	73	32	10	73*	4	13
16	A	2 (c) (iii)	KU	62	33	62*	17	4	17
17	C	2 (c) (iv)	KU	72	26	10	10	72*	8
18	D	2 (d) (ii)	PS	70	32	4	24	1	70*
19	A	2 (e) (ii)	KU	59	18	59*	18	18	4
20	C	2 (e) (iii)	KU	58	23	16	9	58*	17
21	B	3 (a) (i)	KU	95	20	2	95*	2	1
22	C	3 (a) (i)	PS	84	18	3	7	84*	6
23	B	3 (a) (ii)	KU	47	45	16	47*	16	20
24	A	3 (a) (iii)	PS	56	40	56*	10	23	10
25	A	3 (b) (i)	KU	95	17	95*	2	1	1
26	D	3 (c) (i)	KU	61	30	5	24	10	61*
27	D	3 (c) (i)	PS	74	34	8	7	10	74*
28	D	3 (c) (iv)	KU	75	27	7	11	7	75*
29	C	3 (c) (v)	KU	70	21	4	14	70*	11
30	D	3 (c) (v)	KU	70	23	7	1	21	70*



Chemistry Higher Level 2008

Section A

Number of persons in test : 9438  
 Average test score : 24.62  
 Average facility value : 61.54  
 Reliability : 0.83

Item	Key	Content Area	Ability	Fac	Disc	% Choosing Option			
						A	B	C	D
1	D	Standard Grade	KU	58	33	30	7	5	58*
2	B	Standard Grade	KU	53	12	9	53*	25	13
3	A	Standard Grade	PS	53	36	53*	22	21	5
4	D	Standard Grade	PS	57	47	13	10	20	57*
5	A	1 (a) (i)	KU	87	33	87*	4	6	3
6	D	Standard Grade	PS	58	42	12	9	21	58*
7	D	1 (a) (ii)	KU	61	25	4	7	28	61*
8	C	1 (b) (1)	KU	70	38	10	15	70*	5
9	A	1 (c)	KU	78	30	78*	10	3	9
10	D	1 (c)	KU	66	35	7	13	13	66*
11	C	1 (c)	KU	83	31	4	8	83*	4
12	D	1 (d) (i)	KU	36	20	10	40	14	36*
13	A	1 (d) (ii)	KU	65	27	65*	28	4	3
14	C	1 (d) (ii)	KU	74	36	10	5	74*	12
15	B	1 (d) (iii)	KU	41	36	52	41*	4	3
16	C	1 (e) (i)	KU	46	38	38	13	46*	3
17	D	1 (e) (i)	PS	69	24	9	12	10	69*
18	B	1 (e) (i)	PS	39	34	29	39*	10	22
19	C	1 (e) (iii)	PS	54	37	5	11	54*	29
20	B	2 (a) (ii)	KU	66	18	2	66*	30	2
21	D	2 (b) (i)	PS	50	24	19	20	10	50*
22	A	2 (c) (i)	KU	71	33	71*	11	14	4
		2 (c) (ii)							
23	A	2 (c) (iv)	KU	59	44	59*	15	5	20
24	B	2 (c) (i)	PS	56	36	14	56*	14	17
25	A	2 (e) (i)	KU	56	26	56*	5	14	26
26	B	2 (e) (i)	KU	42	20	41	42*	8	8
27	C	2 (f) (ii)	KU	88	33	3	3	88*	6
28	B	2 (f) (ii)	KU	82	28	6	82*	4	8
29	B	3 (c) (ii)	KU	85	27	3	85*	3	9
30	C	3 (c) (ii)	PS	29	29	31	16	29*	23
31	B	3 (d) (ii)	KU	71	24	14	71*	4	12
32	B	3 (d) (i)	KU	53	37	11	53*	11	25
33	C	3 (d) (ii)	KU	72	24	10	5	72*	12
34	A	3 (d) (ii)	PS	78	36	78*	9	5	8
35	C	3 (d) (ii)	PS	23	16	10	30	23*	36
36	D	3 (d) (iii)	KU	46	36	19	17	18	46*
37	D	3 (e) (i)	KU	58	39	5	11	25	58*
38	A	3 (e) (i)	KU	57	32	57*	16	10	16
39	C	3 (f) (i)	PS	92	21	2	4	92*	2
40	C	3 (f) (ii)	KU	83	25	2	12	83*	4



Chemistry Advanced Higher 2008

Section A

Number of persons in test : 2111  
 Average test score : 26.85  
 Average facility value : 67.13  
 Reliability : 0.83

Item	Key	Content Area	Ability	Fac	Disc	% Choosing Option			
						A	B	C	D
1	D	1 (a) (ii)	KU	37	10	11	46	6	37*
2	D	1 (a) (ii)	PS	69	29	4	15	13	69*
3	B	1 (b) (i)	PS	74	37	5	74*	9	13
4	C	1 (b) (iii)	KU	83	33	9	2	83*	5
5	B	1 (b) (iii)	KU	75	33	14	75*	6	5
6	A	1 (b) (iii)	KU	85	25	85*	1	6	8
7	D	1 (c) (i)	PS	75	16	14	4	7	75*
8	C	1 (c) (i)	PS	58	26	11	14	58*	17
9	A	1 (c) (ii)	PS	70	31	70*	6	17	6
10	C	1 (c) (ii)	PS	74	24	15	5	74*	6
11	B	1 (c) (ii)	PS	53	30	29	53*	14	4
12	D	2 (b) (i)	PS	43	30	37	17	3	43*
13	D	2 (b) (i)	PS	89	29	5	1	6	89*
14	C	2 (b) (i)	PS	68	38	17	10	68*	5
15	B	2 (b) (ii)	PS	39	25	18	39*	13	28
16	C	2 (b) (iii)	KU	78	28	8	4	78*	9
17	A	2 (c) (ii)	KU	73	38	73*	10	10	5
18	A	2 (d) (i)	KU	72	25	72*	1	10	17
19	B	2 (d) (i)	PS	85	35	4	85*	7	4
20	A	2 (e)	KU	74	24	74*	5	5	16
21	D	2 (e)	PS	70	34	6	8	16	70*
22	B	2 (e)	PS	78	27	15	78*	4	3
23	A	2 (e)	KU	75	40	75*	13	6	5
24	A	3 (a) (ii)	PS	51	38	51*	15	30	3
25	C	3 (a) (iii)	KU	79	29	2	16	79*	4
26	D	3 (a) (iii)	PS	70	25	11	15	3	70*
27	B	3 (b) (ii)	PS	73	33	4	73*	14	9
28	A	3 (b) (ii)	PS	67	32	67*	4	25	4
29	C	3 (b) (ii)	PS	71	37	9	10	71*	9
30	C	3 (b) (ii)	PS	63	41	14	10	63*	12
31	D	3 (b) (ii)	PS	48	39	21	12	18	48*
32	B	3 (b) (iii)	PS	63	39	22	63*	10	4
33	D	3 (b) (iii)	PS	57	35	11	22	10	57*
34	D	3 (b) (iv)	PS	65	37	26	4	5	65*
35	A	3 (b) (v)	PS	71	33	71*	15	4	9
36	B	3 (c)	PS	69	27	12	69*	10	9
37	A	3 (c)	PS	76	23	76*	14	6	4
38	C	3 (d) (i)	PS	72	30	5	14	72*	9
39	D	3 (d) (ii)	PS	58	36	14	18	10	58*
40	C	3 (e)	PS	38	22	29	13	38*	20



Human Biology Higher Level 2008

Section A

Number of persons in test : 3721  
 Average test score : 20.77  
 Average facility value : 69.24  
 Reliability : 0.76

Item	Key	Content Area	Ability	Fac	Disc	% Choosing Option			
						A	B	C	D
1	B	1 c (i)	KU	94	25	5	94*	1	0
2	C	1 c	KU	77	39	6	11	77*	5
3	A	1 c	KU	72	35	2*	8	4	16
4	B	1 c (iii)	KU	85	36	9	85*	4	2
5	B	1 c (v)	PS	77	23	6	77*	8	7
6	D	1 e (ii)	KU	79	27	6	7	9	79*
7	A	1 e (ii)	KU	55	35	5*	8	11	25
8	A	1 c (iv)	KU	80	32	0*	5	6	9
9	A	1 e (v)	KU	65	30	5*	11	11	13
10	B	1 f 1 (iv)	KU	35	22	0	35*	29	25
11	D	1 f 2 (i)	PS	74	28	3	1	22	74*
12	D	1 f 2 (iv)	KU	28	0	6	60	6	28*
13	D	2 a (i)	KU	67	34	5	8	10	67*
14	B	2 a (iii)	KU	76	24	7	76*	17	0
15	D	2 b (i)	PS	63	36	3	24	10	63*
16	C	2 c (iii)	KU	73	29	7	5	73*	14
17	A	2 b (i)	KU	65	35	5*	8	4	22
18	C	2 c (iii)	PS	67	22	6	17	67*	9
19	A	2	KU	66	30	6*	26	2	5
20	D	2 d (ii)	KU	72	46	8	14	6	72*
21	C	2 f (iii)	PS	85	16	1	1	85*	13
22	A	3 a (ii)	KU	69	28	9*	11	15	5
23	A	3 a (ii)	KU	67	28	7*	30	2	1
24	D	3 a (ii)	KU	69	28	4	7	20	69*
25	B	3 a (iii)	KU	62	-4	1	62*	1	36
26	B	3 b 2 (iii)	KU	84	33	9	84*	6	1
27	C	3 c 1 (i)	PS	71	29	6	8	71*	5
28	C	3 c 2 (iii)	PS	72	23	3	3	72*	2
29	C	3 c 3 (ii)	KU	49	26	0	25	49*	6
30	D	3 c 3 (iii)	KU	80	27	9	10	1	80*



Mathematics Higher Level 2008

Section A

Number of persons in test :19643  
 Average test score : 29.13  
 Average facility value : 72.84  
 Reliability : 0.77

Item	Key	Content Area	Fac	Disc	% Choosing Option			
					A	B	C	D
1	C	A 11	83	26	3	5	83*	9
2	D	G 10	78	33	8	11	3	78*
3	C	G 27	77	34	8	9	77*	6
4	B	A 13	82	27	4	82*	2	12
5	A	G 11	94	28	94*	2	2	1
6	B	T 7	69	35	16	69*	6	9
7	C	G 2	74	40	12	8	74*	6
8	D	A 3	83	25	3	9	5	83*
9	B	T 8	81	41	9	81*	8	2
10	A	A 17	73	37	73*	7	12	9
11	B	G 24	87	24	2	87*	7	4
12	C	G 21	67	24	10	14	67*	9
13	A	A 15	59	42	59*	4	32	5
14	B	C 23	58	39	31	58*	5	6
15	C	C 21	84	39	4	6	84*	6
16	A	A 5	72	42	72*	11	6	11
17	C	A 1	62	22	14	16	62*	9
18	C	G 29	52	33	3	16	52*	29
19	B	A 33	76	29	7	76*	7	9
20	D	A 7	46	44	15	17	22	46*



Physics Intermediate 1 2008

Section A

Number of persons in test : 2301  
 Average test score : 12.44  
 Average facility value : 62.20  
 Reliability : 0.60

Item	Key	Content Area	Ability	Fac	Disc	% Choosing Option				
						A	B	C	D	E
1	B	1.2.5	KU	78	14	17	78*	2	0	1
2	B	1.4.5	KU	69	28	20	69*	4	5	3
3	C	1.5.8/9	KU	40	4	25	20	40*	7	9
4	B	1.5.5/6/7	PS	88	24	0	88*	7	4	1
5	C	2.1.5/7/12/14	PS	41	25	25	8	41*	13	13
6	E	1.5.2	KU	30	27	11	6	15	38	30*
7	E	2.3.4/5	KU	53	19	8	6	12	21	53*
8	B	2.1.16	PS	69	18	5	69*	18	3	5
9	E	3.3.1/2/3/4/7	KU	76	22	3	4	9	7	76*
10	C	3.1.9/10	PS	67	11	25	3	67*	2	4
11	D	3.3.5	PS	55	31	4	13	9	55*	18
12	D	4.2.1	KU	92	19	1	1	2	92*	5
13	C	4.3.3	KU	54	27	1	8	54*	33	3
14	B	4.3.7	KU	75	31	4	75*	19	2	0
15	D	5.1.12	PS	32	13	7	51	7	32*	3
16	B	5.3.2/3	KU	83	24	6	83*	5	4	2
17	A	5.2.4	KU	86	18	86*	1	6	7	0
18	E	5.2.3	KU	26	11	26	40	3	3	26*
19	D	6.1.8/12	KU	86	22	1	3	3	86*	7
20	A	6.2.1/3	PS	44	20	44*	23	8	3	21



Physics Intermediate 2 2008

Section A

Number of persons in test : 3448  
 Average test score : 13.44  
 Average facility value : 67.20  
 Reliability : 0.77

Item	Key	Content Area	Ability	Fac	Disc	% Choosing Option				
						A	B	C	D	E
1	E	1.1.7	KU	91	26	4	2	2	1	91*
2	C	1.1.7	KU	52	27	7	3	52*	6	31
3	C	1.1.12	PS	24	32	57	10	24*	6	2
4	B	1.2.13	PS	66	32	7	66*	11	11	5
5	D	1.3.6	KU	52	27	3	4	9	52*	30
6	B	1.3.12	KU	74	26	3	74*	3	7	13
7	A	1.4.5	KU	74	42	74*	7	6	8	4
8	D	2.1.5	KU	96	15	1	1	0	96*	1
9	C	2.1.11/12	PS	58	37	2	8	58*	30	2
10	D	2.1.2	PS	93	17	2	2	2	93*	1
11	D	2.2.6	PS+	82	38	4	8	3	82*	2
12	E	2.3.3	KU	92	24	1	2	4	2	92*
13	C	2.4.16	KU	75	30	11	3	75*	6	5
14	B	3.1.5	PS	73	40	5	73*	12	5	5
15	C	3.3.3	KU	71	35	12	7	71*	6	3
16	A	3.3.8	PS+	43	34	43*	8	14	24	12
17	B	4.1.2	KU	74	35	11	74*	2	4	9
18	A	4.2.1	KU	69	41	69*	19	3	5	4
19	E	4.2.4	KU	46	48	15	14	7	18	46*
20	A	4.4.4	KU	38	40	38*	12	8	29	13



Physics Higher Level 2008

Section A

Number of persons in test : 8727  
 Average test score : 15.00  
 Average facility value : 75.00  
 Reliability : 0.77

Item	Key	Content Area	Ability	Fac	Disc	% Choosing Option				
						A	B	C	D	E
1	D	1.1.3	KU	84	28	5	7	4	84*	1
2	A	1.1.6 1.2.6	PS	82	35	82*	8	8	1	1
3	B	1.3.2/3	PS+	68	36	5	68*	12	7	8
4	C	1.3.4	PS	82	22	3	6	82*	4	5
5	D	1.4.5	KU	79	44	12	3	3	79*	3
6	C	1.4.10	PS	75	31	10	8	75*	4	3
7	D	1.5.6	KU	69	38	3	16	4	69*	8
8	E	2.1.6	PS	64	41	6	4	11	15	64*
9	E	2.1.7	KU	68	28	22	4	2	4	68*
10	D	2.2.1/2	PS+	70	46	2	6	19	70*	2
11	A	2.2.3	KU	70	28	70*	5	22	2	1
12	B	2.2.4 2.4.4	PS	82	42	6	82*	2	3	8
13	E	3.1.6	KU	78	26	1	3	4	14	78*
14	C	3.1.8	KU	66	37	2	7	66*	3	22
15	A	4.2.8	PS	90	22	90*	2	3	1	3
16	B	3.2.13	KU	89	31	7	89*	1	1	1
17	B	3.2.12/13/16	KU	54	34	13	54*	10	9	14
18	C	3.3.24	KU	88	20	1	1	88*	9	2
19	C	3.4.2	KU	58	38	10	10	58*	13	9
20	D	3.4.2/3	KU	85	34	2	8	1	85*	4





## Scottish Qualifications Authority

### Notes for Guidance on Statistical Data on Objective Tests

**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.