Question FBQ1 : \_\_\_ is a group 2 metal that is not counted as an alkaline earth metal since its oxide is not alkaline  
Answer: Beryllium  
  
Question FBQ2 : Group 2A elements are called alkaline earth metals because they react with oxygen to form \_\_\_\_\_\_\_  
Answer: Oxides  
  
Question FBQ3 : Alkaline earth metals have \_\_\_\_\_\_ valence electrons  
Answer: Two  
  
Question FBQ4 : Alkaline earth metals from ions with a \_\_\_\_\_\_ charge  
Answer: +2  
  
Question FBQ5 : The polarizing power of a cation is \_\_\_\_\_\_\_\_ proportional to its size  
Answer: inversely  
  
Question FBQ6 : Group 1 metals are known as \_\_\_\_\_\_  
Answer: alkaline metals  
  
Question FBQ7 : Group 2 elements are also known as \_\_\_\_\_\_\_ earth metals  
Answer: alkaline  
  
Question FBQ8 : John Newlands, an English chemist reported his law of \_\_\_\_\_\_\_\_\_  
Answer: Octaves  
  
Question FBQ9 : If elements are arranged sequentially in order of increasing \_\_\_\_\_\_\_\_\_\_, a periodic repetition, that is, periodicity in properties is observed  
Answer: Atomic weight  
  
Question FBQ10 : The modern periodic law states that the properties of elements are \_\_\_\_\_\_ functions of their atomic numbers  
Answer: periodic  
  
Question FBQ11 : The systematic name for the element with atomic number of 105 is called \_\_\_\_\_\_  
Answer: Unnilpentium  
  
Question FBQ13 : According to \_\_\_\_\_\_\_\_\_, no two electrons in the same atom can have the same value of n, l and mi.  
Answer: Exclusion principle  
  
Question FBQ14 : According to \_\_\_\_\_ rule, every orbital in a subshell is singly occupied with one electron before any one orbital is doubly occupied, and all electrons in singly occupied orbitals have the same spin  
Answer: Hunds  
  
Question FBQ15 : Elements in the same period have same number of \_\_\_\_\_\_\_  
Answer: Shell  
  
Question FBQ16 : Elements in the same group have the same number of \_\_\_\_\_\_\_\_  
Answer: Valence electrons  
  
Question FBQ17 : The electronic configuration of an atom with atomic number 9 is given as \_\_\_\_\_\_  
Answer: 1s2 2s2 2p5  
  
Question FBQ18 : The ionic radii of metallic cations are \_\_\_\_ than the atomic radii  
Answer: Smaller  
  
Question FBQ19 : The ionic radii of non-metallic anion are \_\_\_\_ than the atomic radii  
Answer: Bigger  
  
Question FBQ20 : Electron affinity \_\_\_\_\_\_\_ across the period  
Answer: Increases  
  
Question FBQ21 : Complete the following reaction Na2C2 + 2H2O → 2NaOH + \_\_\_  
Answer: C2H2  
  
Question FBQ22 : When Li2CO3 is decomposed under heat it gives \_\_\_\_ and CO2  
Answer: Li2O  
  
Question FBQ23 : KO2 is an example of a \_\_\_\_ oxide  
Answer: Super  
  
Question FBQ24 : When a metal is surrounded by solvent molecules, the phenomenon is called \_\_\_\_\_\_  
Answer: Solvation  
  
Question FBQ25 : Electrons associated with the solvent are known as \_\_\_\_\_\_ electrons  
Answer: Solvated  
  
Question FBQ26 : \_\_\_\_\_\_\_\_ is an alkaline earth metals useful in the formation of bones and teeth  
Answer: Magnesium  
  
Question FBQ27 : Complete the following reaction; Ca(OH)2 + CO2 → \_\_\_\_ + H2O  
Answer: CaCO3  
  
Question FBQ28 : All group 2 elements except \_\_\_ form hydrides  
Answer: Beryllium  
  
Question FBQ29 : Complex formation is favoured by \_\_\_\_, highly charged cations with suitable empty orbitals of approximately the right energy with which the ligand orbitals can combine  
Answer: Small  
  
Question FBQ30 : In chlorophyll \_\_\_\_ is coordinated to four nitrogen atoms in the heterocyclic porphyrin ring system  
Answer: Magnesium  
  
Question FBQ31 : The hydrated ionic radii of alkali metal ions \_\_\_\_\_ down the group  
Answer: Decreases  
  
Question FBQ32 : The tendency to form complexes \_\_\_\_\_\_ with increasing atomic number in alkali earth metals  
Answer: Decreases  
  
Question FBQ33 : The density of alkali earth metals shrinks from beryllium to calcium, but \_\_\_\_ considerably thereafter up to radium  
Answer: Increases  
  
Question FBQ12 : The systematic name for the element with atomic number 102 is called \_\_\_\_\_\_  
  
Answer: Unilbium  
  
Question FBQ34 : \_\_\_\_ is a metallic cation that is isoelectronic to Al3+  
Answer: Mg2+  
  
Question FBQ35 : Potassium (19K) has an effective Z value of \_\_\_  
Answer: 2.20  
  
Question MCQ1 : Alkaline earth metals form ions with a \_\_\_\_\_\_ charge  
Answer: +2  
  
Question MCQ2 : Which element is not an alkaline earth metals?  
Answer: zirconium  
  
Question MCQ3 : The classification of certain groups of three elements into TRIADS was done by?  
Answer: Dobereiner  
  
Question MCQ4 : Classification of elements according to increasing atomic weight on a line which spiraled around a cylinder from the bottom to top was done by ?  
Answer: De chancourtois  
  
Question MCQ5 : The Law of octaves was put forward by?  
Answer: Newlands  
  
Question MCQ6 : Arranging elements in increasing atomic weight leading to a periodicity in their properties was done by  
Answer: Mendeleev  
  
Question MCQ7 : Both elements of the 1st period contains valence electrons in  
Answer: K shell  
  
Question MCQ8 : In periodic table, helium is placed at  
Answer: top right corner  
  
Question MCQ9 : On the basis of electronic configuration group and period an element with atomic number of 5 is  
Answer: 2 and IIIA  
  
Question MCQ10 : Chemical properties depends upon  
Answer: valence shell electronic configuration  
  
Question MCQ11 : Nobel gases are present in  
Answer: VIIIA group  
  
Question MCQ12 : Energy required to remove an electron from the outermost shell is called  
Answer: ionization energy  
  
Question MCQ13 : As we go from top to bottom in a group shielding effect  
Answer: Increases  
  
Question MCQ14 : Group A elements are called  
Answer: transition elements  
  
Question MCQ15 : Period number of element indicates  
Answer: value of valence shell  
  
Question MCQ16 : Ability of atom to attract electrons towards itself is called  
Answer: Electronegativity  
  
Question MCQ17 : Average distance between nucleus and outer shell is called  
Answer: atomic size  
  
Question MCQ18 : Groups containing alkaline earth metals are  
Answer: IIA  
  
Question MCQ19 : Physical properties depends on the  
Answer: size of atom  
  
Question MCQ20 : Elements that lie in same column have  
Answer: similar properties  
  
Question MCQ21 : As we go from left to right across period, electron affinity  
Answer: Increases  
  
Question MCQ22 : Elements are arranged in order of  
Answer: increasing atomic number  
  
Question MCQ23 : Decrease in force of attraction between valence electrons and nucleus by innver electrons is called  
Answer: shielding effect  
  
Question MCQ24 : 14 elements after actinium is called  
Answer: Actinides  
  
Question MCQ25 : an element that has an atomic number of 15 with which of the following elements will it show similar chemical properties  
Answer: N (7)  
  
Question MCQ26 : The group number and period number respectively of an element with atomic number 8 is  
Answer: 6, 2  
  
Question MCQ27 : Identify the wrong sequence of elements in a group  
Answer: Cu, Au, Ag  
  
Question MCQ28 : An element with atomic number \_\_\_\_\_\_ will form a basic oxide  
Answer: 11  
  
Question MCQ29 : What principle/rule is violated in the configuration 1s2 2s3  
Answer: Pauli's exclusion principle  
  
Question MCQ30 : What principle/ rule is violated in the configuration 1s2 2s2 2px2 2py1  
Answer: Hund's rule  
  
Question MCQ31 : What principle/ rule is violated in the electronic configuration 1s2 2px2  
Answer: Aufbau's principle  
  
Question MCQ32 : What type of bonding is found in Ammonia molecule  
Answer: Covalent  
  
Question MCQ33 : The polarizing power of a cation is \_\_\_\_\_\_\_\_\_ proportional to its size  
Answer: Inversely  
  
Question MCQ34 : Na3AlF6 is known as  
Answer: Cryolite  
  
Question MCQ35 : When a metal is surrounded by solvent molecules, the phenomenon is called  
Answer: Solvation