CAMBRIDGE
INTERNATIONAL EXAMINATIONS

NOVEMBER 2002

INTERNATIONAL GCSE

MARK SCHEME

MAXIMUM MARK : 40

SYLLABUS/COMPONENT : 0620/5

CHEMISTRY
(PRACTICAL)

UNIVERSITY of CAMBRIDGE
Local Examinations Syndicate

Question Number	Question (including any Source Details)	Part Mark

Results obtained for Q1.

Experiment	Metal	Temp/°C. initial	Temp/°C. max
1	zinc	19	22
2	iron	19	21
3	magnesium	19	82
4	copper	19	19

Experiment 5.

Initial temp (Cu Sulfate) 21°C

Max temp reached 40°C

Question Number	Mark Scheme Details	Part Mark
1	Table of results. of supervisor's results.	
	All initial temperatures recorded (2)	
	All maximum temperatures recorded (2)	
	observations	
	zinc few bubbles / slow reaction (1)	
	iron few bubbles / slow reaction (1)	
	magnesium violent / rapid (1) reaction, bubbles (1) / heat (1) max 3 splint pops (1)	
	copper no reaction (1)	10
(a)	(i) magnesium (1)	1
	(ii) largest temperature rise (1) most violent reaction (1)	2
	(iii) hydrogen (1)	1

Question Number	Mark Scheme Details	Part Mark
1	Experiment 5	
	Table of results. of supervisor's	
	Initial temperature recorded (1)	
	Maximum temperature recorded of supervisors (1)	2
	observations.	
	solution becomes paler (1), red / brown / dark / black. / lighter blue	
ppt /	deposit / solid (1), fizz / bubbles (1)	3
(b)	temperature rises / goes up (1)	1
(c)	displacement / redox (1)	1
(d)	copper least	
	iron	
	zinc	
	magnesium most (1)	1
	Tot - total	22

Question Number	Mark Scheme Details	Part Mark
2(a)	(i) F colourless (1) not clear/transparent	
	description of smell (1)	2
	(ii) G colourless (1) no smell (1)	1
(b)	(i) iodine dissolves (1) and pink/violet purple (1) solution	2
	(ii) iodine dissolves (1) yellow/orange/brown reddish (1) solution	2
	Mixtures combined give two layers (1) or similar	1
(c)	(i) catches fire/ignites (1) yellow/blue flame (1)	2
	(ii) extinguishes splint (1) / does not burn	1
(d)	yellow (1) precipitate (1)	2
(e)	yellow (1) precipitate (1)	2
(f)	organic (1), hydrocarbon (1), alkane (1) max 2	2
(g)	iodide / I^- (1)	1
	Sub total	18
	Total for paper	40