

Note: Answer all the questions. Choose the best answer.

- Titanium is purified by
 - Mond process
 - Van-Arkel method
 - Zone refining
 - Electrolytic refining
- General empirical formula of silicone is
 - (R_2SiO)
 - $(RSiO)$
 - (R_2CO)
 - $(RSiH)$
- Shape of $XeOFe_4$ is
 - square pyramidal
 - pyramidal
 - linear
 - T-shaped
- Assertion** : In any transition series the magnetic moment of M^{2+} ions first increases and then decreases.
Reason : In a transition series, the number of unpaired electrons increases and then decreases.
 - If both assertion and reason are true and reason is the correct explanation of the assertion
 - If both assertion and reason are true but reason is not the correct explanation of assertion
 - If assertion is true, but reason is false,
 - If both assertion and reason are false
- is used as an antitumor drug in cancer treatment.
 - Sodium thio sulphate
 - Ca-EDTA
 - Cis-platin
 - Nickel chloride
- An example of covalent crystal is
 - graphite
 - Sulphur
 - Diamond
 - rock salt
- If $[A]$ is the concentration of A at any time t and $[A_0]$ is the concentration at $t = 0$, then for the first order reaction, the rate equation can be written as
 - $k = \frac{2.303}{t} \log \left[\frac{A}{A_0} \right]$
 - $k_t = \frac{2.303}{t} \log \left[\frac{A_0}{A} \right]$
 - $k_t = \frac{2.303}{t} \log \left[\frac{A_0}{[A_0] - [A]} \right]$
 - $k_t = \frac{2.303}{t} \log \left[\frac{A_0}{[A]} \right]$
- Cl^- is the conjugate base of
 - $HClO_4$
 - HCl
 - ClO_4^-
 - $HClO_3$
- When one coulomb of electricity is passed through an electrolytic solution, the mass deposited on the
 - equivalent weight
 - molecular weight
 - electrochemical equivalent
 - one gram
- Dispersion of a solid in a liquid, a liquid in a gas and liquid in a liquid are
 - aerosol, emulsion, sol
 - Emulsion, sol, aerosol
 - Aerosol, sol, emulsion
 - Sol, aerosol, emulsion
- The preparation of glycerol and soap from oils and fats is known as
 - esterification
 - saponification
 - hydroboration
 - trans esterification
- The acid which reduces Tollen's reagent is
 - acetic acid
 - benzoic acid
 - formic acid
 - oxalic acid
- When aqueous solution of benzene diazonium chloride is boiled the product formed is
 - benzyl alcohol
 - phenol
 - benzene + N_2
 - Phenyl hydroxylamine

