- 1) The name of the compound whose formula is Ca₃N₂ is
 - a) calcium nitrate
 - b) nitrogen calsite
 - c) calcium nitride
 - d) calcium nitrite
- 2) What is formed when an atom loses electrons?
 - a) covalent bond
 - b) a molecule
 - c) different element
 - d) positive ion
- 3) A type of chemical bond which often formes between two nonmetals is
 - a) covalent
 - b) ionic
 - c) metallic
 - d) molecular bond
- 4) An element which has the same valence electron configuration as tin (Sn) is
 - a) Si
 - b) Au
 - c) Ca
 - d) Xe

5) Which of the following is not an ionic compound?2

- a) NaBr
- b) CaH2
- c) H2S
- d) BaO
- 6) The atomic mass of the element is the number of:
 - a) protons in its nucleus
 - b) neutrons in its nucleus
 - c) protons and neutrons in the nucleus
 - d) electrons in the shell

- 7) A neutral atom contains 5 electrons and 5 protons. This must be an atom of
 - a) could be several atoms
 - b) boron
 - c) nitrogen
 - d) neon
- 8) what type of bond exists in a molecule of ammonia?
 - a) ionic
 - b) covalent polar
 - c) covalent nonpolar
 - d) metallic bonds
- 9) When two atoms equally share two electrons this bond is
 - a) polar and double
 - b) polar and single
 - c) nonpolar and single
 - d) ionic
- 10) The number of oxygen atoms in the correct formula of alluminium oxide is:
 - a) 0
 - b) 1
 - c) 2
 - d) 3
- 11) A calcium ion
 - a) has on electron in its outer energy level
 - b) has two electrons in its outer energy level
 - c) has a filled outer energy level
 - d) lacks tow electrons of having noble gas configuration
- 12) The atoms with the same number of electron shells are in the same
 - a) period
 - b) group
 - c) column
 - d) zone

13) How many sublevels are present in the third energy level?

- a) 2
- b) 3
- c) 4
- d) 10

14) Which of the following designates the sublevels that exist in the energy level 2?

- a) s, p
- b) p, f
- c) s, p, d
- d) s, p, d, f

15) The atom of which element has two unpaired electrons in the 2p sublevel?

- a) N
- b) C
- c) Be
- d) F

16) Which of the following combinations represents an ion with charge +1 and mass number 85?

- a) 48 neutrons, 37 protons, 37 electrons
- b) 48 neutrons, 37 protons, 36 electrons
- c) 48 neutrons, 36 protons, 37 electrons
- d) 48 neutrons, 35 protons, 36 electrons

17) An element with seven electrons in the outer level would be a ...

- a) metal
- b) metalloid
- c) nonmetal
- d) nitrogen

18) In which series the elements have metallic character:

- a) Br, P
- b) Ba, Cs
- c) AI, S
- d) B, Cs

19) Atoms of the chemical elements are characterized by the number of ...

- a) elemental forms
- b) electrons
- c) protons
- d) neutrons

20) When they combine with nonmetal atoms, metal atoms tend to

- a) gain electrons to become negative ions
- b) lose electrons to become positive ions
- c) remain electrically neutral with a charge of zero
- d) any of the above depending on the circumstances