

(Choose and mark the correct answer in the Answer Sheet)

D1- If the temperature is 25 °C, what is the temperature in °F (Fahrenheit)?

- a- 77 °F b- 22 °F c- 50 °F d- 30 °F

D2- What is a density of an object that has a mass of 149.8 g and a volume of 12.1 cm³?

- a- 0.45 g/cm³ b- 12.38 g/cm³ c- 9.45 g/m³ d- 9.00 g/cm³

D3- Choose the pure substance from the list below.

- a- sea water b- pure water c- sand d- soup

D4- The number of electrons in Na⁺ ion.

- a- 10 b- 20 c- 38

D5- Choose the heterogeneous mixture from the list below.

- a- hydrogen b- pure water c- tea with sugar d- 11

D6- What is the number of core electrons in Si (Silicon)?

- a- 5 b- 1 c- 2 d- wet sand

D7- Which of the following has the smallest first ionization energy?

- a- Cs b- Ga c- K d- 10

D8- The burning of lamp oil is a _____.

- a- physical change b- chemical change c- physical property d- As

D9- What is the element in group (2A) and period (3)?

- a- Mg b- Na c- Ca d- chemical Property

D10- How many moles in 2.54 g of silver (Ag)?

- a- 2.24 mol b- 0.024 mol c- Ca d- P

1- Which of the following is an element?

- a- nitrogen b- water c- 3.24 mol d- 0.24

Which of the following is a SI-base Unit?

- a- second b- Fahrenheit c- gasoline d- sand

- D13- How many milligrams "mg" does a 433 kg sample contain?
 a- 1.245×10^5 mg b- 11.2×10^9 mg c- 9,245 mg d- 433×10^6 mg
- D14- Which of the following has the highest atomic radius?
 a- Ca b- As c- Ge d- Br
- D15- The factor 10^{-3} corresponds to which prefix?
 a- centi b- milli c- micro d- nano
- D16- Which of the following is a nonmetal?
 a- Na b- Mn c- S d- Al
- D17- The elements in a group (1A) are called?
 a- alkali metals b- Transition metals c- Nonmetals d- Gases
- D18- Which of following is an ion?
 a- Li^+ b- Na c- H_2 d- KCl
- D19- Which pair of elements should be the most similar in chemical properties?
 a- N and Ni b- Br and I c- Na and Sc d- C and O
- D20- How many atoms in 0.0069 mol carbon (C)?
 a- 4.17×10^{12} atom b- 4.17×10^{11} atom c- 4.155×10^{21} atom d- 4.17 atom
- D21- What is the electron configuration of P (phosphorous)?
 a- $[\text{Ne}] 3s^2 3p^3$ b- $[\text{Ne}] 3s^1 3p^4$ c- $[\text{Ar}] 3s^2 3p^2$ d- $[\text{Ne}] 3s^2$
- D22- What is the number of valence electrons in Ca (Calcium)?
 a- 5 b- 1 c- 2 d- 4
- D23- Which of the following has the smallest metallic character?
 a- Li b- Na c- Rb d- K
- D24- If an object has a density of 8.65 g/cm^3 , what is its density in a unit of kg/m^3 ?
 a- $8.65 \times 10^{-6} \text{ kg/m}^3$ b- $5.15 \times 10^4 \text{ kg/m}^3$ c- $8.65 \times 10^3 \text{ kg/m}^3$ d- 8.65 kg/m^3
- D25- The ability of alcohol to evaporate is a _____.
 a- physical change b- chemical change c- physical property d- chemical Property

Good Luck