

CHEMISTRY

BOOKS - EVERGREEN CHEMISTRY (ENGLISH)

QUESTION PAPER 2022 TERM 1

Multiple Choice Questions

1. In the Periodic Table, elements of Period 3

are arranged in the increasing order of

ionization potential as:

A. B, N, Cl, Ar

B. Mg, Si, S, Ar

C. Ar, Si, S, Mg

D. Si, Ar, Cl, Mg

Answer:



2. If Relative Molecular Mass of Butane (C_4H_{10}) is 58 then its vapour density will be:

- A. 58
- B. 29
- C. 32
- D. 16

Answer:



3. Identify one statement that holds true for electrolysis of molten lead bromide:

A. Silver grey metal deposits at the anode

B. Temperature is not maintained during

the electrolysis

C. Brown vapours of bromine are obtained

at the anode

D. Electrolyte contains $H^{\,+}$ ions along with

 $Pb^{2\,+}$ ions

Answer:

4. The tendency of an atom to attract shared pair of electrons to itself when forming a chemical bond is known as:

A. Electron affinity

B. Electronegativity

C. lonization potential

D. Nuclear charge

Answer:

5. Solid sodium chloride does not conduct electricity as:

A. The strength of the bond is weak

B. It contains free ions

C. It does not contain any free ions

D. it contains free ions as well as molecules

Answer:



Watch Video Solution

6. Elements A and B have electronic configurations 8 and 13 respectively. The chemical formula formed between A and B will be:

A. AB

B. B_3A_3

 $\mathsf{C.}\,A_2B_3$

 $\mathsf{D}.\,B_2A_3$



Watch Video Solution

7. The percentage of hydrogen present in NaOH is : (Relative Molecular Mass of NaOH = 40) (At. Wt. of H = 1)

A. 2.5

B. 25

C. 0.25

D. 0.025



Watch Video Solution

8. A salt formed by incomplete neutralization of acid by a base :

- A. Basic salt
- B. Acid salt
- C. Normal salt
- D. Complex salt



Watch Video Solution

9. The colour of the precipitate formed after the addition of a small amount of sodium hydroxide solution to an aqueous solution of ferric chloride is:

A. gelatinous white

B. pale blue

C. reddish brown

D. dirty green

Answer:



Watch Video Solution

10. Alkaline earth metals have the same:

A. number of valence electrons

B. number of shells

C. metallic property

D. ionization potential



- **11.** Which of the following compounds neither dissociate not ionise in water ?
 - A. Hydrochloric acid
 - B. Sodium hydroxide
 - C. Potassium Nitrate
 - D. Carbon tetrachloride



12. The table shows the electronic configuration of four elements.

element	electronic configuration				
w	2, 6				
X	2, 8				
Y	2, 8, 1				
Z	2, 8, 7				

Which pair of atoms will form a covalent compound?

- A. two atoms of W
- B. two atoms of X
- C. an atom of W and an atom of X
- D. an atom of Y and an atom of Z



- 13. Element with an atomic number 19 will:
 - A. accept an electron and get oxidized

- B. accept an electron and get reduced
- C. lose an electron and get oxidized
- D. lose an electron and get reduced



Watch Video Solution

14. Which of the following has two sets of lone pair of electrons in them?

A. Ammonia

- B. Methane
- C. Water
- D. Ammonium ion



Watch Video Solution

15. If the empirical mass of the formula PQ_2 is 10 and the Relative Molecular Mass is 30, then the molecular formula will be:

- A. PQ_2
- $\operatorname{B.}P_3Q_2$
- $\mathsf{C}.\,P_6Q_3$
- D. P_3Q_6



Watch Video Solution

16. Which of the following is a tribasic acid?

A. H_2SO_4

B. $Al(OH)_3$

 $\mathsf{C}.\,H_3PO_4$

D. $Ca(OH)_2$

Answer:



Watch Video Solution

17. If a solution of an electrolyte mixture has calcium ions, cupric ions, zinc ions and magnesium ions, which of these ions would

you see preferentially discharged at the cathode?

- A. Calcium ions
- B. Zinc ions
- C. Cupric ions
- D. Magnesium ions

Answer:



18. Which of the following ions will readily discharge at the anode during the electrolysis of acidulated water:

A.
$$OH^-$$

$$\mathsf{B.}\,SO_4^{2\,-}$$

$$\mathsf{C}.\,Cl^-$$

D.
$$H^{\,+}$$

Answer:



19. If the empirical formula of a compound of CH and its vapour density is 13, then its molecular formula will be:

A. CH

B. C_2H_2

 $\mathsf{C}.\,C_4H_4$

D. C_3H_3

Answer:



20. Aqueous solution of Cupric chloride forms a deep blue solution on addition of :

A. dropwise sodium hydroxide

B. excess sodium hydroxide

C. dropwise ammonium hydroxide

D. excess ammonium hydroxide

Answer:



21. Which statement about conduction of electricity is correct?

A. Electricity is conducted in aqueous solution by electrons

B. Electricity is conducted in a metal wire by ions

C. Electricity is conducted in a molten electrolyte by electrons

D. Electricity is conducted in an acid solution by ions

Answer:



Watch Video Solution

22. If an element has low ionization potential, then it is likely to be a:

A. metal

B. metalloid

C. non metal

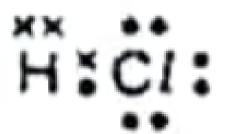
D. inert gas

Answer:



Watch Video Solution

23. Which electron arrangement for the outer shell electrons in a covalent compound is correct?



A.

XH:CI:

В.

H:N:H

C.

H:N:H A

D.



Watch Video Solution

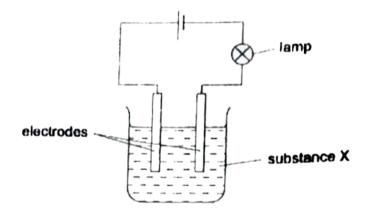
24. The products formed when an acid reacts with a base is :

- A. salt and hydrogen
- B. salt and oxygen
- C. salt and water
- D. salt and carbon dioxide



Watch Video Solution

25. In the circuit below, the lamp lights up



What could X be?

A. a solution of alcohol in water

B. a solution of sodium chloride in water

C. sugar solution

D. solid potassium chloride

Answer:



Watch Video Solution

26. Which one of the following is a non metallic cation?

A. $K^{\,+}$

B.
$$NH_4^+$$

C.
$$Cu^{2+}$$

D.
$$Na^+$$



Watch Video Solution

27. Type of bonding present in hydrogen chloride:

A. metallic

- B. ionic
- C. covalent
- D. coordinate



Watch Video Solution

28. How does the metallic and non-metalic character vary on moving from left to right in a period?

- A. increases
- B. decreases
- C. remains same
- D. first increases and then decreases



Watch Video Solution

29. The aqueous solution of the following compounds which contains both ions and molecules is

B. nitric acid
C. acetic acid
D. hydrochloric acid
Answer:
Watch Video Solution
30. The basic oxide which is an alkali :
A. Copper oxide

A. sulphuric acid

- B. Sodium oxide
- C. Ferric oxide
- D. Zinc oxide



Watch Video Solution

31. If the pH of solution is '2', then the solution is a

A. strong acid

- B. strong alkali C. weak acid D. weak alkali **Answer: Watch Video Solution**
 - **32.** The acidity of aluminium hydroxide is:
 - **A.** 3
 - B. 1

- C. 4
- D. 2



- 33. Hydracids are those acids which contain:
 - A. Hydrogen with any metal
 - B. Hydrogen, a non-metal and oxygen

C. Hydrogen and a non-metal other than oxygen

D. Hydrogen and oxygen only

Answer:



Watch Video Solution

34. The oxidation reaction among the following is:

A.
$$Fe^{3\,+}\,+3e^{-}\,
ightarrow\,Fe$$

B.
$$Fe^{2+}-1e^{-}
ightarrow Fe^{3+}$$

C.
$$Cl_2 + 2e^-
ightarrow 2Cl^{1-}$$

D.
$$Cu^{2+} + 2e^- o Cu$$



Watch Video Solution

35. A student added excess of sodium hydroxide solution to each of the salt solution

. An insoluble precipitate formed was observed

in:

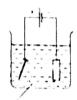
- A. Calcium nitrate
- B. Zinc nitrate
- C. Lead nitrate
- D. Sodium nitrate



Watch Video Solution

36. Which apparatus could be used to electroplate an iron nail with copper?





B aqueous copper(il) suiphale



aqueous iron(il); sulphale



aqueous iron(II) sulphate

Answer:



37. The table below shows the electronic arrangements of six atoms, A to F.

atam.	Α.	D	C	D	E	F
atom	^	ь			200	202
electronic configuration	2,5	2	2.6	2,8,6	2,8,8	2,8,5

With respect to the table select the following:

Two atoms from the same group of the periodic table:

- A. D and E
- B. C and D
- C. E and F
- D. C and E



Watch Video Solution

38. The table below shows the electronic arrangements of six atoms, A to F.

atom	A	В	C	D	E	1
				206	2,8,8	2.8 7
electronic configuration	2,5	2	2,6	2,8,6	2,0,0	2,01

With respect to the table select the following:

Two noble gases:

A. A and B

B. E and F

- C. B and E
- D. D and E



Watch Video Solution

39. The table below shows the electronic arrangements of six atoms, A to F.

atom	A	В	C	D	E	P
				206	2,8,8	2.8
electronic configuration	2,5	2	2,6	2,8,6	2,0,0	2,0,

With respect to the table select the following:

The atom which is the most electronegative:

- A. A
- B. B
- C. C
- D. F



Watch Video Solution

40. The table below shows the electronic arrangements of six atoms, A to F.

atom	A	В	C	D	E	F
are an		-			2,8,8	281
electronic configuration	2,5	2	2,6	2,8,6	2,0,0	4,0,3

With respect to the table select the following:

The atom which has the highest ionization potential:

- A. A
- B. B
- C. E
- D. F

Answer:



