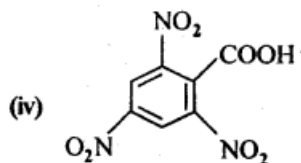
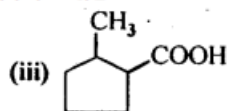


12.6. Give the IUPAC names of the following compounds:

(i) $\text{PhCH}_2\text{CH}_2\text{COOH}$

(ii) $(\text{CH}_3)_2\text{C}=\text{CHCOOH}$



Ans: (i) 3-Phenylpropanoic acid

(ii) 3-Methylbut-2-enoic acid

(iii) 2-Methylcyclohexanecarboxylic acid

(iv) 2,4,6-Trinitrobenzoic acid

12.2. Name the following compounds according to IUPAC system of nomenclature:

(i) $\text{CH}_3\text{CH}(\text{CH}_3)\text{CH}_2\text{CH}_2\text{CHO}$

(ii) $\text{CH}_3\text{CH}_2\text{COCH}(\text{C}_2\text{H}_5)\text{CH}_2\text{CH}_2\text{Cl}$

(iii) $\text{CH}_3\text{CH}=\text{CHCHO}$

(iv) $\text{CH}_3\text{COCH}_2\text{COCH}_3$

(v) $\text{CH}_3\text{CH}(\text{CH}_3)\text{CH}_2\text{C}(\text{CH}_3)_2\text{COCH}_3$

(vi) $(\text{CH}_3)_3\text{CCH}_2\text{COOH}$.

(vii) $\text{OHCC}_6\text{H}_4\text{CHO-p}$

Ans: (i) 4-Methyl pentanal

(ii) 6-Chloro-4-ethylhexan-3-one

(iii) But-2-enal

(iv) Pentane-2,4-dione

(v) 3,3,5-Trimethyl-hexan-2-one

(vi) 3,3-Dimethyl butanoic acid

(vii) Benzene-1,4-dicarbaldehyde

12.5. Draw structures of the following derivatives:

(i) The 2,4-dinitrophenylhydrazone of benzaldehyde

(ii) Cyclopropanone oxime

(iii) Acetaldehydedimethylacetal

(iv) The semicarbazone of cyclobutanone

(v) The ethylene ketal of hexan-3-one

(vi) The methyl hemiacetal of formaldehyde

Ans:

