

Scottish Qualifications Authority

Intermediate 2 Chemistry - 2000 Examination

Paper 1A

Statistical Data from Sample of Candidates

Item	Syllabus		Ability	Facility	r	Percentage Choosing Option				
	Section					A	B	C	D	Omit
1	1c	KU	0.67	0.28	0.28	67*	27	4	2	0
2	1c	KU	0.55	0.40	0.40	7	26	11	55*	0
3	1e	PS	0.27	0.10	0.10	17	27*	6	49	1
4	1a	KU	0.42	0.19	0.19	6	3	49	42*	0
5	1b	PS	0.48	0.24	0.24	41	5	48*	5	1
6	2a	KU	0.89	0.18	0.18	89*	3	2	6	0
7	2a	KU	0.36	0.19	0.19	15	42	36*	6	0
8	2b	PS	0.38	0.15	0.15	38*	17	22	22	1
9	2e	KU	0.36	0.30	0.30	18	33	13	36*	0
10	2c	PS	0.31	0.31	0.31	31*	35	14	20	0
11	2e	KU	0.39	0.29	0.29	39*	17	29	15	0
12	2e	KU	0.67	0.27	0.27	8	20	5	67*	0
13	2e	KU	0.78	0.27	0.27	5	16	78*	1	0
14	2b	KU	0.71	0.34	0.34	5	71*	3	21	0
15	2d	KU	0.74	-0.03	-0.03	7	3	74*	14	1
16	2b	KU	0.80	0.29	0.29	2	8	80*	10	0
17	3c	PS	0.52	0.23	0.23	16	25	52*	7	0
18	3a	PS	0.32	0.19	0.19	25	39	4	32*	0
19	3c	PS	0.42	0.28	0.28	5	17	35	42*	1
20	3b	KU	0.50	0.17	0.17	50*	9	10	31	0
21	3b	PS	0.59	0.07	0.07	3	26	59*	12	0
22	1&2	PS	0.22	0.09	0.09	22*	40	18	20	1
23	3c	PS	0.45	0.26	0.26	9	9	45*	36	0
24	3c	PS	0.79	0.30	0.30	2	12	6	79*	0
25	3a	KU	0.73	0.31	0.31	10	73*	4	12	1

Scottish Qualifications Authority

Intermediate 2 Chemistry - 2001 Examination

Paper 1A

Statistical Data from Sample of Candidates

Item	Syllabus Section	Ability	Facility	r	Percentage Choosing Option				
					A	B	C	D	Omit
1	1a	KU	0.72	0.24	7	15	5	72*	1
2	1c	PS	0.90	0.19	90*	6	0	4	1
3	1d	KU	0.29	0.32	29*	9	45	17	0
4	2d	KU	0.51	0.25	19	19	51*	11	0
5	1b	KU	0.79	0.25	6	79*	5	10	0
6	1e	PS	0.30	0.14	49	30*	16	4	0
7	1b	KU	0.59	0.23	10	2	29	59*	1
8	1f	KU	0.49	0.20	49*	12	4	35	0
9	2a	KU	0.49	0.17	49*	8	20	22	0
10	2a	KU	0.56	0.05	23	56*	16	3	1
11	2b	KU	0.89	0.17	4	89*	4	2	0
12	2a	PS	0.45	0.24	2	9	45*	44	0
13	2c	KU	0.42	0.22	18	42*	38	3	0
14	2	KU	0.56	0.21	18	56*	6	20	1
15	2d	PS	0.26	0.30	24	13	37	26*	0
16	2e	KU	0.71	0.02	22	71*	5	1	0
17	2e	PS	0.71	0.23	14	11	71*	4	0
18	3a	KU	0.66	0.32	5	14	15	66*	0
19	3a	KU	0.69	0.16	18	3	69*	11	0
20	3b	KU	0.24	0.10	46	16	24*	14	0
21	3a	PS	0.29	-0.06	11	28	29*	33	0
22	3c	KU	0.26	0.15	26*	18	28	27	0
23	3c	KU	0.47	0.17	12	11	29	47*	1
24	3c	PS	0.54	0.11	7	24	14	54*	1
25	3c	PS	0.67	0.25	67*	19	11	3	0



2002
INT2

Scottish Qualifications Authority

Intermediate 2 Chemistry - 2002 Examination

Paper 1A

Statistical Data from Sample of Candidates

Item	Syllabus Section	Ability	Facility	r	Percentage Choosing Option				
					A	B	C	D	Omit
1	2a	PS	0.87	-0.03	87*	10	2	1	0
2	1	KU	0.85	0.32	3	4	8	85*	0
3	1	KU	0.77	0.29	18	77*	4	2	0
4	1	KU	0.74	0.23	11	74*	12	3	0
5	2c	PS	0.42	0.32	23	21	42*	14	1
6	2c	PS	0.67	0.27	3	13	16	67*	0
7	2c	PS	0.84	0.22	2	10	84*	4	0
8	2c	PS	0.31	0.25	36	15	31*	18	0
9	2	KU	0.94	0.26	3	3	94*	1	0
10	2c	PS	0.73	0.19	9	73*	5	12	0
11	2c	PS	0.78	0.26	5	4	78*	13	0
12	2	KU	0.87	0.19	7	87*	4	3	0
13	2	KU	0.37	0.11	25	24	11	37*	2
14	2	KU	0.55	0.31	55*	9	18	18	0
15	2	KU	0.50	0.19	5	36	50*	9	1
16	2c	PS	0.20	0.14	34	25	20	20*	0
17	2c	PS	0.62	0.23	9	62*	18	12	0
18	3	KU	0.65	0.17	65*	15	13	7	1
19	3	KU	0.67	0.29	7	7	19	67*	0
20	3	KU	0.75	0.31	75*	8	12	5	0
21	3	KU	0.43	0.30	43*	33	13	11	0
22	2b	PS	0.28	0.21	35	28*	8	28	1
23	2c	PS	0.39	0.27	13	28	19	39*	1
24	3	KU	0.57	0.07	57*	12	19	9	3
25	2b	PS	0.54	0.19	54*	18	16	13	0

Scottish Qualifications Authority

Intermediate 2 Chemistry - 2003 Examination

Paper 1A

Statistical Data from Sample of Candidates

Item	Syllabus Section	Ability	Facility	r	Percentage Choosing Option				
					A	B	C	D	Omit
1	1ai	KU	0.62	0.25	12	62*	22	3	1
2	1bii	PS	0.26	0.05	5	22	26*	46	1
3	1ci	KU	0.71	0.29	20	71*	7	2	0
4	1cii	KU	0.84	0.28	84*	7	3	6	0
5	1ciii	KU	0.75	0.21	1	18	75*	6	0
6	1di	PS	0.33	0.32	36	10	21	33*	0
7	1diii	KU	0.81	0.22	6	81*	3	11	0
8	1ei	KU	0.89	0.10	1	89*	7	3	0
9	2bii	PS	0.67	0.24	4	9	19	67*	2
10	2biv	KU	0.46	0.29	46*	17	12	25	0
11	2dii	PS	0.67	0.22	7	24	2	67*	0
12	2ciii	KU	0.49	0.47	24	49*	19	7	0
13	2di	KU	0.60	0.22	26	5	60*	10	0
14	2di	PS	0.44	0.47	44*	22	21	13	0
15	2ei/ii	PS	0.75	0.37	19	3	3	75*	0
16	3ai	KU	0.79	0.35	79*	2	5	14	1
17	3aii	KU	0.55	0.34	22	20	55*	3	0
18	3aiii	PS	0.44	0.30	11	20	44*	23	2
19	3bi	PS	0.86	0.13	12	1	86*	1	1
20	3biv	PS	0.73	0.22	4	5	18	73*	0
21	3bv	KU	0.76	0.32	76*	10	7	7	0
22	3ci/iii	KU	0.85	0.19	4	3	7	85*	1
23	3cv	KU	0.58	0.19	10	58*	20	12	0
24	1cii	KU	0.81	0.36	81*	10	4	5	0
25	1dii	KU	0.36	0.32	11	48	4	36*	1
26	2aai	KU	0.74	0.30	74*	8	5	13	0
27	2ei	KU	0.64	0.38	2	13	21	64*	0
28	3bi	PS	0.58	0.14	19	58*	9	14	0
29	1fi	PS	0.93	0.28	0	5	93*	1	0
30	2ei	KU	0.69	0.32	9	10	11	69*	0

Scottish Qualifications Authority

Intermediate 2 Chemistry - 2004 Examination

Section A

Statistical Data from Sample of Candidates

Item	Syllabus		Facility	r	Percentage Choosing Option				Omit
	Section	Ability			A	B	C	D	
1	1ai	PS	0.92	0.22	2	5	1	92*	0
2	1aii	PS	0.78	0.35	78*	5	10	8	0
3	1bi	PS	0.51	0.35	10	51*	11	28	0
4	1bii	PS	0.73	0.32	8	16	73*	3	0
5	1cii	KU	0.66	0.35	66*	28	4	1	0
6	1di	KU	0.52	0.43	14	4	29	52*	0
7	1div	KU	0.48	0.31	48*	24	10	17	0
8	2bi	KU	0.85	0.33	9	85*	5	2	0
9	2di	PS	0.81	0.30	8	6	81*	5	0
10	2eiii	KU	0.43	0.44	6	35	43*	16	0
11	2bi	KU	0.86	0.33	86*	8	6	1	0
12	2bi	PS	0.75	0.46	9	12	75*	4	0
13	2bi	PS	0.86	0.35	2	86*	7	5	0
14	2ciii	KU	0.41	0.41	18	9	41*	31	0
15	2dii	KU	0.85	0.32	3	85*	1	11	0
16	2bii	PS	0.58	0.32	30	58*	9	3	1
17	2ei	PS	0.46	0.36	20	46*	20	15	0
18	2ei	KU	0.60	0.46	14	16	11	60*	0
19	2eiii	KU	0.47	0.40	26	18	47*	8	1
20	2diii	KU	0.48	0.36	48*	14	31	7	0
21	3aii	KU	0.70	0.40	14	12	4	70*	0
22	3cii	KU	0.69	0.35	22	3	69*	6	0
23	3ai	PS	0.74	0.22	11	74*	11	5	0
24	3bi	KU	0.59	0.28	59*	18	13	10	0
25	3biv	PS	0.61	0.34	10	10	18	61*	1
26	3bi	PS	0.38	0.18	38*	45	10	7	0
27	3ci	KU	0.60	0.24	6	23	11	60*	0
28	3ci	PS	0.65	0.25	8	65*	20	6	0
29	3ci	PS	0.60	0.47	18	10	11	60*	0
30	3civ	KU	0.58	0.29	58*	11	18	13	0

Chemistry Intermediate 2 2005

Section A

Number of persons in test : 2711
 Average test score : 17.68
 Average facility value : 58.94
 Reliability : 0.83

Item	Syllabus Section	Ability	Fac	Discr	% Choosing Option			
					A	B	C	D
1	1b ii	PS	38	17	41	38*	12	9
2	1a ii	KU	61	37	5	16	17	61*
3	1b iii	KU	70	31	70*	9	16	5
4	1c ii	PS	89	26	7	89*	2	2
5	1c iii	KU	58	44	11	17	13	58*
6	1d i	KU	38	36	38*	4	12	46
7	1d iii	KU	59	36	59*	11	23	7
8	1f ii	PS	53	26	8	28	10	53*
9	2a i	PS	35	36	35*	36	12	17
10	2b ii	KU	92	24	3	4	92*	1
11	2b i	PS	66	45	13	66*	7	14
	2b ii							
12	2b i	KU	82	30	4	82*	2	12
13	2b iv	KU	52	49	5	8	35	52*
14	2c i	PS	76	36	5	76*	17	2
15	2c iii	KU	70	31	6	2	70*	22
16	2c iii	PS	53	29	20	53*	11	16
17	2e i	KU	66	34	11	16	7	66*
18	2e ii	KU	76	30	11	5	76*	8
19	3a i	KU	69	34	10	10	10	69*
20	3a i	PS	47	33	31	47*	7	15
	3a iii							
21	3a ii	KU	50	41	38	10	50*	2
22	3b ii	PS	28	26	11	51	10	28*
23	3b iv	KU	47	42	16	22	15	47*
24	3b v	KU	83	36	83*	4	5	8
25	3c i	KU	38	38	22	28	38*	11
26	3c i	KU	53	33	53*	9	31	7
27	3a i	KU	78	36	8	3	78*	11
28	3c ii	KU	41	35	8	41*	32	19
29	3c v	KU	40	38	40*	27	16	17
30	3c v	PS	60	30	6	16	60*	18

2006

Chemistry Intermediate 2

Section A

Number of persons in test : 3329
 Average test score : 21.09
 Average facility value : 70.31
 Reliability : 0.81

Item	Content Area	Ability	Fac	Disc	% Choosing Option			
					A	B	C	D
1	1 (a) (i)	KU	83	36	6	8	3	83*
2	1 (a) (ii)	KU	63	36	63*	20	14	3
3	1 (c) (ii)	KU	80	35	10	5	80*	5
4	1 (c) (ii)	PS	68	36	2	2	68*	29
5	1 (c) (iii)	PS	82	32	2	82*	2	14
6	1 (d) (i)	KU	73	43	73*	11	8	8
7	1 (d) (i)	PS	66	36	3	16	15	66*
8	1 (e) (i)	KU	71	44	11	10	71*	7
9	1 (f) (i)	KU	71	35	4	71*	5	19
10	1 (f) (i)	PS	76	45	76*	6	9	8
11	2 (a) (i)	KU	89	25	5	89*	5	2
12	2 (a) (ii)	KU	66	32	12	8	13	66*
13	2 (b) (i)	PS	43	17	43*	3	47	7
14	2 (b) (iv)	KU	86	32	2	86*	7	5
15	2 (c) (i)	PS	41	34	21	41*	22	16
16	2 (c) (ii)	PS	72	50	11	12	72*	3
17	2 (c) (iii)	KU	94	25	2	94*	3	1
18	2 (d) (ii)	KU	75	21	4	9	75*	12
19	2 (e) (ii)	KU	85	32	85*	2	1	11
20	2 (e) (ii)	KU	67	22	17	10	67*	6
21	3 (a) (i)	PS	50	35	16	20	14	50*
22	3 (a) (iii)	KU	81	21	2	15	81*	2
23	3 (a) (iii)	KU	79	32	79*	10	7	4
24	3 (b) (i)	KU	56	32	56*	25	9	10
25	3 (b) (iv)	PS	83	20	2	2	13	83*
26	3 (b) (iv)	PS	76	32	76*	11	7	6
27	3 (c) (i)	PS	55	32	8	10	55*	27
28	3 (c) (ii)	PS	58	26	16	58*	10	16
29	3 (c) (iv)	KU	70	33	13	11	6	70*
30	3 (c) (v)	KU	49	33	7	9	34	49*



Chemistry Intermediate 2 2007

Section A

Number of persons in test : 3696
 Average test score : 20.68
 Average facility value : 68.93
 Reliability : 0.81

Item	Key	Content	Area	Ability	Fac	Disc	% choosing option				
							A	B	C	D	
1	B	1	(a)	(i)	PS	92	21	3	92*	4	1
2	D	1	(a)	(ii)	KU	74	17	13	2	12	74*
3	A	1	(a)	(ii)	KU	79	22	79*	10	9	2
4	D	1	(c)	(iii)	KU	65	44	6	18	11	65*
5	C	1	(a)	(ii)	PS	68	29	24	4	68*	4
6	A	1	(d)	(ii)	PS	79	31	79*	9	7	6
7	B	1	(d)	(iii)	KU	78	29	9	78*	8	4
8	B	2	(a)	(ii)	KU	71	30	17	71*	9	4
9	D	2	(b)	(i)	PS	76	38	4	9	11	76*
10	D	2	(b)	(ii)/(iii)	KU	64	39	1	7	27	64*
11	A	2	(b)	(iii)	KU	66	44	66*	3	3	28
12	B	2	(c)	(i)	PS	82	31	9	82*	3	6
13	C	2	(d)	(i)	KU	54	25	7	11	54*	28
14	B	2	(d)	(ii)	PS	00	-1	0	100*	0	0
15	D	2	(e)	(i)	KU	71	39	8	7	14	71*
16	C	2	(e)	(iii)	KU	66	42	13	13	66*	8
17	B	2	(e)	(iii)	KU	52	43	16	52*	27	5
18	B	3	(a)	(i)	PS	76	25	11	76*	10	3
19	D	3	(a)	(i)	PS	77	34	4	15	4	77*
20	A	3	(a)	(i)	KU	85	37	85*	4	8	3
21	B	3	(a)	(ii)	PS	69	29	4	69*	7	19
22	C	3	(b)	(i)	KU	54	25	16	14	54*	16
23	C	3	(b)	(iii)	KU	71	24	12	5	71*	12
24	D	3	(b)	(iv)	PS	62	45	14	14	8	62*
25	A	3	(b)	(v)	KU	52	30	52*	8	5	35
26	B	3	(c)	(i)	KU	50	34	6	50*	27	17
27	C	3	(c)	(i)	PS	90	26	2	5	90*	3
28	B	3	(c)	(ii)	PS	47	27	30	47*	11	12
			1	(d)							
29	A	3	(c)	(iv)	PS	53	25	53*	16	21	10
30	D	3	(c)	(v)	KU	46	41	25	22	7	46*

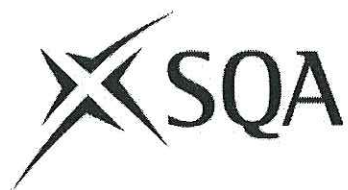


Chemistry Intermediate 2 2008

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 Intermediate 2 2009

Section A

Number of persons in test : 4078
 Average test score : 20.23
 Average facility value : 67.43
 Reliability : 0.78

Item	Key	Content Area	Ability	Fac	Disc	% Choosing Option			
						A	B	C	D
1	A	1 (a) (i)	PS	95	22	95*	1	4	1
2	C	1 (a) (ii)	PS	69	30	23	3	69*	5
3	D	1 (b) (ii)	PS	95	20	0	1	3	95*
4	B	1 (c) (iii)	PS	89	27	5	89*	4	3
5	B	1 (a) (ii)	KU	74	33	4	74*	16	5
6	A	1 (d) (i)	KU	70	41	70*	5	16	8
7	D	1 (d) (i)	PS	81	20	13	2	4	81*
8	C	1 (d) (ii)	PS	43	5	2	47	43*	8
9	B	1 (d) (ii)	PS	48	28	27	48*	10	15
10	D	1 (d) (iv)	PS	48	36	31	8	12	48*
11	A	1 (e) (ii)	KU	44	43	44*	53	1	2
12	B	2 (a) (i)	KU	55	35	3	55*	17	25
13	C	2 (a) (i)	PS	51	19	20	16	51*	12
14	D	2 (a) (ii)	KU	77	35	7	8	8	77*
15	C	2 (b) (i)	KU	87	30	1	5	87*	8
16	A	2 (b) (i)	KU	85	28	85*	5	5	5
17	D	2 (c) (i)	PS	73	39	12	5	10	73*
18	A	2 (d) (i)	PS	37	30	37*	26	23	14
19	D	2 (e) (i)	KU	71	39	9	14	6	71*
20	A	2 (e) (iii)	KU	70	25	70*	12	15	2
21	D	3 (a) (i)	PS	81	24	10	7	3	81*
22	B	3 (b) (i)	PS	86	25	4	86*	9	1
23	A	3 (a) (iii)	KU	53	36	53*	10	11	26
24	D	3 (a) (i)	PS	46	23	4	9	41	46*
25	C	3 (b) (iv)	KU	57	42	13	10	57*	19
26	C	3 (a) (i)	PS	65	8	2	25	65*	7
27	A	3 (c) (i)	PS	80	31	80*	11	6	2
28	C	3 (c) (ii)	KU	53	47	6	12	53*	29
29	A	3 (c) (i)	PS	73	28	73*	6	12	9
		3 (c) (iv)							
30	B	3 (c) (v)	KU	67	27	7	67*	17	8



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 Intermediate 2 2011

Section A

Number of persons in test : 4,461
 Average test score : 19.75
 Average facility value : 65.83
 Reliability : 0.80

Item	Key	Content Area	Ability	Fac	Disc	% Choosing option			
						A	B	C	D
1	B	1 (a) (i)	PS	71	32	12	71*	12	4
2	D	1 (a) (ii)	KU	71	37	4	9	16	71*
3	A	1 (b) (ii)	KU	84	26	84*	4	4	9
4	D	1 (c) (i)	PS	72	39	6	16	6	72*
5	A	1 (c) (ii)	KU	88	32	88*	5	4	4
6	A	1 (a) (ii)	PS	15	13	15*	47	20	18
		3 (c) (iii)							
7	D	1 (d) (iii)	KU	74	26	14	10	2	74*
8	C	1 (e) (ii)	PS	54	34	18	15	54*	13
9	A	2 (a) (i)	PS	41	36	41*	36	12	11
10	C	2 (a) (ii)	KU	94	22	4	1	94*	1
11	C	2 (a) (ii)	KU	32	17	17	41	32*	9
12	C	2 (b) (i)	PS	81	41	6	7	81*	6
13	B	2 (b) (i)	KU	78	37	4	78*	3	15
14	B	2 (c) (i)	PS	40	40	20	40*	22	18
15	A	2 (c)	PS	86	33	86*	5	2	7
16	D	2 (e) (i)	KU	79	38	4	8	10	79*
17	C	2 (e) (ii)	KU	51	14	41	4	51*	3
18	D	2 (e) (ii)	KU	40	33	25	23	12	40*
19	B	2 (e) (iii)	KU	57	28	12	57*	13	17
20	C	2 (e) (iii)	PS	49	37	26	20	49*	4
21	A	3 (a) (i)	PS	60	30	60*	12	22	6
22	B	3 (a) (i)	PS	74	36	10	74*	10	6
23	D	3 (a) (i/iii)	PS	53	40	27	12	8	53*
24	A	3 (b) (i)	KU	88	30	88*	5	3	4
25	D	3 (b) (v)	KU	90	29	2	2	7	90*
26	D	3 (c) (i/iii)	KU	85	24	4	5	6	85*
27	B	3 (c) (iii)	PS	63	13	2	63*	34	1
28	D	3 (c) (iv)	PS	56	40	13	20	10	56*
29	C	3 (c) (v)	KU	86	15	2	4	86*	8
30	C	3 (c) (v)	PS	64	34	8	13	64*	16



Chemistry Intermediate 2 2012

Section A

Number of persons in test : 4,514
 Average test score : 19.56
 Average facility value : 65.19
 Reliability : 0.82

Item	Key	Content Area	Ability	Fac	Disc	% Choosing option			
						A	B	C	D
1	A	1 (a) (i)	PS	84	29	84*	2	1	13
2	B	1 (b) (i)	PS	95	20	2	95*	0	2
3	A	1 (a) (ii)	PS	45	35	45*	15	37	2
4	D	1 (c) (ii)	PS	81	38	7	3	9	81
5	C	1 (d) (i)	PS	40	52	8	2	40*	50
6	D	1 (d) (i)	PS	61	48	12	9	18	61*
7	A	1 (d) (i)	KU	78	40	78*	10	6	6
8	A	1 (d) (i)	KU	49	35	49*	33	16	2
9	B	1 (d) (ii)	PS	63	39	13	63*	17	7
10	A	1 (d) (iii)	KU	55	18	55*	39	1	6
11	B	2 (a) (i)	PS	68	37	6	68*	22	4
12	A	2 (a) (ii)	KU	76	35	76*	6	10	9
13	D	2 (b) (i)	PS	78	36	3	7	12	78*
14	C	2 (b) (iii)	PS	48	7	15	17	48*	20
15	A	2 (c) (ii)	PS	70	41	70*	21	5	4
16	D	2 (d) (i)	KU	47	36	37	8	9	47*
17	C	2 (d) (i)	PS	84	35	4	7	84*	4
18	D	2 (d) (i)	KU	68	37	5	25	3	68*
19	C	2 (e) (iii)	KU	85	24	2	12	85*	1
20	C	2 (e) (ii)	KU	71	28	17	8	71*	4
21	B	3 (a) (i)	PS	66	32	13	66*	13	8
22	B	3 (b) (i)	KU	61	14	4	61*	8	28
23	A	3 (c) (i)	PS	87	33	87*	5	3	4
24	C	3 (b) (i)	KU	58	28	17	20	58*	4
25	D	3 (b) (i)	PS	44	49	9	23	23	44*
26	B	3 (b) (iii)	KU	64	37	14	64*	12	9
27	C	3 (c) (i)	KU	38	38	29	22	38*	10
28	D	3 (c) (i/ii)	PS	66	22	8	21	4	66*
29	C	3 (c) (iv)	PS	65	37	13	10	65*	12
30	D	3 (c)	KU	61	37	7	10	22	61*



Chemistry Intermediate 2 2013

Section A

Number of persons in test: 4,625
 Average test score: 20.52
 Average facility value: 68.39
 Reliability: 0.84

Label	Key	Content Area	Abilities	Fac	Disc	% Choosing Option			
						A	B	C	D
1	B	1 a	KU	93	10	1	93*	3	3
2	A	1 a	PS(c)	83	30	83*	2	7	7
3	B	1 a	PS(c)	69	36	2	69*	26	3
4	B	1 b	KU	79	28	5	79*	11	5
5	C	1 c	PS(c)	92	27	1	2	92*	5
6	A	1 d	PS(c)	77	44	77*	5	3	15
7	B	1 e	PS(c)	39	46	4	39*	2	55
8	A	1 e	PS(b)	64	34	64*	6	29	1
9	D	1 f	PS(b)	82	34	4	9	5	82*
10	C	2 b	PS(c)	90	28	4	4	90*	2
11	C	2 a	PS(c)	46	42	2	1	46*	50
12	C	2 b/2 c	PS(c)	68	46	8	21	68*	3
13	B	2 c	KU	84	22	3	84*	5	8
14	C	2 c	PS(c)	61	52	17	5	61*	16
15	B	2 d	PS(c)	78	42	7	78*	10	5
16	B	2 d	KU	68	27	21	68*	2	9
17	D	2 e	PS(c)	68	39	22	5	5	68*
18	C	3 a	KU	83	36	6	3	83*	8
19	D	2 e	KU	65	44	11	17	7	65*
20	A	3 a	KU	78	34	78*	10	9	4
21	C	3 a	KU	60	42	18	17	60*	5
22	A	3 b	KU	59	37	59*	24	9	8
23	D	3 a	PS(c)	40	27	3	14	42	40*
24	A	3 b	KU	42	34	42*	15	16	28
25	D	3 b	PS(d)	82	25	2	4	12	82*
26	D	3 c	PS(c)	60	39	7	22	10	60*
27	A	3 c	PS(a)	68	43	68*	5	25	2
28	A	3 c	PS(c)	74	28	74*	6	18	2
29	B	3 c	KU	45	23	27	45*	12	16
30	D	3	PS(a)	58	39	16	13	13	58*



Chemistry Intermediate 2 2014

Section A

Number of persons in test: 3,818
 Average test score: 20.11
 Average facility value: 67.02
 Reliability: 0.82

Item	Key	Content Area	Ability	Fac	Disc	% Choosing Option			
						A	B	C	D
1	D	1 a i	PS	84	30	5	8	3	84*
2	A	1 a ii	KU	76	39	76*	14	9	2
3	B	1 a ii	PS	39	41	3	39*	25	32
4	B	1 b iii	KU	97	14	1	97*	1	0
5	D	1 c ii	PS	92	26	2	1	4	92*
6	A	1 d ii	KU	54	34	54*	22	10	14
7	B	1 d iii	KU	47	47	10	47*	31	13
8	A	1 d iv	PS	56	33	56*	15	17	12
9	C	1 e iii	KU	90	26	1	6	90*	2
10	C	1 f i	PS	81	40	6	8	81*	5
11	B	2 a i	KU	92	21	4	92*	3	1
12	C	2 a i	PS	45	32	13	6	45*	36
13	A	2 b iii	KU	75	35	75*	9	8	7
14	B	2 c i	PS	42	31	19	42*	15	23
15	C	2 c iii	KU	81	26	9	3	81*	7
16	D	2 d i	PS	74	24	9	3	14	74*
17	B	2 e i	KU	60	22	4	60*	4	32
18	C	2 e i	KU	74	36	4	17	74*	5
19	C	2 e ii	KU	77	35	12	10	77*	1
20	C	3 a i	KU	79	41	7	3	79*	11
21	B	3 a i/iii	PS	63	44	19	63*	5	13
22	A	3 a i	PS	68	29	68*	11	9	12
23	B	3 a i	PS	56	21	16	56*	11	17
24	D	3 b iii	KU	57	26	13	10	19	57*
25	A	3 b i/ 3 c iii	KU	79	32	79*	10	5	5
26	D	3 b iv	KU	59	47	11	17	13	59*
27	C	3 c v	KU	46	32	21	26	46*	8
28	C	3 c i	PS	48	33	4	33	48*	15
29	B	3 c ii	KU	49	38	32	49*	12	7
30	B	3 c iv	KU	68	37	10	68*	8	13

Chemistry Intermediate 2 (Objective Test) 2015

Item Label	Item nr.	Weight	Key	A	B	C	D	E	O/D	single	Mis-#	Max	Mean	P	Sd	RSK	Rit	Rlr	AR	
1	1	1	C	5	1	94*	1		0	0	1	0.94	94	0.24	0.24			33	29	82
2	2	1	C	1	2	93*	5		0	0	1	0.93	93	0.26	0.26			34	29	82
3	3	1	A	86*	10	3	1		0	2	1	0.86	86	0.35	0.35			34	27	82
4	4	1	B	12	83*	4	0		0	0	1	0.83	83	0.37	0.37			44	38	81
5	5	1	C	23	6	60*	12		0	0	1	0.60	60	0.49	0.49			45	36	81
6	6	1	D	2	3	6	89*		0	0	1	0.89	89	0.31	0.31			42	37	82
7	7	1	D	4	3	8	84*		0	0	1	0.84	84	0.36	0.36			50	44	81
8	8	1	B	4	95*	1	1		0	0	1	0.95	95	0.23	0.23			31	27	82
9	9	1	B	11	68*	9	12		0	0	1	0.68	68	0.47	0.47			36	27	82
10	10	1	A	87*	4	4	4		0	0	1	0.87	87	0.33	0.33			42	37	82
11	11	1	C	34	7	49*	10		0	0	1	0.49	49	0.50	0.50			52	44	81
12	12	1	A	48*	11	23	18		0	1	1	0.48	48	0.50	0.50			33	24	82
13	13	1	B	8	38*	28	26		0	2	1	0.38	38	0.49	0.49			26	17	82
14	14	1	A	85*	1	8	6		0	0	1	0.85	85	0.36	0.36			50	45	81
15	15	1	C	8	37	51*	4		0	1	1	0.51	51	0.50	0.50			36	27	82
16	16	1	B	8	82*	8	2		0	0	1	0.82	82	0.39	0.39			35	27	82
17	17	1	D	13	8	5	75*		0	1	1	0.75	75	0.44	0.44			57	50	81
18	18	1	B	2	94*	3	1		0	0	1	0.94	94	0.24	0.24			34	30	82
19	19	1	A	61*	19	10	11		0	0	1	0.61	61	0.49	0.49			50	42	81
20	20	1	C	5	3	90*	2		0	0	1	0.90	90	0.30	0.30			31	25	82
21	21	1	A	76*	22	1	1		0	0	1	0.76	76	0.43	0.43			51	44	81
22	22	1	D	6	3	7	83*		0	2	1	0.83	83	0.38	0.38			41	34	82
23	23	1	C	5	12	79*	4		0	0	1	0.79	79	0.41	0.41			44	37	81
24	24	1	B	6	83*	9	2		0	0	1	0.83	83	0.38	0.38			35	27	82
25	25	1	B	17	55*	12	16		0	0	1	0.55	55	0.50	0.50			50	41	81
26	26	1	C	20	9	55*	17		0	0	1	0.55	55	0.50	0.50			29	19	82
27	27	1	A	97*	2	0	1		0	0	1	0.97	97	0.17	0.17			20	16	82
28	28	1	D	3	16	7	73*		0	1	1	0.73	73	0.45	0.45			52	45	81
29	29	1	C	10	3	79*	8		0	0	1	0.79	79	0.41	0.41			50	44	81
30	30	1	A	58*	16	17	8		0	2	1	0.58	58	0.49	0.49			44	36	82

Number of persons in test : 465

Number of selected items : 30