MPVM GANGAGURUKULAM
Holiday homework – Chemistry – Class 11
Session – 2025 -26

1. Prepare a chart to show the importance of chemistry, also show the deferent discipline of chemistry.

2. Prepare a list of 5 soaps and detergents with their concentration terms written in labels and explain the concentration terms used.

3. What were the Philosopher's stone (Paras) and 'Elixir of life?

4. In ancient India what was other name of chemistry?

5. Explain about chemicals found in Mohenjodaro and Harappans culture.

6. Write the work of -Kautilya's Arthashastra, Rigveda, ancient Vedic literature, Sushruta Samhita, Charaka Samhita and Rasopanishada in chemistry.

7. What was the contribution of Ngarjuna, Chakrapani and Varähmihir's Brihat Samhita in chemistry?

8. reaction, $CaCO_3$ (s) + 2 HCl (aq) → $CaCl_2$ (aq) + CO_2 (g) + H_2O(l) .What mass of $CaCO_3$ is required to react completely with 250 mL of 0.5 M HCl?

9. A welding fuel gas contains carbon and hydrogen only. Burning a small sample of it in oxygen gives 3.38 g carbon dioxide, 0.690 g of water and no other products. A volume of 10.0 L (measured at STP) of this welding gas is found to weigh 11.6 g. Calculate (i) empirical formula, (ii) molar mass of the gas, and (iii) molecular formula.

10. In a reaction A + B2 $\longrightarrow$ AB2 . Identify the limiting reagent, if any, in the following reaction mixtures.
    (i)   300 atoms of A + 200 molecules of B
    (ii)   2 mol A + 3 mol B
    (iii)   100 atoms of A + 100 molecules of B
    (iv)   5 mol A + 2.5 mol B
    (v)   2.5 mol A + 5 mol B