AL/02-S/E-I

01.

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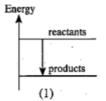
06.

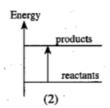
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වුලාස් මධුරංග - රහසන විදහව Chemi ලැසේ මධුරංග - රහසන විදහව Chemi දහන් මධුරංග - රහසන විදහව Chemi	stry - Dulan Madurange දැනම් මිටුරංග - S stry - Dulan Madurange දැනම් මිටුරංග - S	- රසායන විදපාව විභ	istry - Dulan Madurange good SQCoo - Gexoo Sq. 100	si Chemistry - Dulan Ma pe gapit 30,000 - denser D pe papit 30,000 - denser D pe papit 30,000 - denser D pe papit 30,000 - denser D
Gen		දු සහතික පතු (උසස් පෙළ) Education (Adv. Level) l	. 2023 අගෝස්තු Examination, August 202	3
රසායන Chemis	විදහාව I try I	02 S/E I		
Univers	al gas constant $R = 8.3$	314 J K ⁻¹ mol ⁻¹ Pl	ank's constant $h = 6.626 \times 10^{-3}$) ⁻³⁴ J s
	tro constant $N_A = 6.0$		elocity of light $c = 3 \times 10^8 \text{m/s}$	i ⁻¹
	<u>Founda</u>	tion Course - Mode	el paper 01	
An element X reacts could be	with Cl ₂ gas and fo	rms the ionic compound ?	XCl ₂ . The electronic config	uration of X
(1) 2, 6	(2) 2, 8	(3) 2, 8, 1	(4) 2, 8, 2	
The number of lone (1) 2	pair electrons around (2) 4	O atom in a H ₂ O molection (3) 6	cule is (4) 8	
	lacement of water.			
What is the number (1) 2	of O atoms in 22 g (2) 6.022 × 10	of CO_2 gas? (C = 12, O 3) 2×6.022	= 16) $\times 10^{23}$ (4) 22 \times 6.022 \times	10 ²³
The mole fraction water is	of NaOH in a solution	on formed, when 2 moles	of NaOH is dissolved in	10 moles of
(1) $\frac{1}{10}$	(2) $\frac{1}{6}$	(3) $\frac{1}{5}$	(4) $\frac{5}{6}$	
of Al is 13.)	trons and the number	of protons in an Al3+ io	on are respectively, (The at	omic number
(1) 10, 13	(2) 10 27	(3) 13 13	(4) 13 27	

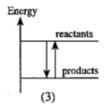
- 07. The composition of a glucose solution in terms of mass and volume is 90 g dm⁻³. What is the concentration of that glucose solution? (Relative molecular mass of glucose is 180)
 - (1) 0.25 mol dm⁻³
- (2) 0.50 mol dm⁻³
- (3) 0.75 mol dm⁻³
- (4) 2.00 mol dm⁻³
- O8. A saturated solution of sugar was prepared at 80 °C temperature by dissolving a solid sample of sugar which has been made impure by a small amount of table salt. Which of the following measures can be taken to get pure sugar crystals?
 - (1) Increasing the temperature of the solution
- (2) Cooling the solution

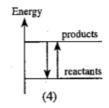
(3) Diluting the solution

- (4) Filtering the solution
- 09. "An amount of heat 1.47 kJ has evolved when 1g of solid NaOH completely reacted with a solution of dil. HCl."
 - . What is the amount of heat evolved when 1 mol of solid NaOH completely reacted with a HCl solution? (Na = 23, O = 16, H =1)
 - (1) 1.47 kJ
- (2) 5.88 kJ
- (3) 58.80 kJ
- (4) 147.00 kJ
- 10. What is the correct energy diagram relevant to the reaction mentiond in the statement above?









ANSWERS

01)	02)	03)	04)	05)
06)	07)	08)	09)	10)