



CHEMISTRY

BOOKS - VGS BRILLIANT CHEMISTRY (TELUGU ENGLISH)

CLASSIFICATION OF ELEMENTS-THE PPERIIODIC TABLE

Exercise

1. Which of the given elements A, B, C, D and E with atomic numbers 2, 3, 7, 10 and 30 respectively belong to the same period?

- A. A,B,C
- B. B,C,D
- C. A,D,E
- D. B,D,E

Answer:



2. Which of the following elements A, B, C, D and E with atomic numbers 3, 11, 15, 18, and 19 respectively belong to the same group?

- A. A,B,C
- B. B,C,D
- C. A,D,E
- D. A,B,E

Answer:



3. Which of the following sets of elements belongs to halogen family?

- A. 1,12,30,4,62
- B. 37,19,3,55
- C. 9,17,35,53
- D. 12,20,56,88

Answer:



4. Which one of these group of elements is also called the halogen family?

- A. Group 16
- B. Group 18
- C. Group 10
- D. Group 17

Answer:



- **5.** On the basis of following features identify correct option.
- a) These elements majorly forms acidic oxides .
- b) These elements are majorly non-metals.
 - A. S-block elements
 - B. P-block elements
 - C. d- block elements
 - D. F- block elements

Answer:



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6. Which of the following statements is incorrect from the point of view of modern periodic table ?

A. Elements are arranged in the order of increasing atomic number.

B. There are eighteen vertical columns called groups

C. Transition elements fit in the middle of long periods.

D. Noble gases are arbitrarily placed in eighteenth group.

Answer:



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7. Among Al_2O_3, SiO_2, P_2O_3 and SO_2 the correct order of acid strength is

A. So_2 lt P_2O_3 lt SiO_2 lt Al_2O_3

 $\mathsf{B.}\ Al_2O_3\mathsf{It}SiO_2\mathsf{It}P_2O_3\mathsf{It}SO_2,$

 $\mathsf{C.}\,Al_2O_3\mathsf{lt}SiO_2\mathsf{lt}SO_2\mathsf{lt}P_2O_3$

D. SiO_2 lt SO_2 lt Al_2O_3 lt P_2O_3

Answer:



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8. An atom of an element (X) has its K, L and M shell filled with some electrons. It reacts with sodium metal to form a compound NaX. The number of electrons in the M shell of the atom (X) will be

- A. Eight
- B. Seven
- C. Two
- D. One

Answer:



- 9. Which of the following statements are the characteristics of isotopes of an element?
- a) Isotopes of an element have same atomic

- masses
- b) Isotopes of an element have same atomic number
- c) Isotopes of an element show same physical properties

Isotopes of an element show same chemical properties

- A. Isotopes of an element have same atomic masses
- B. Isotopes of an element have same atomic number

C. Isotopes of an element show same physical properties

D. Isotopes of an element show same chemical properties

Answer:



10. 3 elements x , Y and Z form a Dobereinertriad . Their atomic weights are in the ratio 5 :11 : 17 . If the sum of the atomic weights of

extreme elements is 176 , then find the atomic weights of X , Y and z .

- A. 4080176
- B. 4088136
- C. 4080120
- D. 80100120

Answer:



11. Which of the given elements A, B, C, D and E with atomic numbers 2, 3, 7, 10 and 30 respectively belong to the same period?

- A. A,B,C
- B. B,C,D
- C. A,D,E
- D. B,D,E

Answer:



12. Which of the following elements A, B, C, D and E with atomic numbers 3, 11, 15, 18, and 19 respectively belong to the same group?

- A. A,B,C
- B. B,C,D
- C. A,D,E
- D. A,B,E

Answer:



13. Which of the following sets of elements belongs to halogen family?

- A. 1,12,30,4,62
- B. 37,19,3,55
- C. 9,17,35,53
- D. 12,20,56,88

Answer:



14. Which one of these group of elements is also called the halogen family?

- A. Group 16
- B. Group 18
- C. Group 10
- D. Group 17

Answer:



- **15.** On the basis of following features identify correct option.
- a) These elements majorly forms acidic oxides .
- b) These elements are majorly non-metals.
 - A. S-block elements
 - B. P-block elements
 - C. d- block elements
 - D. F- block elements

Answer:



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16. Which of the following statements is incorrect from the point of view of modern periodic table?

A. Elements are arranged in the order of increasing atomic number.

B. There are eighteen vertical columns called groups

C. Transition elements fit in the middle of long periods.

D. Noble gases are arbitrarily placed in eighteenth group.

Answer:



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17. Among Al_2O_3, SiO_2, P_2O_3 and SO_2 the correct order of acid strength is

A. So_2 lt P_2O_3 lt SiO_2 lt Al_2O_3

 $\mathsf{B.}\ Al_2O_3\mathsf{It}SiO_2\mathsf{It}P_2O_3\mathsf{It}SO_2,$

 $\mathsf{C.}\,Al_2O_3\mathsf{lt}SiO_2\mathsf{lt}SO_2\mathsf{lt}P_2O_3$

D. SiO_2 lt SO_2 lt Al_2O_3 lt P_2O_3

Answer:



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18. An atom of an element (X) has its K, L and M shell filled with some electrons. It reacts with sodium metal to form a compound NaX. The number of electrons in the M shell of the atom (X) will be

- A. Eight
- B. Seven
- C. Two
- D. One

Answer:



- 19. Which of the following statements are the characteristics of isotopes of an element?
- a) Isotopes of an element have same atomic

- masses
- b) Isotopes of an element have same atomic number
- c) Isotopes of an element show same physical properties
- Isotopes of an element show same chemical properties
 - A. Isotopes of an element have same atomic masses
 - B. Isotopes of an element have same atomic number

C. Isotopes of an element show same physical properties

D. Isotopes of an element show same chemical properties

Answer:



20. 3 elements x , Y and Z form a Dobereinertriad . Their atomic weights are in the ratio 5 :11 : 17 . If the sum of the atomic weights of

extreme elements is 176 , then find the atomic weights of X , Y and z .

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- B. 4088136
- C. 4080120
- D. 80100120

Answer:

