FBQ1: ML ⁻¹ T ⁻² is the dimensional formula for
Answer: *pressure*
FBQ2: Logarithmic functions are quantities and hence have no units.
Answer: *dimensionless*
FBQ3: are often used in weighing substances. Answer: *Balance*
FBQ4: It is always advisable to data for effective management. Answer: *Tabulate*
FBQ5: In application, only gases obey Boyle's and Charles laws. Answer: *Ideal*
FBQ6: At 0.2 ^o C, Nitrogen gas in a 0.05m ³ container has a pressure of 5.065 x 10 ⁵ Pa, the number of moles isAnswer: *11.15*
FBQ7: If at 0.2 ^o C, Nitrogen gas in a 0.05m ³ container has a pressure of 5.065 x 10 ⁵ Pa, its mass will beAnswer: *312.2g*
FBQ8: In line with Dalton's law, in a gaseous mixture, the pressure of a gas is the product of its and total pressure. Answer: *Mole function*
FBQ9: is the number of molecules of a gas in a unit volume. Answer: *Number density*
FBQ10: At any given instant, the molecules in a sample of a gas have a range of
Answer: *Velocities*
FBQ11: In equation, the pressure is represented as power series of VM. Answer: *Virial*
FBQ13: The critical volume is inversely proportional to critical
Answer: *density*
FBQ14: If the temperature of the gas is above its inversion temperature, Joule Thompson expansion results inAnswer: *heating*
FBQ15: Linde's method of liquefaction is efficient than Claude's method. Answer: *Less*
FBQ16: polarity is a temporary dipolar arrangement of charge. Answer: *Instantaneous*
FBQ17: A lattice is a regular arrangement of points in space. Answer: *periodic*
FBQ18: Every is identical in orientation, arrangement and

composition. Answer: *basis*
FBQ19: Metallic solids can be seen as having bonds between adjacent atoms. Answer: *covalent*
FBQ20: The bond model is the same as the bond approach. Answer: *Valence*
FBQ21: The bcc crystal can be defined in terms of two positions in the cell. Answer: *unique*
FBQ22: When a germanium is doped with gallium, the gallium (impurity) is called theAnswer: *Acceptor*
FBQ23: Due to strong hydrogen bonding, water has vapour pressure than benzene. Answer: *Lower*
FBQ24: The successive twist in structure makes the liquid crystals coloured. Answer: *cholesteric*
FBQ25: rule is applicable to liquids in which there is no hydrogen bonding. Answer: *Trouton's*
FBQ26: is the number of moles of solute present in one kilogram of the solvent. Answer: *Molality*
FBQ27: The solubility of a gas in a liquid is measured in terms of absorption coefficient or coefficient. Answer: *Bunsen*
FBQ28: The concentration of gases that pollute the atmosphere are expressed in
Answer: *Parts per million*
FBQ29: , ideal solutions are those in which volume change is zero. Answer: *Thermodynamically*
FBQ30: A solution is said to show deviation from Raoult's law, when the vapour pressure of the solution is lower than that of an ideal solution of the same concentration. Answer: *negative*
FBQ31: According to , the mole fraction of a more volatile component in an ideal solution is more in the vapour phase than in the liquid phase. Answer: *Konownloff*
FBQ32: Fractional distillation is a process Answer: *Continuous*
FBQ33: Another name for critical solution temperature is temperature. Answer: *Consolute*
FBQ34: Differential is employed in the static method of

lowering vapour pressure. Answer: *Manometer*
FBQ35: In , Gibbs deduced a simple relationship among the number of phases in equilibrium. Answer: *1876*
FBQ12: The volume of gas that liquefies at critical pressure and temperature is the critical volume. True or False? Answer: *False*
Multiple Choice Questions (MCQs): MCQ1: ML ² T ⁻² is the dimensional formula for Answer: Work
MCQ2: Which of this/these representations of force is/are correct? I 50NII 50nIII 50 NewtonIV 50 newton. Answer: I,III
MCQ3: The SI unit factor of 2.5km in M/KM is Answer: 1/1000
MCQ4: Steam bath is employed in which of the separation methods? Answer: sublimation
MCQ5: Which of the following is false about gases? Answer: They expand at high temperature
MCQ6: <p style="text-align:left">Which of these have definite volume? Answer: Solids</p>
MCQ7: <p style="text-align:left">Which of the following is false? Answer: Gas pressure can vary inversely with its volume</p>
MCQ8: <p style="text-align:left">If a fixed mass of gas is transferred from a 50cm³ container to a 150cm³ container, then its pressure will be Answer: Tripled</p>
MCQ9: <p style="text-align:left">Charles law is not linked with which of the following? Answer: $P \infty T$
MCQ10: <p style="text-align:left">One of the following has no contribution to the kinetic theory? Answer: James Clark</p>
MCQ11: <p style="text-align:left">Gaseous diffusion method can be used to separate Answer: Isotopes</p>
MCQ12: <p style="text-align:left">Considering CO, HCl and NH₃ at 400K, which conclusion is true regarding their average kinetic energies? Answer: HCl>CO>NH₃</p>
MCQ13: <p style="text-align:left">Gases behave ideally at<p style="text-align:left">I Low pressure<p style="text-align:left">II High pressure<p style="text-align:left">III High temperature<p style="text-align:left">IV Low temperature. Answer: I and IV</p></p></p></p></p>

MCQ14: <p style="text-align:left">All the following are true of the density of a liquid except Answer: Increases with temperature</p>
MCQ15: <p style="text-align:left">One of these is not a refrigerant. Answer: Ammonia</p>
MCQ16: <p style="text-align:left">Vander waals forces includes the following except Answer: Dipole-dipole interactions</p>
MCQ17: <p style="text-align:left">The under-listed can be linked to dispersion interactions except Answer: Low liquefaction temperature</p>
MCQ18: <p style="text-align:left">The effect of attractive and repulsive interactions on the energy of a system can be understood by plotting against Answer: r,v</p>
MCQ19: <p style="text-align:left">The basic shape of a unit cell is described by the Answer: All of the options</p>
MCQ20: <p style="text-align:left">From the relationships among the axis angles and the edge length, there are crystal systems only. Answer: 5</p>
MCQ21: <p style="text-align:left">The density of crystal depends on<p style="text-align:left">I &a</p></p>
MCQ22: <p style="text-align:left">NaCl is composed of interpenetrating lattices. Answer: Two, bcc</p>
MCQ23: <p style="text-align:left">Polonium metal is an example of structure. Answer: Single cubic</p>
MCQ24: <p style="text-align:left">Which of the following is not inversely related to temperature? Answer: Semi-conductor resistance</p>
MCQ25: <p style="text-align:left">Viscosity of liquids depends on the following except Answer: Temperature</p>
MCQ26: <p style="text-align:left">Which of these has the least vapour pressure? Answer: Mercury</p>
MCQ27: <p style="text-align:left">Zinc amalgam is a solution of Answer: Solid-solid</p>
MCQ28: <p style="text-align:left">The solubility of gas in liquid is directly related to Answer: Temperature</p>

MCQ29: <p style="text-align:left">The ratio of the number of moles of a solute to the total number of moles of the solute and the solvent in solution is

Answer: Normality

MCQ30: <p style="text-align:left">According to Roult's, when a non volatile solute is dissolved in a solvent, the vapor pressure of the

solute____.
Answer: Decreases

MCQ31: <p style="text-align:left">If x, y, and z are solutions with high vapor, low vapor and atmospheric pressure respectively, if equal amount of heat is supplied to x, y and z, at which order will they boil?

Answer: z, y, x

MCQ32: <p style="text-align:left">Which of these processes is not found in fractional distillation?

Answer: Condensation

MCQ33: <p style="text-align:left">Which of these liquid pairs shows both the lower and upper critical solution temperature?

Answer: Water and nicotine

MCQ34: <p style="text-align:left">A system of totally immiscible liquids has/have how many phase{s}?

Answer: One

MCQ35: <p style="text-align:left">Phase equilibria containing ice, water and its vapour is a _____ component system.

Answer: Three