MCQ1: One of the following pair cannot constitute suitable pair for n-type conductor?
Answer: Antimony: Arsenic

MCQ2: One of the following is not true about n-type conductor
Answer: There is no chemical but physical interaction between the impurity and the semi conductor

MCQ3: One of the following is not a right pair for p-type semi conductor
Answer: Aluminium: indium

MCQ4: One of the following is not associated with the conductivity of semi conductors due to doping
Answer: o-type

MCQ5: One of the following is not a class of crystal solids
Answer: Hydrogen bonded

MCQ6: One of the following does not describe the crystal structure of metallic solid
Answer: Trigonal-close packing

MCQ7: The unit of one of the following quantity is a derived unit
Answer: Momentum of electron

MCQ8: When iron metal corrodes, its colour changes to ____
Answer: Brown

MCQ9: One of the following is not a chemical instrument
Answer: Filter paper

MCQ10: The pressure exerted by 0.5 cm3 of gas is 1 Pa at 273 K. If the temperature of the gas changes to 546 K and its pressure to 3 Pa, what will be the new volume of the gas
Answer: 0.3 cm3

MCQ11: One of the following combination does not match for gas law
Answer: Gay-Lussac law : Constant volume

MCQ12: If 3.00 litre sample of gas at 1.00 atm is compressed to 0.600 litre at constant temperature. Calculate the final pressure of the gas
Answer: 5.0 atm

MCQ13: Calculate the volume which 6.00 litres of gas at 0 Â°C will occupy at 125Â°C at constant pressure
Answer: 8.75 litres

MCQ14: Calculate the volume occupy by 32 g of oxygen at stp
Answer: 44.8 dm3

MCQ15: One of the following is not correct

Answer: 1 atm = 1 Pa

MCQ16: Calculate the volume occupied by 0.0660 kg of carbon (IV) oxide gas at a temperature of 300.2 K and a pressure of 9.41 x I0 Pa assuming ideal behaviour
Answer: 0.0398m3

MCQ17: Hydrogen bonding may not affect the physical properties of one of the following molecules
Answer: CsF

MCQ18: Which of the following pair does not agrees with the kinetic theory of gases
Answer: Temperature = Average collision

MCQ19: The length of one axis of a cubic crystal is 0.05 cm. What is the length of the next minimum axis?
Answer: 0.05 cm

MCQ20: Which of the following is not true about Grahamâ€™s law
Answer: Diffusion rate is proportional to density

MCQ21: Use Dalton law to calculate the total vapour pressure exerted by a mixture of A and B if the following data were obtained; XA = 0.40, XB = 0.60, PA0 = 1710 mm/Hg and PB0 = 127 mm/Hg
Answer: 760 mm/Hg

MCQ22: Which of the following pair does not match?
Answer: Hexagonal:K2O

MCQ23: Which of the following pair does not match?
Answer: Hexagonal: a=b=c

MCQ24: Which of the following salts can form precipitate
Answer: AgCl

MCQ25: The value of the gas constant R is often expressed as I 987 cal moJ-1 K 1 â€¢ Obtain its value in SI units (Given 1 ca; = 4.184 J)
Answer: 8.314 J/mol/K

MCQ26: 16 g of oxygen gas occupies a volume of 22.4 dm3. Calculate the density of the gas
Answer: 0.000714 g/dm3

MCQ27: The concentration of an acid in a sample can be estimated by ____
Answer: Titration

MCQ28: Consider four gases whose densities are (i) 0.2, (ii) 0.4, (iii) 0.6 and (iv) 0.8 g/cm3. The order of diffusion will be
Answer: i>ii>iii>iv

MCQ29: The pressure of air in a system is 10 Pa and the volume occupied is 4 m3. If the the volume is increased to 16 m3, what will be the new pressure
Answer: 2.5 pa

MCQ30: The order of intermolecular distance among the three state of matter is __Â
Answer: Gas>liquid>solid

MCQ31: The product of pressure and volume of a gas at 300 K is 500 Pam3. Calculate the number of moles of the gas
Answer: 0.2

MCQ32: 2 moles of water was mixed with 3 moles of ethanol. The ratio of the mole fraction of ethanol to that of water is ____Â
Answer: 1.5

MCQ33: An ideal gas will not obey one of the following law
Answer: Van der waal

MCQ34: A real gas will obey one of the following lawÂ
Answer: Van der waal law

MCQ35: A solute was dissolved in two separate immiscible solvent. If 2.0g of the salt dissolve in the first solvent and 4.0g dissolved in the second solvent. Calculate the partition coefficient if the two solution are combined together
Answer: 0.5

FBQ1: Modern approach to chemistry deals with equilibrium properties, ability to change and _____
Answer: Structure

FBQ2: Physical Chemistry is concern with two major aspects, namely ability to change and Â-Â-Â-Â-Â-Â-Â-Â-Â-_____
Answer: Equilibrium properties

FBQ3: International system of unit or systeme internatwnale can be written as an acronym _____
Answer: SI unit

FBQ4: Temperature, length, time and mass are examples of _____
Answer: basic quantities

FBQ5: Meter, kelvin, second and kilogram are examples of _____
Answer: Basic units

FBQ6: A skilful process of identifying. substituting and using correct apparatusappropriately in the laboratory is called _____
Answer: Instrumentation

FBQ7: Apparatus that arc basically used for determining the melting points of

substances are called _____
Answer: melting point tubes

FBQ8: The Beckman thermometer IS used in the BeckmanÂ·s apparatus for dctem1inmg____ of a substance
Answer: Freezing point

FBQ9: _____ is an instrument that can be used to measure the strength of an acid or a base
Answer: pH meter

FBQ10: A homogenous materials that contain only one substance is called a _____
Answer: pure substance

FBQ11: Constituents in a solution can be separated by applying the principle of _____
Answer: Equilibrium

Fill in the Blank (FBQs) 11: The process of separating a pure substance from a solution is called _____
Answer: crystallization

FBQ13: In a gas. the molecules on the average are separatedby large _____ distances
Answer: Intermolecular

FBQ14: -_____is a state of matter that does not have a definite shape nor volume
Answer: Gas

FBQ15: At constant temperature, the gas law that is most suitable is called _____ law
Answer: Boyleâ€™s

FBQ16: At constant pressure, properties of gases that undergo changes are _____
Answer: volume and temperature

FBQ17: A gas that obeys all the gas laws is called an _____
Answer: ideal gas

FBQ18: At high temperature and low pressure, gases tend to undergo phenomena that is called _____
Answer: Expansion

FBQ19: At low temperature and high pressure, gases tend to _____
Answer: Contract

FBQ20: The temperature, above which a substances can exist only in gaseous state is called _____
Answer: Critical temperature

FBQ21: The mathematical equation for Boyleâ€™s law can be written as _____
Answer: PV = constant

FBQ22: The mathematical equation for Charles law can be written as _____
Answer: V/T = constant

FBQ23: A plot showing the variation of volume with temperature at constant pressure is called _
Answer: An isobar

FBQ24: An expression for the combined gas law can be expressed as _____
Answer: PV/T = constant

FBQ25: The equation of ideal gas can be expressed as _____
Answer: PV = nRT

FBQ26: Numerical value of the universal gas constant is ____ J/K/mol
Answer: 8.314

FBQ27: The volume occupied by 1 mole of oxygen gas at s.t.p. is _____ dm3Â
Answer: 22.4

FBQ28: The individual pressure of a gas in a mixture of gases is called _____
Answer: Partial pressure

FBQ29: The gas law that consider the total pressure of a gas as a function of the pressures exerted by the individual gases that make up the mixture is _____
Answer: Dalton law of partial pressure

FBQ30: For 1 mole of an ideal gas, a plot of PV against T will give a straight line whose slope is equal to _____
Answer: 8.314

FBQ31: The rate at which gases diffuse is inversely proportional to the Square root of their _____
Answer: Densities

FBQ32: The gas law that explain the effusion of gas is _____
Answer: Graham law

FBQ33: Gas molecules confined to a container are in a state of _____ motion
Answer: Constant

FBQ34: At relatively low pressure, there are no _____ forces between gas molecules
Answer: Intermolecular

FBQ35: _____ of a gas is proportional to the mean kinetic energy of the molecules

in a gas
Answer: Absolute temperature