

Organic Compounds Grade 12 general

[REVIEW] (SECTION 1)

- * Write the scientific term ?? ~~class 12~~
- 1) Most Compounds Contain Carbon element []
- 2) A bond formed when two atoms share one or more pairs of electrons. []
- 3) The simplest way to represent organic Compounds []
- 4) A formula that uses lines to show the bonds formed between atoms []
- 5) The model gives a more realistic picture of the relative size of atoms and their arrangement in the molecule. []
- 6) Compounds consisting of Carbon and hydrogen only []

14

7 Gas is used as fuel and works by some ovens and most of the external grills and hot air balloons

[

]

8 Hydrocarbons contain carbon atoms bound only by single bonds.

[

]

9 Hydrocarbons contain at least one double or triple bond between carbon atoms.

[

]

10 Compounds have the same chemical formula but differ in structural formulas and form.

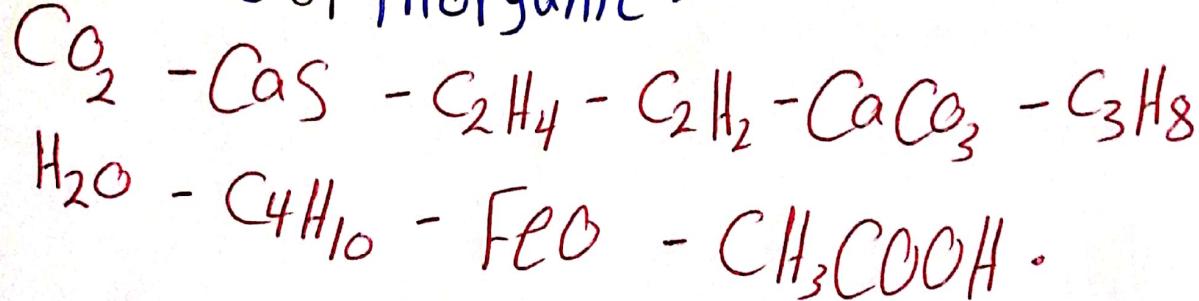
[

11 Cyclic hydrocarbon contains six carbon atoms

[

]

*^② Classify each of the following compounds as organic or inorganic.



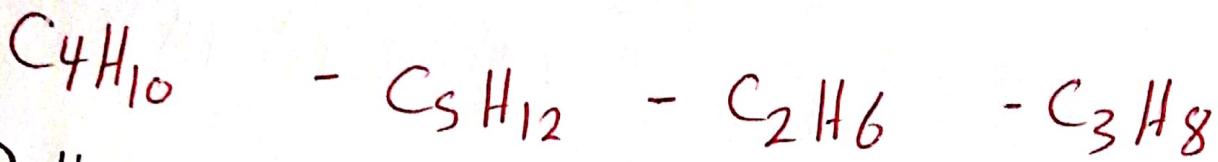
*^③ Compare and contrast ethane-ethene-ethyne

ethane	ethene	ethyne	Comparison
			Similarities
			Chemical formula
			Saturation
			bonds
			Structural formulas

Explain the term saturated in relation to hydrocarbons. What are these compounds saturated with?

- ⑤ how boiling and melting points generally vary as branching in hydrocarbon isomers increases??
- ⑥ Cyclobutane is a cyclic saturated hydrocarbon containing four carbon atoms. Draw its structural formula. Are cyclobutane and butane isomers?

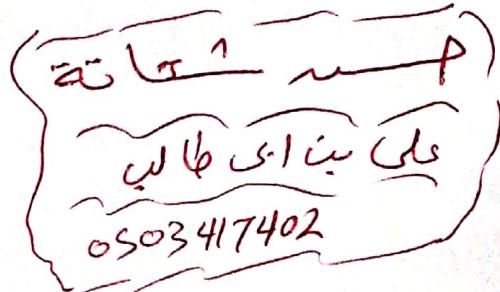
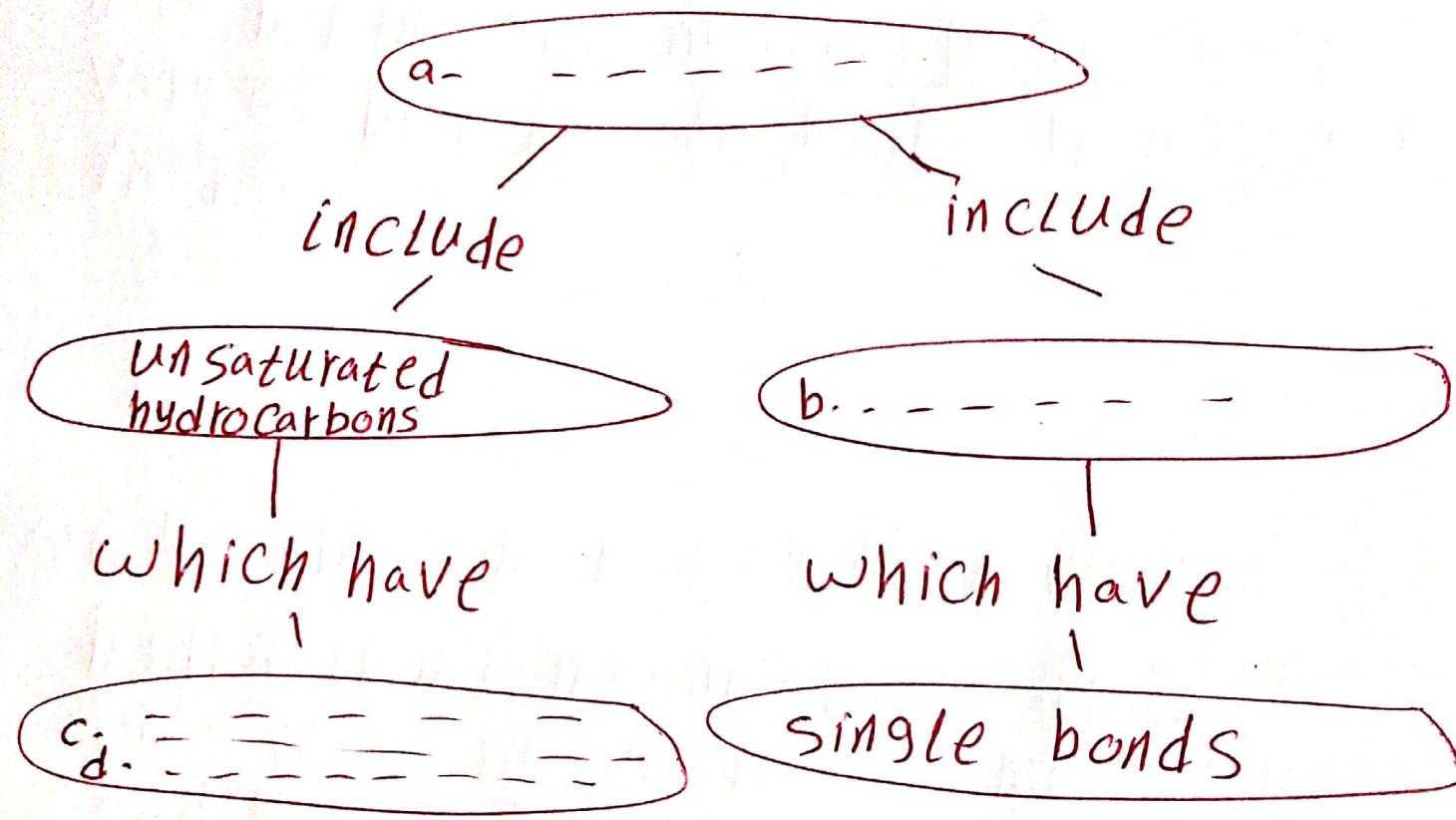
7 Which of the following compounds is the highest boiling point?



8 How would you describe a benzene ring??

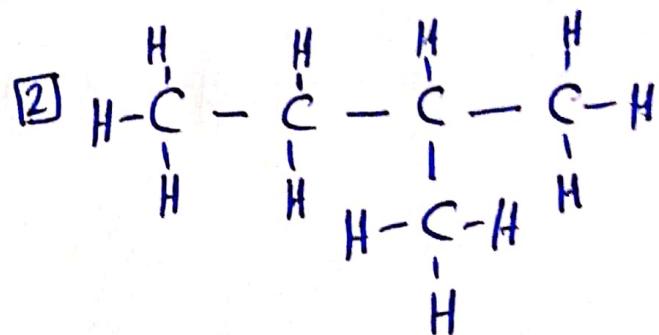
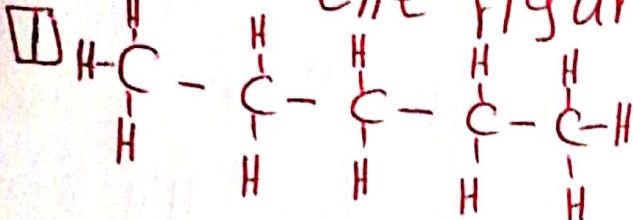
- A - rare B - stable C - unstable D - saturated

9 Complete.

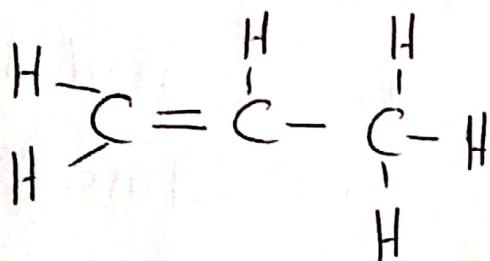


16

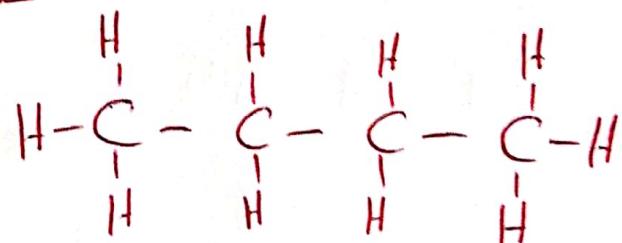
Use the figure below to answer question



③



④



Ⓐ Write the chemical formula of each of these hydrocarbons

① -----

② -----

③ -----

④ -----

Ⓑ Identify which two are isomers?

Ⓒ None of the previous Compounds is Saturated?

or: Which unsaturated Compounds
or: Any

19

* Choose the correct answer:

① What atoms make up a hydrocarbon molecule
molecule?

A: Oxygen, carbon, and hydrogen

B: Nitrogen and Carbon

C: Carbon and hydrogen

② Any of the following Compounds are organic?

A: CO_2 - B: Co^{+2} - C: H_2O - D: CH_4

③ Any of the types of representations shows the realistic picture of the size of atoms

A: Chemical formulas

B: Structural formulas

C: Space filling models

④ Which of the following Compounds is used in some welding torches

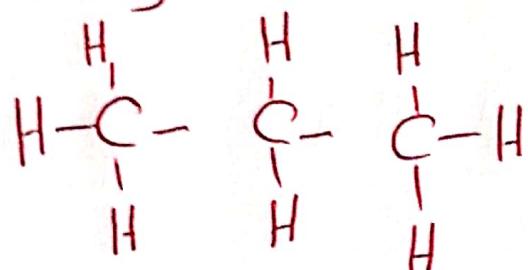
A: methane

B: Ethane

C: Ethyne

⑤ Which of the following compounds helps ripen fruits ()
A: ethylene B: Ethyne C: Ethane

⑥ Use the figure below to answer questions X and Y



X What is the chemical formula of the compound shown above??

- A: C_3H_3 B: CH_8 C: C_6H_6 D: C_3H_8

Y What is the name of this compound

- A: Propane B: heptane
C: isoprene D: methane

