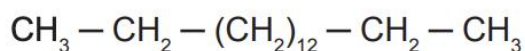


**Question 28****(6 marks)**

While petroleum diesel and biodiesel are produced differently, they have similar structures to each other.

- (a) The condensed structure of a petroleum diesel is given here.



Draw the condensed structure of a biodiesel containing the same number of carbon atoms in the chain. (3 marks)

- (b) Biodiesel can be synthesised using a base-catalysed method or a lipase-catalysed method. Outline briefly an argument to justify the use of a lipase-catalysed method rather than a base-catalysed method to produce biodiesel. (3 marks)

---

---

---

---

---

---