



CHEMISTRY

BOOKS - ARIHANT PUBLICATION

JHARKHAND

**PERIODIC CLASSIFICATION OF
ELEMENTS**

Exam Booster For Cracking Exam

1. Which of the following is most electronegative ?

A. Lead

B. Silicon

C. Carbon

D. Tin

Answer: C



Watch Video Solution

2. Group number and valency has no relation
in

A. zero group

B. first group

C. IIIrd group

D. VII group

Answer: A



Watch Video Solution

3. In second period most acidic oxide is formed by

A. F

B. N

C. O

D. Li

Answer: A



Watch Video Solution

4. On the basis of valencies of elements in a group, the formula of compound formed by tin with fluorine is



Answer: D



Watch Video Solution

5. In a period, the element with least atomic size is

A. alkali metal

B. halogen

C. inert gas

D. chalcogen

Answer: B



Watch Video Solution

6. Which of the following has least density?

A. Na

B. Li

C. Mg

D. K

Answer: B



Watch Video Solution

7. Which of the following groups may contain a metalloid?

A. IA

B. IIA

C. VIA

D. None of these

Answer: C



Watch Video Solution

8. Name the block in which metals, metalloids, non-metals and inert gases all are present

A. s-block

B. p-block

C. d-block

D. f-block

Answer: B



Watch Video Solution

9. Which has highest boiling point?

A. CH_4

B. Cl_2

C. H_2

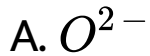
D. Xe

Answer: B



Watch Video Solution

10. Which of the following has the smallest radius?

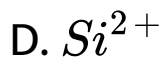


Answer: D



Watch Video Solution

11. The cation which is least stable is



Answer: C



Watch Video Solution

12. The number of periods in Mendeleev's periodic table is

A. 16

B. 8

C. 9

D. 7

Answer: D



Watch Video Solution

13. The least electronegative element in the periodic table is

A. Na

B. Rb

C. Cu

D. Xe

Answer: D



Watch Video Solution

14. Element with atomic number 17 has its place in periodic table

A. III period, VII group

B. VII period, VII group

C. IV period, VII group

D. II Period, VI group

Answer: B



Watch Video Solution

15. The only metal which is liquid at $0^{\circ}C$ is

A. Iron

B. mercury

C. sodium

D. aluminium

Answer: B



Watch Video Solution

16. Which one has least ionisation potential?

A. N

B. O

C. F

D. Ne

Answer: B



Watch Video Solution

17. In IIIrd period, the most acidic oxide is formed by

A. Na

B. P

C. Cl

D. S

Answer: C



Watch Video Solution

18. The element with electronic configuration

$3d^5 4s^1$ is

A. metalloid

B. non-metal

C. transition element

D. metal

Answer: C



Watch Video Solution

19. VIII group of periodic table contains

A. 6 elements

B. 12 elements

C. 3 elements

D. 9 elements

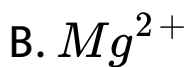
Answer: D



Watch Video Solution

20. Which of the following has the largest ionic radius ?

A. Be^{2+}



Answer: D



Watch Video Solution

21. The telluric helix was given by

A. Newlands

B. Mendeleev

C. Lothar Meyer

D. Dechen Courtious

Answer: D



Watch Video Solution

22. An element has electronic configuration 2, 8,18, 7. Its place in periodic table is in

A. I group

B. II group

C. VII group

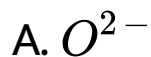
D. VIII group

Answer: C



Watch Video Solution

23. Which of these ions is smallest in size?



D. N^{3-}

Answer: C



Watch Video Solution

24. Downwards in a group, the electropositive character of elements

A. Increases

B. decreases

C. remains same

D. None of these

Answer: A



Watch Video Solution

25. The first attempt to classify elements was made by

A. Mendeleev

B. Lothar Meyer

C. Newlands

D. Doberelner

Answer: D



Watch Video Solution

26. Which pair of elements is chemically most similar?

A. Na, Al

B. Cu, S

C. Ti, Zr

D. Zr, Hf

Answer: D



Watch Video Solution

27. Transition elements are

A. Fe, Co, Ni

B. Li, Na, K

C. Cl, Br, I

D. Ba, Sr, Ca

Answer: A



Watch Video Solution

28. The three elements having chemical symbols of Si, B and Ge are

A. all metals

B. all non-metals

C. Si is metal, B and Ge are non-metals

D. all metalloids

Answer: D



Watch Video Solution

29. Which of the following compounds are analogous to the lanthanides?

A. Actinides

B. Borides

C. Carbides

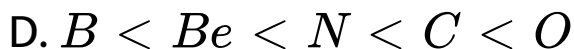
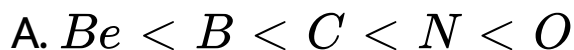
D. Hydrides

Answer: A



Watch Video Solution

30. Which of the following order of ionisation energy is correct?



Answer: B



Watch Video Solution

31. Which of the following is a non-metal?

A. Gallium

B. Indium

C. Boron

D. aluminium

Answer: C



Watch Video Solution

32. In which of the following, the tendency towards the formation of coloured ion is maximum?

- A. s-block elements
- B. d-block elements
- C. p-block elements
- D. All of these

Answer: B



[Watch Video Solution](#)

33. The first IP in eV of N and O are respectively

A. 14.6, 13.6

B. 13.6, 14.6

C. 13.6, 13.6

D. 14.6, 14.6

Answer: A



[View Text Solution](#)

34. In the following, the element with the highest electropositivity is

A. copper

B. cesium

C. barium

D. chromium

Answer: B



Watch Video Solution

35. Which of the following is known as wonder element?

A. Zr

B. Zn

C. Ti

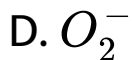
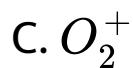
D. None of these

Answer: C



Watch Video Solution

36. Which of the following species has lowest ionisation potential?



Answer: D



Watch Video Solution

37. Which of the following has maximum density?

A. Fe

B. Cu

C. B

D. Pb

Answer: D



Watch Video Solution

38. Number of unpaired electrons in inert gas is

A. 0

B. 8

C. 4

D. 18

Answer: A



Watch Video Solution

39. Which is isoelectronic with hydride ion?

A. He

B. He^+

C. Li^+

D. H^+

Answer: A



Watch Video Solution

40. First ionisation potential of Mg is ... than that of Al.

A. less

B. more

C. equal

D. None of these

Answer: B



Watch Video Solution

41. Who developed the long form of periodic table?

A. Lothar Meyer

B. Niels Bohr

C. Mendeleev

D. Moseley

Answer: B



Watch Video Solution

42. The base of modern periodic table is

A. atomic weight

B. atomic number

C. atomic volume

D. atomic energy

Answer: B



Watch Video Solution

43. Dobereiner triad is

A. Na, K, Rb

B. Mg, S, As

C. Cl, Br, I

D. P, S, As

Answer: C



Watch Video Solution

44. Zero group was introduced by

A. Lothar Meyer

B. Mendeleev

C. Ramsay

D. Lockyer

Answer: C



Watch Video Solution

45. Which of the following statement about the modern periodic table is correct?

A. It has 7 vertical columns known as periods

B. It has 8 horizontal rows known as groups

C. It has 18 vertical columns known as groups

D. It has 9 horizontal rows known as periods

Answer: C



Watch Video Solution

46. Which of the following has the lowest ionisation potential?

A. $3d^2$

B. $4s^1$

C. $2p^6$

D. $3p^5$

Answer: B



Watch Video Solution

47. If an element X forms an oxide X_2O_3 , then find the group in Mendeleev's periodic table where it is placed

A. group III

B. group V

C. group VII

D. group VIII

Answer: A



Watch Video Solution

48. In which of the following carbon is most electronegative?

A. sp

B. sp^2

C. sp^3

D. Same in all

Answer: A



Watch Video Solution

49. C and Si are placed in the same group, because

A. both form chlorides with chlorine

B. both react with hydrogen

C. both have same number of electrons in their outermost orbit

D. both form oxide with oxygen

Answer: C



Watch Video Solution

50. Which of the following has highest melting point?

A. NaCl

B. NaBr

C. NaF

D. NaI

Answer: D



Watch Video Solution

51. Which of the following is not a periodic property?

A. Density

B. Atomic volume

C. Atomic radii

D. Ionisation potential

Answer: A



Watch Video Solution

52. The alkali metals

A. form salt like hydrides

B. form salts which are predominantly
covalent

C. show decreased chemical reactivity with
dry oxygen in going from Li to Cs

D. show increasing electronegativity from
Li to Cs

Answer: A



Watch Video Solution

53. If an element is in fifth group, then with respect to the hydrogen, it has valency

A. 6

B. 5

C. 3

D. 2

Answer: C



Watch Video Solution

54. Which of the following is not the characteristics of alkali metals?

- A. Low melting point
- B. Low electronegativity
- C. High ionisation energies
- D. Highest reducing power in its period

Answer: C



Watch Video Solution

55. The alkali metals are strong reducing agents due to

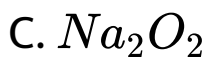
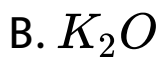
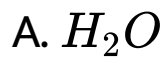
- A. low ionisation energy
- B. large ionic radii
- C. high enthalpy of hydration
- D. low potential value

Answer: A



Watch Video Solution

56. Which of the following is paramagnetic?



Answer: D



Watch Video Solution

57. A trend common to both alkali metals and halogens is that as the atomic number increases

- A. atomic radius increases
- B. boiling point increases
- C. electronegativity increases
- D. reactivity with water increases

Answer: A



Watch Video Solution

58. Which of the following has density greater than water?

A. Li

B. Na

C. K

D. Cs

Answer: D



Watch Video Solution

59. With the increase in atomic weights, melting points of the alkali metals

A. increase

B. decrease

C. remains constant

D. do not show definite trend

Answer: B



Watch Video Solution

60. Compared with alkaline earth metals, the alkali metals exhibit

- A. smaller ionic radii
- B. greater hardness
- C. high boiling point
- D. lower ionisation energies

Answer: D



Watch Video Solution