

King Saud University

Petroleum and Natural Gas Engineering

PGE 362: Properties of Reservoir Fluids

Thursday, January 28, 2017

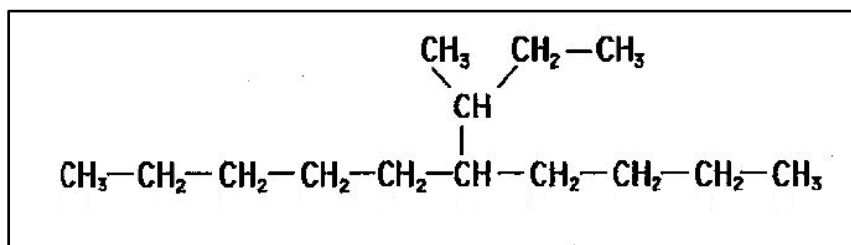
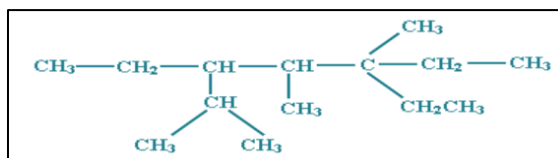
Tutorial one

The numerical multiplier (or multiplying affix) in IUPAC nomenclature indicates how many particular atoms or functional groups are attached at a particular point in a molecule. The affixes are derived from both Latin and Greek.

Number	Multiplier
1	mono-
2	di-
3	tri-
4	tetra-
5	penta-
6	hexa-
7	hepta-
8	octa-
9	nona-
10	deca-

11	undeca-
12	dodeca-
13	trideca-
14	tetradeca-
15	pentadeca-
16	hexadeca-
17	heptadeca-
18	octadeca-
19	nonadeca-
20	icosa-/eicosa-

Q1) Name the following hydrocarbons:



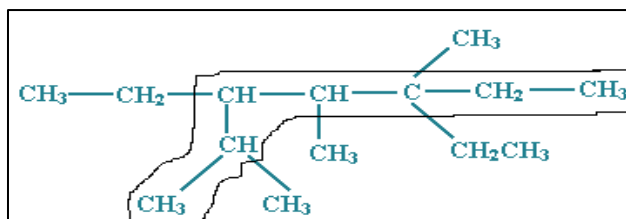
Q2) Draw the following hydrocarbon:

1,2-Dimethyl-5-propylcycloheptane

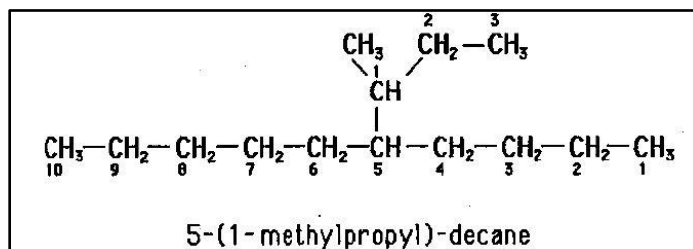
Q3) True or false

- I. Hydrocarbons are classified into Aliphatic and Aromatic only. ()
- II. Alkenes are saturated hydrocarbons. ()
- III. Boiling point of Alkanes decreases with chain branching. ()
- IV. Number of isomers can be predicted easily. ()

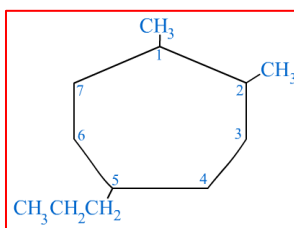
Q1-A)



3, 5 - Diethyl - 2, 4, 5 – Trimethylheptane



Q2-A)



Q3-A) True or false

- I. Hydrocarbons are classified into Aliphatic and Aromatic only. (**T**)
- II. Alkenes are saturated hydrocarbons. (**F**)
- III. Boiling point of Alkanes decreases with chain branching. (**T**)
- IV. Number of isomers can be predicted easily. (**F**)