3. CHEMICAL REACTIONS

Q. No	Question	Marks
	Free Response Question/ Subjective Question	
Q.10	Photographic film consists of a gelatin emulsion with silver halide grains layered onto a film base. The halides that are used are silver chloride, bromide or iodide. The photographic film is usually stored in metal containers to protect it from light. Write the chemical equation for the possible chemical reaction that this method of storing photographic film is preventing.	1
Q.11	Trupti mixed one teaspoon of baking soda in 500 g of cake mixture. She kept the mixture aside for 5 minutes. Geeta mixed one teaspoon of baking powder in 500 g of the same cake mixture. She also kept the mixture aside for 5 minutes. She then baked the two cakes together in the same oven. Whose cake is likely to rise higher? Justify your answer.	3
Q.12	While cooking in an aluminum vessel, Sudeshna burned some food till all that was left was a completely charred and black residue. She just left the blackened vessel heating on the stove. After an hour she found that the vessel was completely clean, with no trace of any blackness. (a) Write a chemical equation to explain what happened to the charred, black residue that made it disappear. (b) Name the type of reaction referred to in (a).	2

Answer Key & Marking Scheme

Q. No	Answers	Marks
Q.10	$2AgX \xrightarrow{Light} 2Ag + X_2$	1
Q.11	Trupti's cake will rise more. [1 mark] Baking powder is a mixture of sodium bicarbonate and tartaric acid. [1 mark] - Baking soda is pure sodium bicarbonate. Hence one teaspoon of baking soda contains more bicarbonate than baking powder and releases more carbon dioxide than baking powder.. [1 marks]	3
Q.12	(a) 0.5 marks each for writing the reactants and product: $C + O_2$ ---> CO_2 (b) 0.5 marks for any of the following: - combustion - oxidation - combination	2