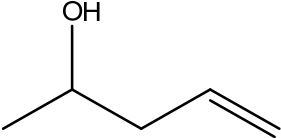


Sample questions Chemistry

S.N.	Questions	Answer	Marks
1.	Calculate the oxidation number of Mn in K_2MnO_4 . (a) 4 (b) 6 (c) 7 (d) 5	B	1
2.	What will be the conjugate bases for HCO_3^- . (a) CO_3^{-2} (b) H_2CO_3 (c) $H_3CO_3^+$ (d) $H_3CO_4^-$	A	1
3.	Write the correct name of the following structure  (a) Pent-1-en-4-ol; (b) Pent-2-en-4-ol; (c) Pent-4-en-2-ol; (d) Pent-3-en-1-ol.	C	1
4.	In the reactions given below, identify the species undergoing oxidation and reduction: $H_2S(g) + Cl_2(g) \rightarrow 2HCl(g) + S(s)$. (a) Cl_2 oxidation & H_2S reduction; (b) Cl_2 reduction & H_2S oxidation; (c) HCl reduction & H_2S oxidation; (d) Cl_2 oxidation & S reduction.	B	1
5.	A hydrocarbon 'A' decolourises bromine water. On ozonolysis it gives 3-Methylbutanal and formaldehyde. Give the name of the compound. (a) 4-Methylpent-1-ene (b) 4-Ethylpent-1-ene (c) 1-Methylpent-4-ene (d) 4-Ethylpent-2-ene.	A	1
6.	Which of these contain the largest number of atoms? (a) 1g Na(s) (b) 1g K(s) (c) 1g Li(s) (d) 1g Rb(s)	C	1

7.	The density of 3M solution of NaCl is 1.25g/mL. Calculate the molality of the solution. (a) 9.72 m (b) 2.79 m (c) 3.79 m (d) 7.45 m	B	1
8.	Calculate the pH of 0.001M NaOH. (a) 3 (b) 9 (c) 10 (d) 11	D	1
9.	Write the formula of the compound Nickel (II) sulphate? (a) NiSO ₄ (b) Ni ₂ SO ₄ (c) NiS (d) Ni ₂ S	A	1
10.	Which reactive intermediate is formed when the covalent bond in CH ₃ -Li undergoes heterolytic cleavage? (a) Carbanion (b) Carbine (c) Carbocation (d) None of the above.	A	1