

Nomenclature of Alkanes:

- ① Identify the parent chain.
- ② Numbering.
Substituent should receive lowest number.
- ③ IUPAC naming: Prefix: subs. & Suffix: parent chain.

→ More than one substituent: Number

Give Name in alphabetical order.

→ Similar substituents:

Mention their numbers, di/tri/tetra alkane

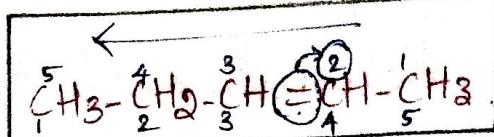
e.g: 1,1 dimethyl

→ If substitutions have other groups

(X, NO₂, etc): Name them alphabetically.

Nomenclature of Alkenes & Alkynes:

①. Identify parent chain:



⇒ Chain with highest no. of C atoms.

⇒ If similar no. of C atoms are present in branches, choose the chain with maximum no. of substituents / $\text{C}=\text{C}$ bond.

②. Numbering:

⇒ Numbering order: lowest to highest no.

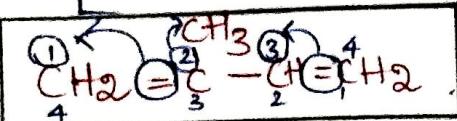
= $\text{C}=\text{C}$ substituents.

③. IUPAC nomenclature:

Substituent + parent
(if present) chain

Alk + ene(=) / yne(\equiv)

④. Multiple = bonds:



② = ⇒ Mention their numbering positions + diene

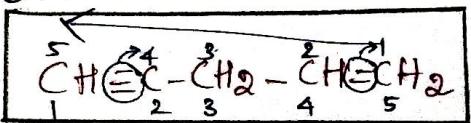
③ = ⇒ Mention their numbers + triene.

E.g: 2-methylbuta1,3 diene.

⑤. If both = $\text{C}=\text{C}$ bonds are present,

= should receive lowest number & given

name first.



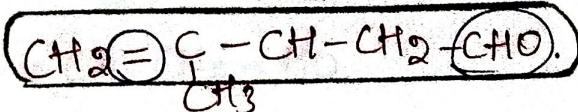
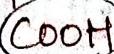
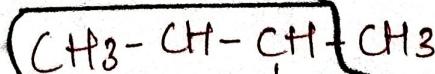
E.g: Pent-1-en-4-yne.

Functional groups:

①. Identify parent chain:

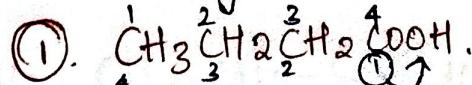
⇒ Longest carbon chain

⇒ Carbon chain with functional group.



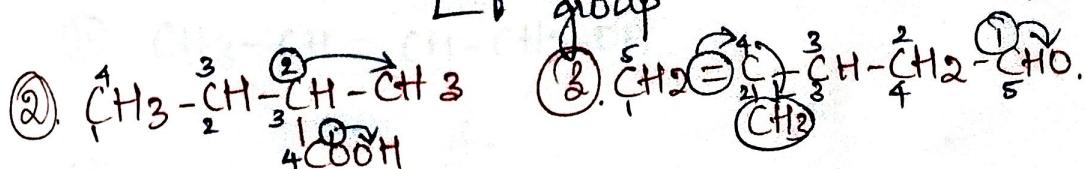
②. Numbering:

⇒ Functional group should receive lowest no.



⇒ Numbering order: Lowest to highest.

[functional group $\angle = \angle \equiv \angle$ subs.]



③. Naming:

Halo / + Substituent's + parent chain
 NO_2 alkyl name
 (if present) (if present) [Alk + (=1≡)enlyn. + f.g's
 if present] suffix

①. Butan-1-oic acid / Butanoic acid

②. 2-methyl butanoic acid.

③. 4-methyl pent-4-en-1-ol.

④. Halogens(Cl, Br, I, F) & NO_2 groups are considered as substitutions.

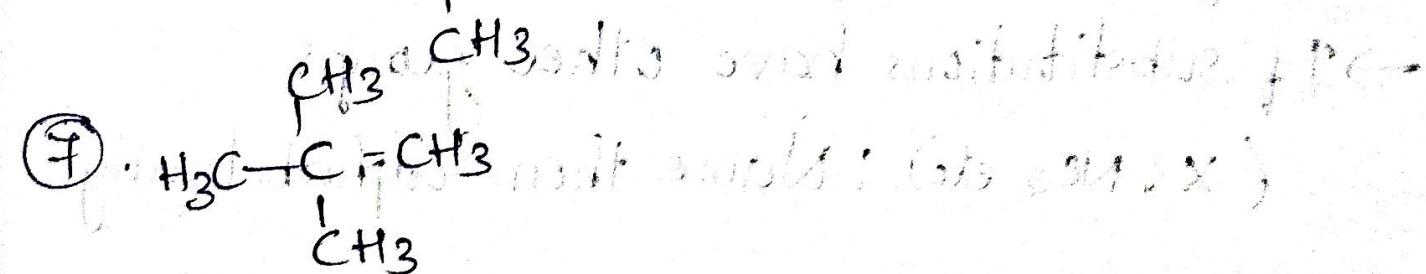
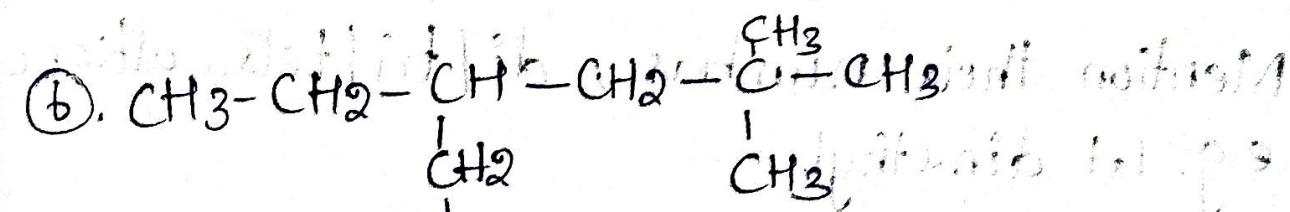
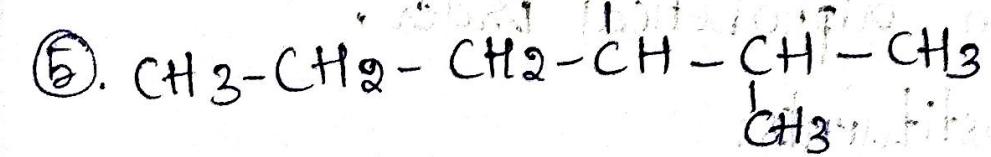
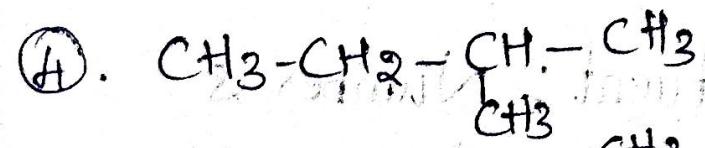
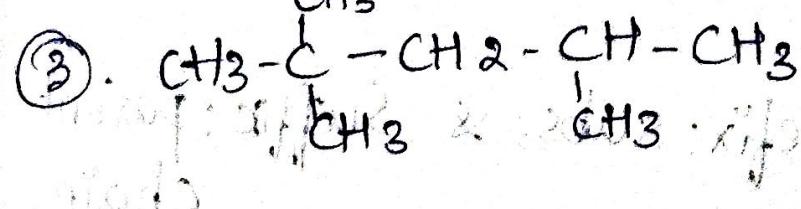
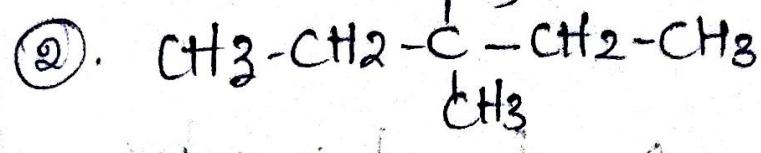
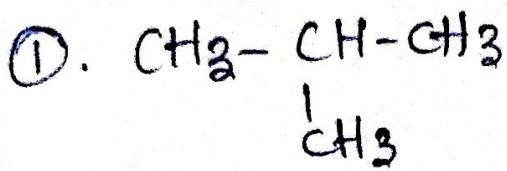
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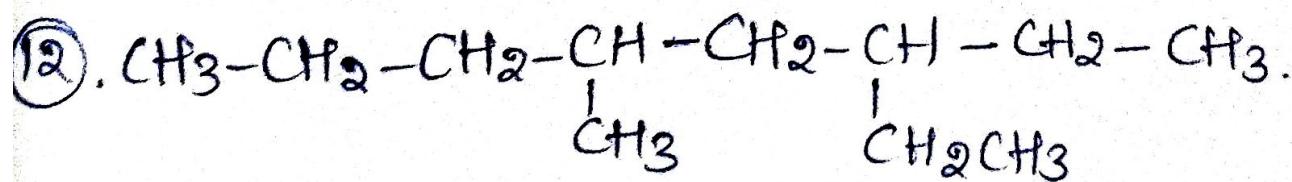
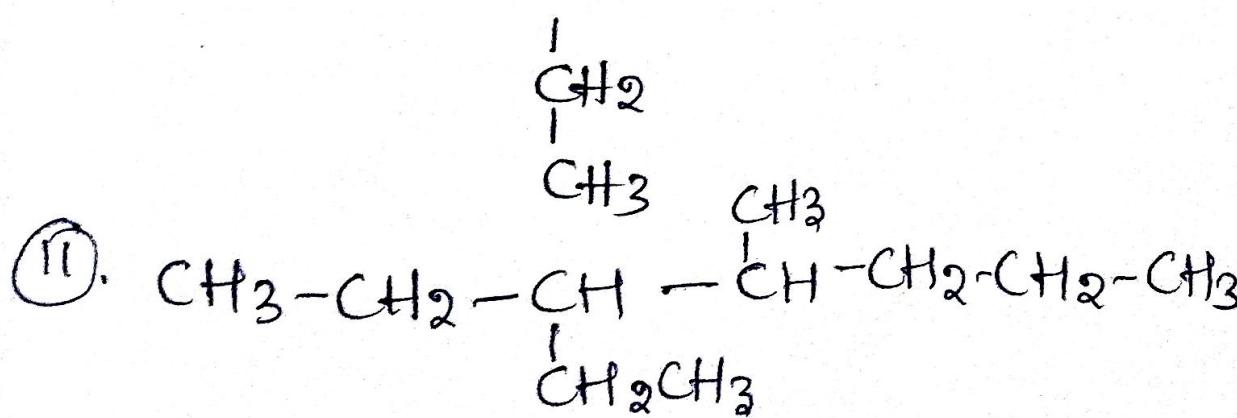
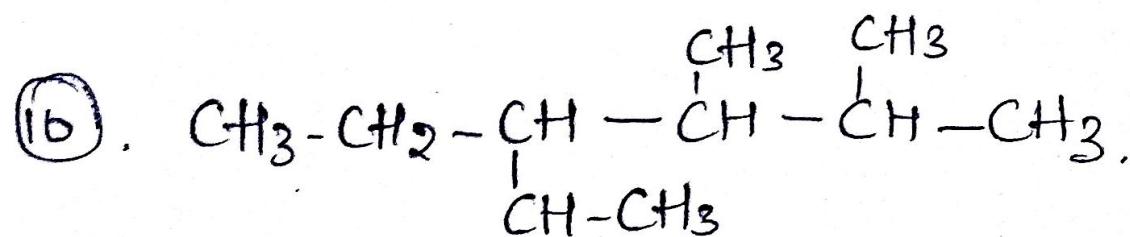
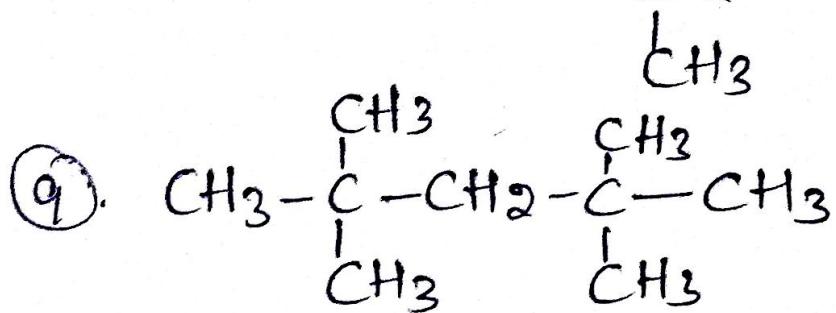
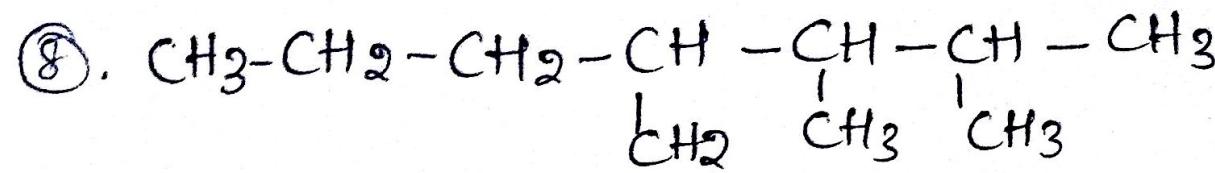
Bromomethane

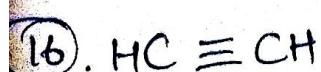
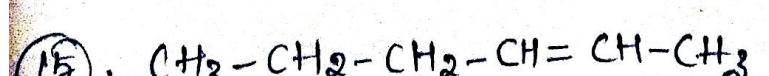
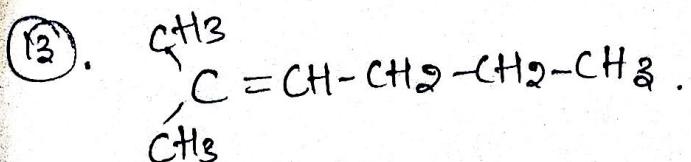
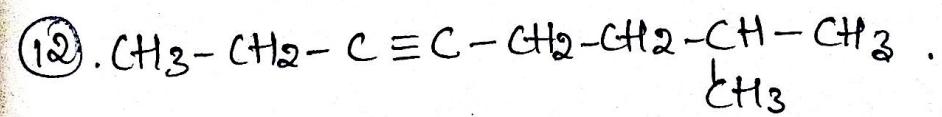
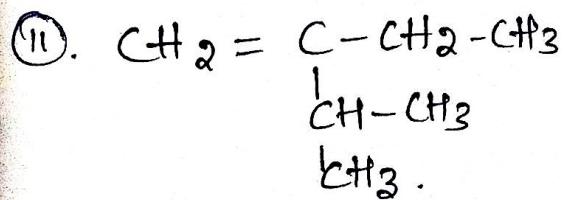
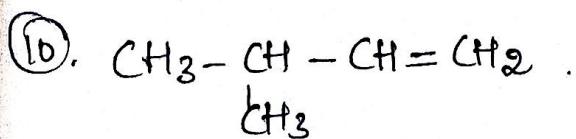
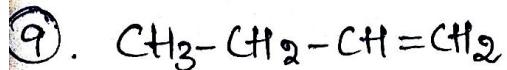
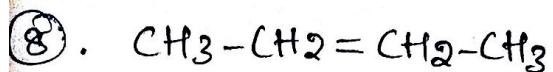
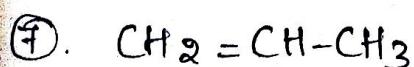
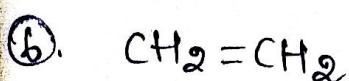
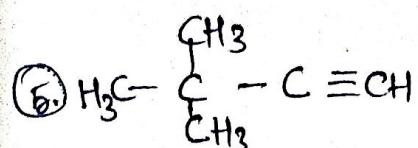
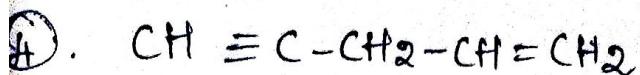
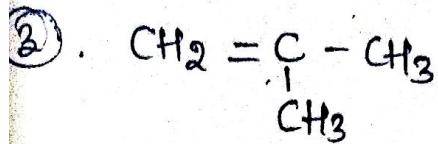
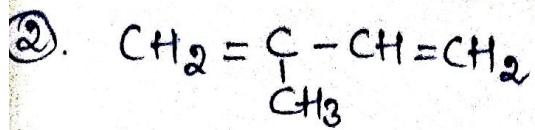
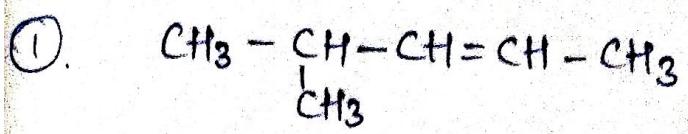
②. $\text{CH}_3\text{CH}_2\text{NO}_2$

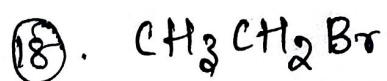
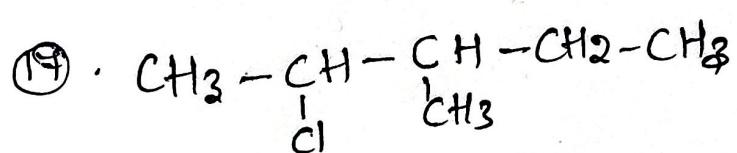
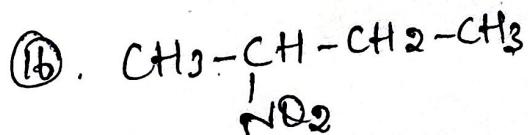
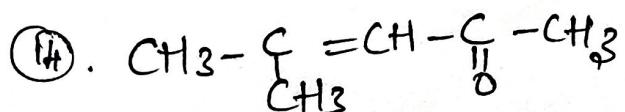
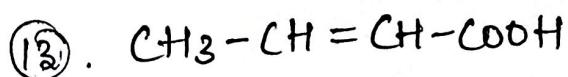
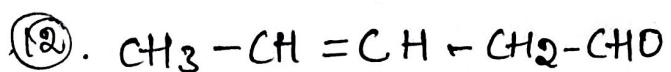
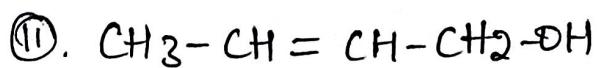
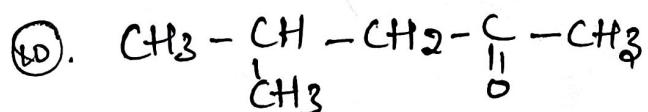
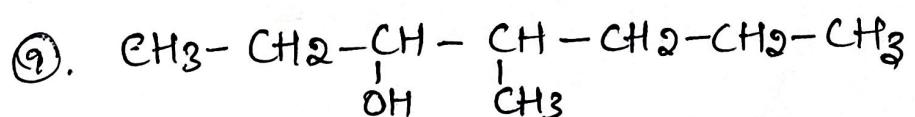
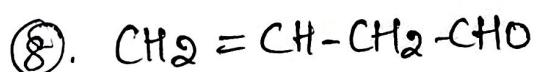
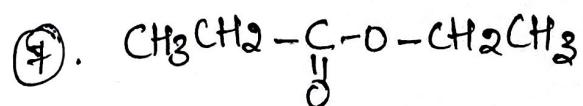
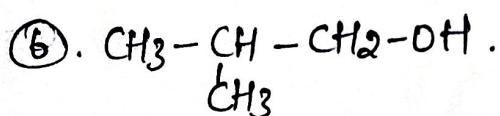
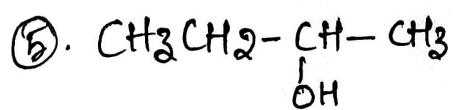
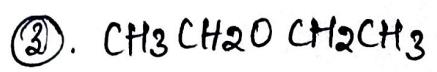
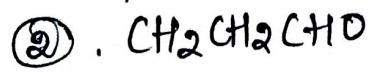
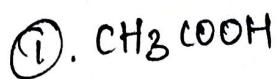
Nitro ethane.

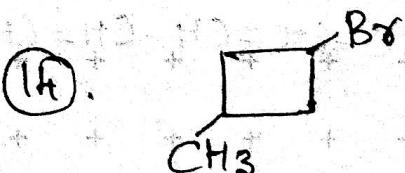
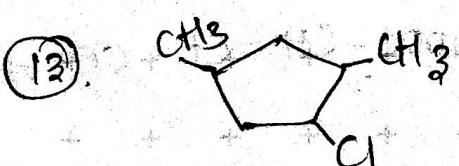
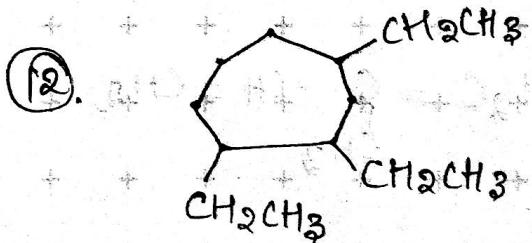
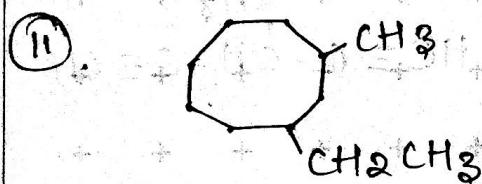
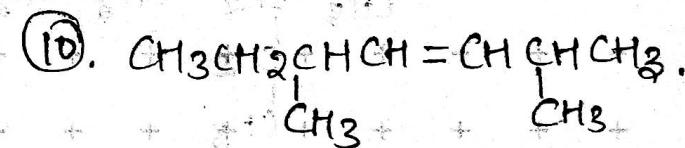
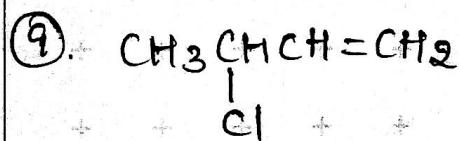
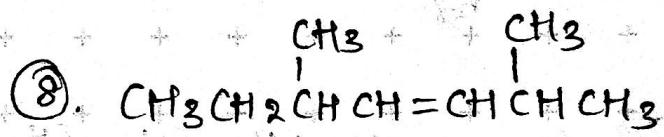
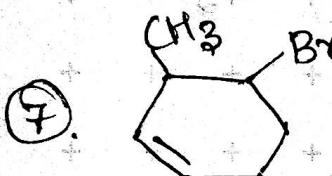
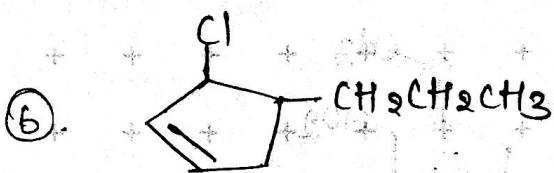
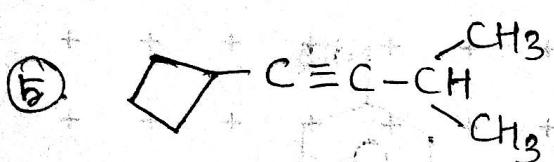
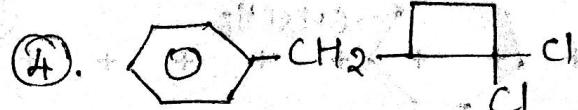
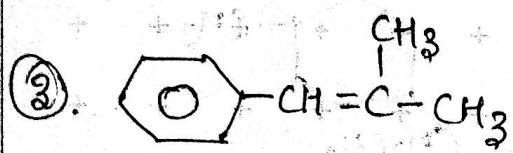
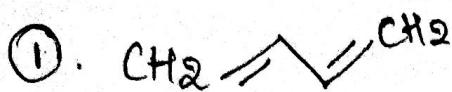
Alkanes:



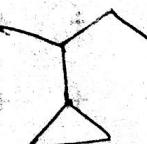






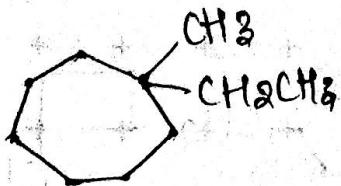


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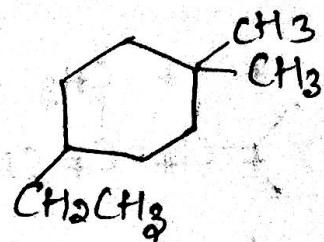


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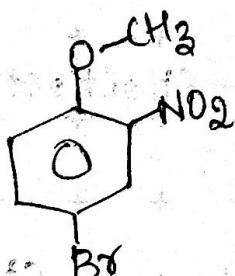
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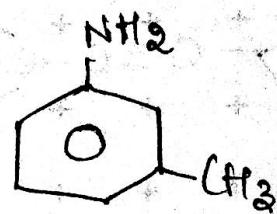
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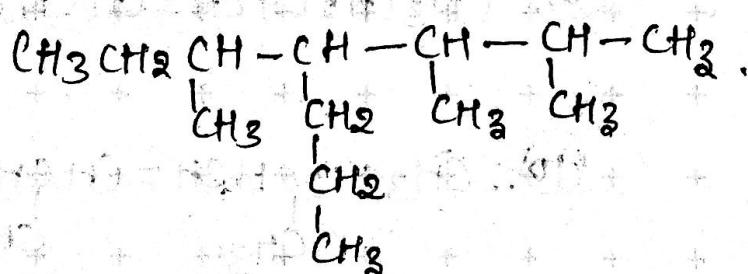
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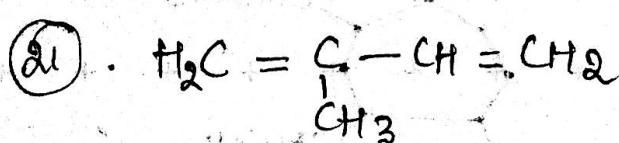
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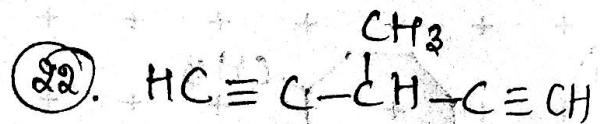
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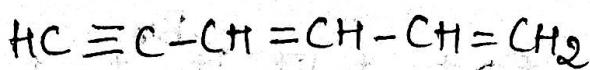
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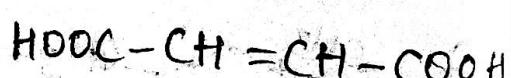
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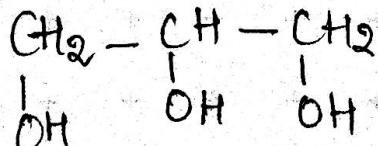
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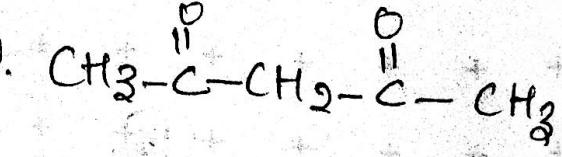
24.



25.



26.



Date 