

BAB 5: SEBATIAN KARBON

5.4 : Lemak

5.5: Minyak Sawit

LATIHAN 2 : Jawab soalan berikut.

- 1 Maklumat berikut menunjukkan ciri-ciri bahan M.

The following information shows the characteristics of substance M.

- Berbentuk pepejal pada suhu bilik
Solid in room temperature
- Diperoleh daripada haiwan
Obtained from animals

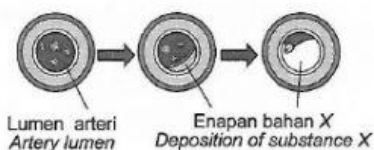
Apakah bahan M?

What is substance M?

- ☐ A Lemak tepu
Saturated fat
- ☐ B Lemak tak tepu
Unsaturated fat
- ☐ C Karbohidrat
Carbohydrate
- ☐ D Detergen
Detergent

- 2 Rajah 1 menunjukkan perubahan dalam lumen arteri

Diagram 1 shows the changes in the lumen of an artery.



Rajah 1 / Diagram 1

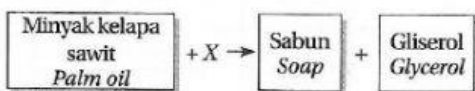
Makanan yang manakah jika diambil secara berlebihan boleh menyebabkan enapan bahan X pada dinding arteri?

Which food if taken in excess can cause the deposition of substance X on the arterial wall?

- ☐ A Susu segar
Fresh milk
- ☐ B Mentega kacang
Peanut butter
- ☐ C Minyak ikan
Fish oil
- ☐ D Minyak zaitun
Olive oil

- 3 Persamaan perkataan berikut menunjukkan proses saponifikasi.

The following word equation shows the saponification process.



Apakah X?

What is X?

- ☐ A Alkali / *Alkali*
- ☐ B Asid / *Acid*
- ☐ C Glukosa / *Glucose*
- ☐ D Natrium klorida / *Sodium chloride*

- 4 Antara yang berikut, yang manakah menunjukkan perbezaan yang betul antara lemak tepu dan lemak tak tepu?

Which of the following correctly shows the difference between saturated fat and unsaturated fat?

	Lemak tak tepu <i>Unsaturated fat</i>	Lemak tepu <i>Saturated fat</i>
A	Berasal daripada haiwan <i>Originates from animals</i>	Berasal daripada tumbuhan <i>Originates from plants</i>
B	Cecair pada suhu bilik <i>Liquid at room temperature</i>	Pepejal pada suhu bilik <i>Solid at room temperature</i>
C	Takat lebur tinggi <i>High melting point</i>	Takat lebur rendah <i>Low melting point</i>
D	Bilangan atom hidrogen maksimum dalam molekul <i>Maximum number of hydrogen atoms in the molecule</i>	Bilangan atom hidrogen dalam molekul belum maksimum <i>Number of hydrogen atoms in the molecule is not maximum</i>

- 5 Berikut ialah senarai langkah-langkah dalam pengekstrakan minyak sawit.

Below is the list of steps in palm oil extraction.

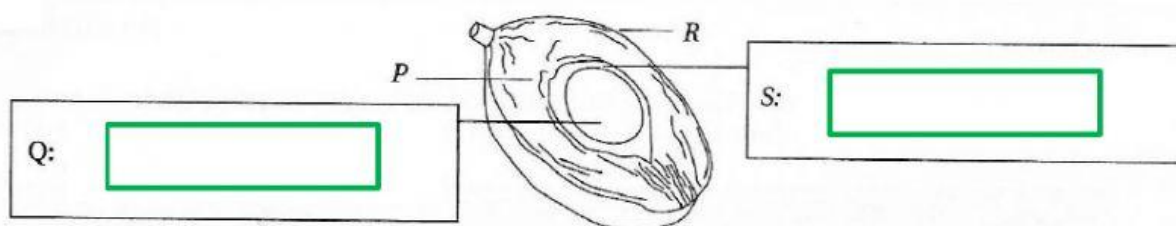
J	Pulpa diperah dan dimampatkan menggunakan mesin hidraulik <i>The pulps are squeezed and compressed using a hydraulic machine</i>
K	Buah kelapa sawit disteril pada suhu dan tekanan tinggi <i>Oil palm fruits are sterilised at a high temperature and pressure</i>
L	Minyak sawit melalui karbon aktif bagi menyahwarna <i>Palm oil is passed through activated carbon to decolourise</i>
M	Buah kelapa sawit ditanggalkan daripada tandannya <i>The oil palm fruits are removed from their bunches</i>
N	Serat pulpa dipisahkan daripada minyak sawit <i>Pulp fibres are separated from the palm oil</i>

Urutan langkah yang manakah betul dalam proses pengekstrakan tersebut?

Which is the correct sequence of steps in the extraction process?

- ☐ A M, K, N, J, L
- ☐ B M, J, N, K, L
- ☐ C K, N, J, L, N
- ☐ D K, M, J, N, L

- 6 Rajah 2 menunjukkan keratan rentas buah kelapa sawit.
Diagram 2 shows a cross-section of oil palm fruit.



Rajah 2 / Diagram 2

- (a) Labelkan bahagian Q dan S dalam rajah di atas.
Label parts Q and S in the diagram above.

[2 markah/marks]

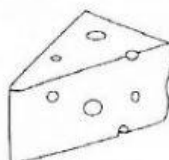
- (b) Bahagian manakah pada buah kelapa sawit yang menghasilkan paling banyak minyak?
Which part of the oil palm fruit produces the most oil?

[1 markah/mark]

- (c) Namakan proses untuk menghasilkan minyak kelapa sawit daripada buahnya.
Name the process to produce palm oil from the oil palm fruit.

[1 markah/mark]

- (d) Tandakan bahan yang diperbuat daripada minyak kelapa sawit pada rajah di bawah.
Ticks the items made from palm oil in the diagram below.


☐

☐

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[1 markah/mark]