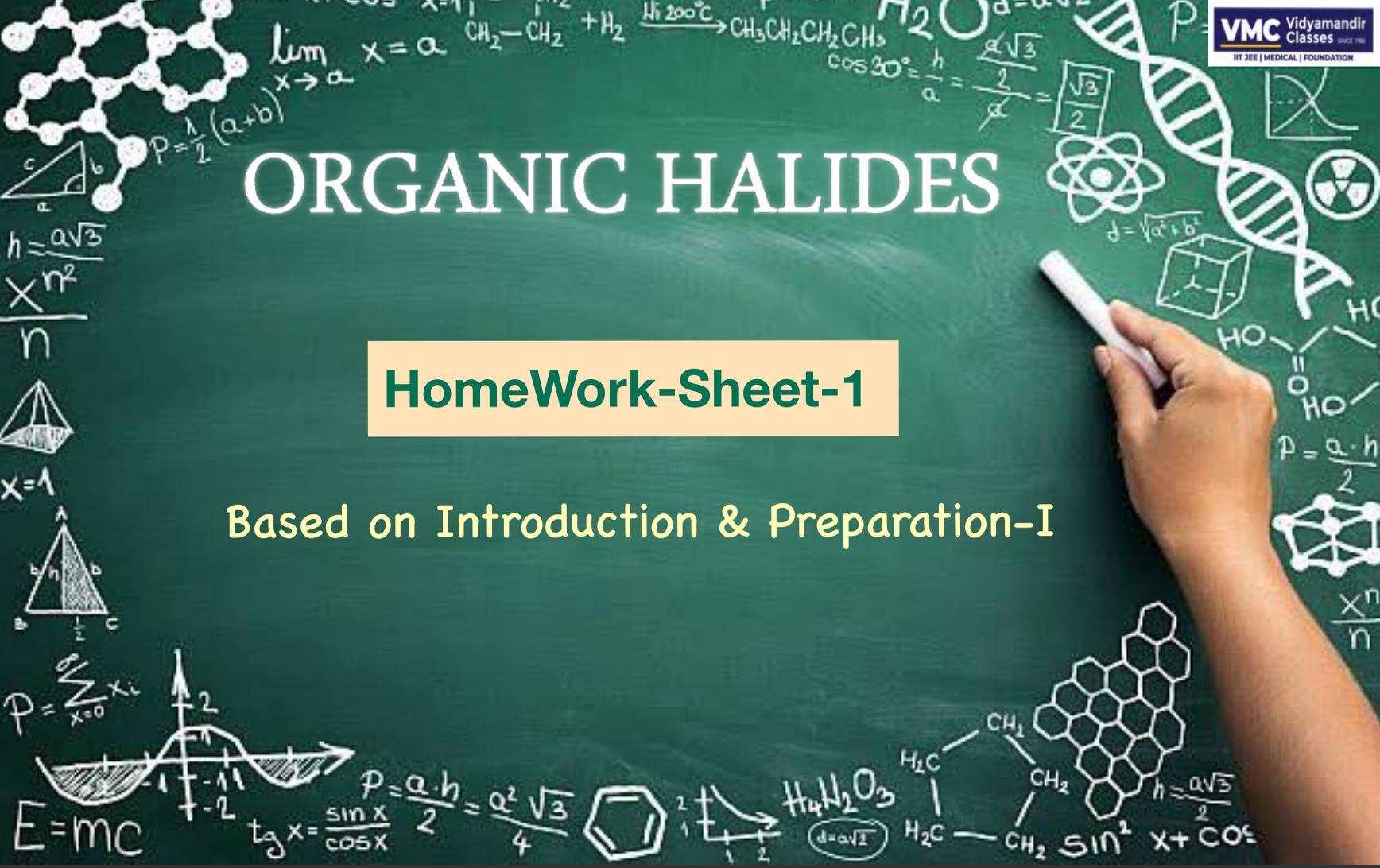


ORGANIC HALIDES

HomeWork-Sheet-1

Based on Introduction & Preparation-I

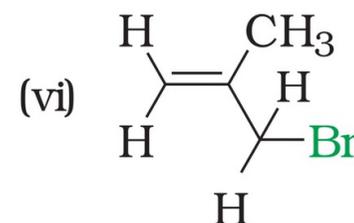
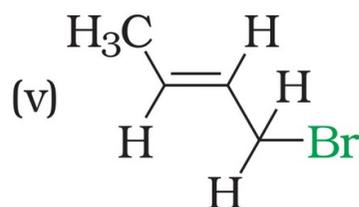
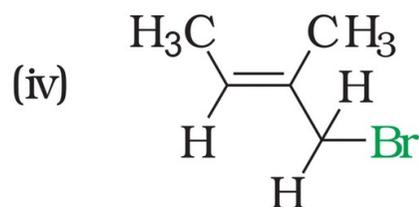
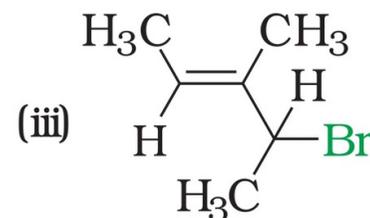
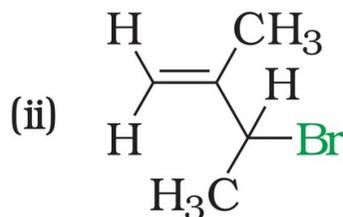
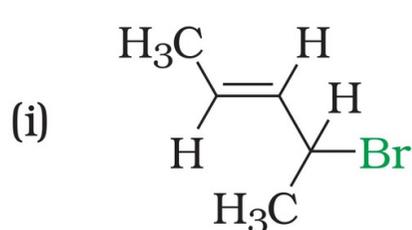


NCERT BOOK QUESTIONS TO BE ATTEMPTED AT HOME

1. Draw the structures of all the eight structural isomers that have the molecular formula $C_5H_{11}Br$. Name each isomer according to IUPAC system and classify them as primary, secondary or tertiary bromide.

2. Write IUPAC names of the following:

Ex



3. Write structures of the following compounds:

(i) 2-Chloro-3-methylpentane

(ii) 1-Chloro-4-ethylcyclohexane

(iii) 4-tert. Butyl-3-iodoheptane

(iv) 1,4-Dibromobut-2-ene

(v) 1-Bromo-4-sec. butyl-2-methylbenzene.

4. Name the following halides according to IUPAC system and classify them as alkyl, allyl, benzyl (primary, secondary, tertiary), vinyl or aryl halides:

- (i) $(\text{CH}_3)_2\text{CHCH}(\text{Cl})\text{CH}_3$ (ii) $\text{CH}_3\text{CH}_2\text{CH}(\text{CH}_3)\text{CH}(\text{C}_2\text{H}_5)\text{Cl}$
(iii) $\text{CH}_3\text{CH}_2\text{C}(\text{CH}_3)_2\text{CH}_2\text{I}$ (iv) $(\text{CH}_3)_3\text{CCH}_2\text{CH}(\text{Br})\text{C}_6\text{H}_5$
(v) $\text{CH}_3\text{CH}(\text{CH}_3)\text{CH}(\text{Br})\text{CH}_3$ (vi) $\text{CH}_3\text{C}(\text{C}_2\text{H}_5)_2\text{CH}_2\text{Br}$
(vii) $\text{CH}_3\text{C}(\text{Cl})(\text{C}_2\text{H}_5)\text{CH}_2\text{CH}_3$ (viii) $\text{CH}_3\text{CH}=\text{C}(\text{Cl})\text{CH}_2\text{CH}(\text{CH}_3)_2$
(ix) $\text{CH}_3\text{CH}=\text{CHC}(\text{Br})(\text{CH}_3)_2$ (x) $p\text{-ClC}_6\text{H}_4\text{CH}_2\text{CH}(\text{CH}_3)_2$
(xi) $m\text{-ClCH}_2\text{C}_6\text{H}_4\text{CH}_2\text{C}(\text{CH}_3)_3$ (xii) $o\text{-Br-C}_6\text{H}_4\text{CH}(\text{CH}_3)\text{CH}_2\text{CH}_3$

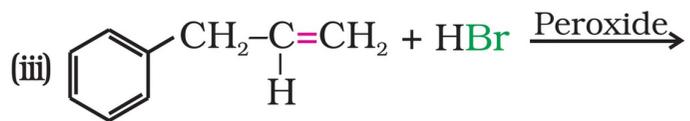
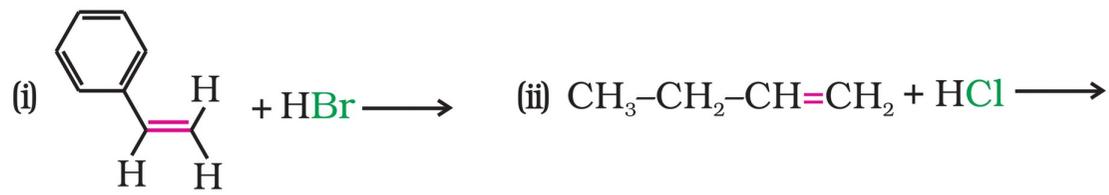
5. Give the IUPAC names of the following compounds:

- (i) $\text{CH}_3\text{CH}(\text{Cl})\text{CH}(\text{Br})\text{CH}_3$ (ii) $\text{CHF}_2\text{CBrClF}$ (iii) $\text{ClCH}_2\text{C}\equiv\text{CCH}_2\text{Br}$
(iv) $(\text{CCl}_3)_3\text{CCl}$ (v) $\text{CH}_3\text{C}(p\text{-ClC}_6\text{H}_4)_2\text{CH}(\text{Br})\text{CH}_3$ (vi) $(\text{CH}_3)_3\text{CCH}=\text{ClC}_6\text{H}_4\text{I-}p$

6. Write the structures of the following organic halogen compounds.

- (i) 2-Chloro-3-methylpentane (ii) p -Bromochlorobenzene
(iii) 1-Chloro-4-ethylcyclohexane (iv) 2-(2-Chlorophenyl)-1-iodooctane
(v) Perfluorobenzene (vi) 4-tert-Butyl-3-iodoheptane
(vii) 1-Bromo-4-sec-butyl-2-methylbenzene (viii) 1,4-Dibromobut-2-ene

7. Write the products of the following reactions:



THANK

39 88.906 3338 1.1 1526 Y [Kr]4d5s ² 4.47 3	8 15.999 -182.82 3.5 -222.65 O [He]2s ² 2p ⁴ 1.43 -2	92 238.029 4134 1.2 1132 U [Rn]5f ³ 6d7s ² 19.0 3,4,5,6
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