

CHOITHRAM SCHOOL MANIKBAGH INDORE
CLASS XI SESSION :2018-19

Subject: Chemistry
Allotment Date: 27/7/18

Assignment no.: 1
Submission Date: 4 /08/18

SNO	QUESTIONS	MARKS	LEVEL
	OBJECTIVE TYPE		
1	Define Avogadro law	1	Knowledge
2	What do you mean by threshold frequency of metal?	1	understanding
3	In combustion of methane, what is the limiting reagent and why?	1	Hot
	SHORT ANSWER TYPE I		
4	A welding fuel gas contains carbon and hydrogen only. Burning a small sample of it in oxygen gives 3.38 carbon dioxide, 0.690 g of water and no other products. Volume of 10.0 L (measured at STP) of this welding gas is found to weigh 11.6 .What is its empirical formula and molar mass.	2	Hot
5	State law constant proportions with suitable example.	2	knowledge
6	Why Molality is preferred over molarity in expressing the concentration of a solution?	2	understanding
7	Molarity of H ₂ SO ₄ (density 1.8g/mL) is 18 M. What is its molality?	2	Logical
	SHORT ANSWER TYPE II		
8	a)What do you understand by saying that energy of electron is quantized? b) Why electronic energy is always negative?	3	understanding
9	Concentrated aqueous sulphuric acid is 98% H ₂ SO ₄ by mass and has density of 1.84gcm ⁻³ .What volume of concentrated acid is required to make 5.0litre of .500M H ₂ SO ₄ solution.	3	Multiconceptual
10	A sample of drinking water was found to be severely contaminated with chloroform,CHCl ₃ , supposed to be carcinogenic in nature. The level of contamination was 15 ppm (by mass). (i) Express this in percent by mass. (ii) Determine the molality of chloroform in the water sample. (iii)Mention the value associated with this question.	3	value
	LONGANSWER TYPE		
11	a) Gastric juice contains 3g of HCl per litre.If a person produces about 2.5 liters of gastric juice per day ,how many antacid tablets each containing 400mg of Al(OH) ₃ are needed to neutralize all the HCl produced in one day. b) Electrons are emitted with zero velocity from a metal surface when it is exposed to radiation of wavelength 6800A ⁰ .what is work function and threshold frequency of metal.	3+2	Hot
12	1.Calculate wave number for longest wavelength transition in the Balmer series of atomic hydrogen. 2.A golf ball has a mass of 40g.If uncertainty in measurement of velocity is .9ms ⁻¹ then what is the uncertainty involved in measurement of its position.	5	Logical