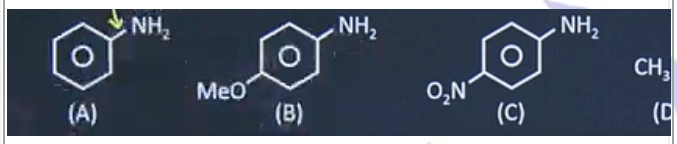
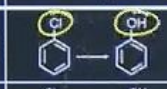
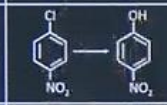
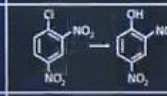
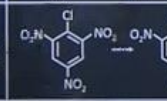
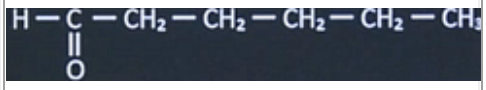
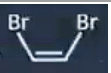
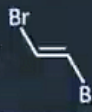
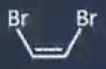
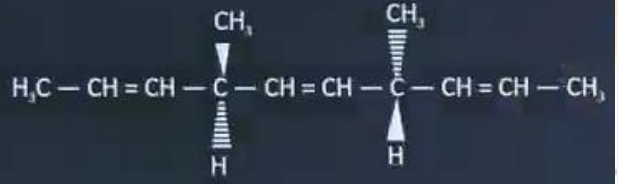
JEE MAIN 7 APRIL 2025 SHIFT 2

CHEMISTRY QUESTION PAPER WITH ANSWER KEY

Q. No.	Question	Answers
1	Consider the following oxides: V_2O_5, Cr_2O_3, MN_2O_7, V_2O_3, VO_2 Number of oxides which are acidic is x. Consider the following complex compound $[Co(NH_2CH_2CH_2NH_2)_3]_2 (SO_4)_3$ the primary valency of complex is y The value of x + y is	4
2	The correct order to basic strength of the following molecules is: 	3. D > B > A > C
3	Which of the following is the correct Hybridisation of XeF_4?	3. sp^3d^2
4	Which of the following is the correct order of acidic character of oxides of vanadium?	1. $V_2O_5 > VO_2 > V_2O_3$
5	Consider the following species (i) SO2 (ii) N^{3-} (iii) NO^{2-} Find the hybridisation of underlined atom.	2. (i) sp^2 (ii) sp (iii) sp^2
6	Consider the reaction given below $C_4H_{10} + (13/2)O_2 \dashrightarrow 4CO_2 + 5H_2O$ If 174 g of Butane reacts with 320 g of O_2. Find the volume of H_2O formed in ml. (given density of H_2O is 1g/ml)	1800/13 kg

7	Match the following List-I with List-II : List-I (Reactions) / List-II (Reaction Temperature) (A)  (I) Slight Warming (B)  (II) 368 K (C)  (III) 443 K (D)  (IV) 623 K	2. A-IV, B-II, C-III, D-I
8	Which of the following compounds molecular formula C6H12O. Positively to 2, 4-DNP test and Tollen's regent test	2. 
9	Assertion :  has more dipole moment than  Reason :  has more boiling point than  Choose the correct option.	3. Assertion is right, Reason is incorrect
10	Consider the following molecule  Number of optically active molecule(s) formed after complete reductive ozonolysis of above compound is	3. 0