

Name of the Student: _____

Max. Marks : 26 Marks

Time : 26 Minutes

Q1.

- (a) Describe and explain the trend in the boiling points of the elements down Group VII from fluorine to iodine.

(4)

- (b) Describe what you would observe when aqueous silver nitrate, followed by dilute aqueous ammonia, is added to separate aqueous solutions of sodium chloride and sodium bromide.

(4)

- (c) State the trend in the oxidising abilities of the elements down Group VII from chlorine to iodine. Explain how this trend can be shown by displacement reactions between halogens and halide ions in aqueous solutions. Illustrate your answer with appropriate observations and equations.

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(7)

(Total 15 marks)

Q2.

- (a) State and explain the trend in electronegativity down Group VII from fluorine to iodine.

Trend _____

Explanation _____

(3)

- (b) (i) Describe what you would observe when an aqueous solution of bromine is added to an aqueous solution containing iodide ions. Write an equation for the reaction occurring.

Observation _____

Equation _____

- (ii) Explain why bromine does not react with aqueous chloride ions.

(3)

- (c) Describe what you would observe when aqueous silver nitrate is added to separate aqueous solutions of potassium fluoride and potassium bromide.

Observation with KF(aq) _____

Observation with KBr(aq) _____

(2)

- (d) Write an equation to show how solid potassium fluoride reacts with concentrated sulphuric acid.

(1)

- (e) Write an equation for the redox reaction of sodium bromide with concentrated sulphuric acid.

(2)

(Total 11 marks)