

JSUNIL TUTORIAL

PANJABI COLONY GALI 01, SAMASTIPUR

ASSIGNMENT

- Q. 1.** Name the scientist who tried to classify the elements in the group of triads.
- Q. 2.** Define modern periodic law.
- Q. 3.** How many groups and periods are present in modern periodic table?
- Q. 4.** Define atomic size?
- Q. 5.** Name two elements you would expect to show chemical reactions similar to magnesium. What is the basis of your choice?
- Q. 6.** Nitrogen (n) atomic number 7 and phosphorus (p) atomic number 15 belong to group 15 of the periodic table. Write the electronic configuration of these elements. Which of these two will be more electronegative? Why?
- Q. 7.** Write the triads as formed by Dobereiner?
- Q. 8.** Define and explain Mendeleev's periodic law?
- Q. 9.** Explain the limitation or demerits of Mendeleev's periodic table?
- Q. 10.** Define and explain modern periodic law?
- Q. 11.** Write the number of elements present in k, l and m shell periods of modern periodic table and give reason for it.
- Q. 12.** An atom has electronic configuration 2, 8, 7
What is the atomic number of this element?
To which of the following elements would it be chemically similar?
- Q. 13.** How does the electronic configuration of an atom relate to its position in the modern periodic table?
- Q. 14.** Explain about the trends in modern periodic table, about various properties like valence, atomic size, metallic and non-metallic properties of the atoms of elements?
- Q. 15.** What were the limitations of Dobereiner classification?
- Q. 16. (a)** Lithium, sodium, potassium are all metals that react with water to liberate hydrogen gas. Is there any similarity in the atoms of these elements?
(b) Helium is an unreactive gas and neon is a gas of extremely low reactivity? Why?
- Q. 17.** Nitrogen (atomic number 7) and phosphorus (atomic number 15) belong to group 15 of the periodic table. Write the electronic configuration of these two elements. Which of these will be more electronegative? Why?
- Q. 18.** In the modern periodic table, calcium (atomic number 20) is surrounded by elements with atomic numbers 12, 19, 21 and 38. Which of these have physical and chemical properties resembling calcium?