

(Carbon compounds as the basis of organic chemistry)

Q1. a). (2019)

a temperature between 400 (°C)
and 500 (°C) inclusive

Q1. b). (2019)

(diesel oil has a) lower boiling
point / range than heavy fuel oil

(but diesel oil has a) higher
boiling point / range than
kerosene

Q1. c). (2019)

any **two** from:

- (too) viscous
- not (very) flammable
- boiling point (too) high

Q2. a). (2022)

crude oil is heated to vaporise
(the hydrocarbons)

there is a temperature gradient
in the (fractionating) column

(so) the gases condense at
different levels

or

(so) lubricating oil condenses
below naphtha (and petroleum
gases do not condense)

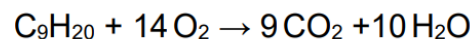
(because of their) different
boiling points

Q2. b). (2022)

detergents

solvents

Q2. c). (2022)



Q2. d). (2022)

(when burned sulfur impurities)
produce sulfur dioxide

(which) causes acid rain

or

(which) causes respiratory
problems

Q3. (2022)

as molecular size increases
viscosity increases

(and) heavy fuel oil has larger
molecules (than kerosene)

Q4. (2024)

there is a temperature gradient
in the (fractionating) column

(so) kerosene condenses

at the level (in the column)
corresponding to kerosene's
boiling point (range)