

Full name: ..... Group: .....

Part One: Choose the right answers from the following!

07 pts

01-The Octane number means:

- a - Resistance to explosion.
- b- Resistance to burning.
- c-Resistance to knock.**

02-Gasoline contains:

- a - 2 to 12 carbons.
- b - 5 to 11 carbons.
- c - 2 to 11 carbons.

03-Grease and fat are removed in :

- a - Pretreatment.**
- b-Secondary treatment.
- c -Tertiary treatment.

04-The result of low compression ratio is :

- a - Audible knock.**
- b - Loss in power.**
- c - Possible engine damage.**

05-Grit removal means :

- a - Sand.**

b -Sludge.

c -Sticks.

06-Natural gas is composed primary of

a -Ethane.

b -Methane.

c -Propane.

07-Sewage treatment goes through :

a -One stage.

b -Two stages.

c -Three stages.

08-Pure gas means:

a -Clean gas.

b -Raw gas.

c -Crude gas.

09-Carbon-14 is used to:

a -Precise time of death.

b -Change colors.

c -Precise age.

10-Methane molecule is made up of:

a -2 carbon atoms and 4 hydrogen atoms. X

b -1 hydrogen atom and 4 carbon atoms. X

c -2 carbon atoms and 2 hydrogen atoms. X

11-Fixed films are more effective than:

a -Suspended growth.

b -Screening.

c -Activated sludge.

12-What are the different forms of carbon?

a -Fullerenes.

b -Diamond.

c -Graphite.

13-Activated sludge removes:

a -Grease.

b -Grit.

c -Organic materials

14-How do we process sludge?

a -Throw it.

b -Dry it.

c - It is skimmed.

Part two: Are these statements True or False?

07pts

01-Gasoline is a simple unique liquid. **F**

02-Isooctane is a straight chain compound. **F**

03-Low compression result is burning. **F**

04-The chemical symbol of carbon is CH. **F**

05-Ethyl benzene is an aromatic compound. **T**

06-Sewage comes only from homes and factories. **F**

07-Carbon atomic mass equals 6. **F**



08-The removed grease is used in soap manufacture. **T**

09-High compression ratio result is heat generation. **T**

10-In reality Alkenes and Alkynes are not contained in gasoline. **F**

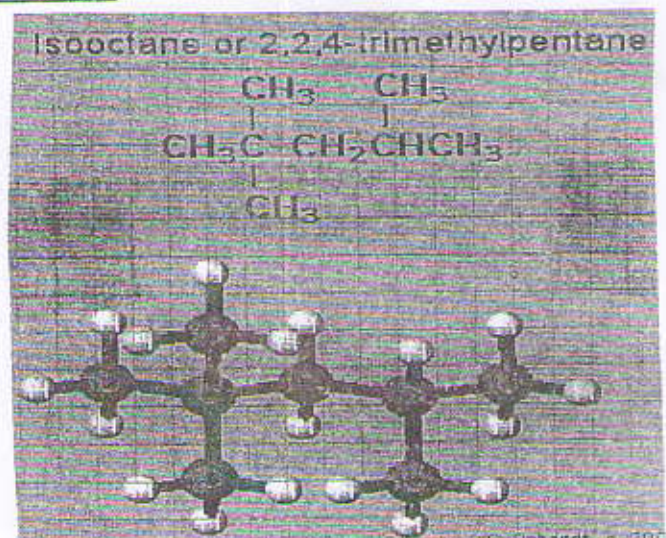
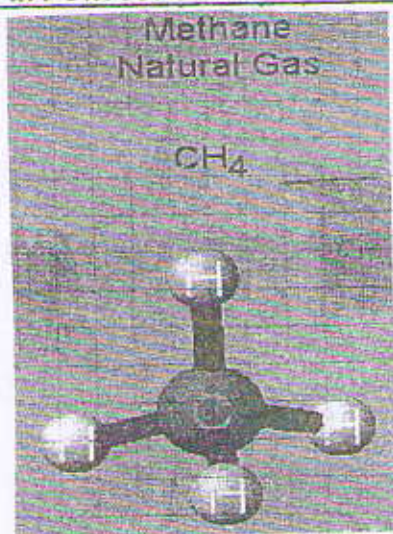
11-Xe, Ne and Ar are rare gases. **T**

12-One carbon atom can form 4 covalent bonds. **T**

13-Carbon is non metallic. **T**

14-Gasoline hydrocarbons have different chain length. **T**

Part Three: comment on the pictures A and B.



(A)

(B)

2/1  
A. It is a picture of a chemical compound which is Methane, it is made up of 1 carbon atom and 4 hydrogen atoms. It is the primary compound of natural gas.

4/1  
B. It is a picture of a chemical compound which is Isooctane; it is a branched compound. It is the primary compound of gasoline.

WISH YOU ALL THE BEST

AOUJCHE.S