

Praktis Stimulus



Bahagian A

3.1 Kelas Makanan Classes of Food

- Antara makanan berikut, yang manakah perlu diambil dengan banyak oleh pesakit yang mengalami sembelit?
Which of the following food should be consumed more by the constipated patients?
 - Roti, nasi, biskut dan mi
Bread, rice, biscuit and noodles
 - Daging, ikan, telur dan susu
Meat, fish, egg and milk
 - Sayur-sayuran, betik, pisang dan air
Vegetables, papaya, banana and water
 - Keju, mentega, kacang tanah dan minyak zaitun
Cheese, butter, groundnuts and olive oil
- Jabatan kesihatan biasanya mencadangkan 2 liter air perlu diminum setiap hari. Apakah kepentingan air dalam kelas makanan?
Health departments commonly recommend about 2 litres water should be drunk everyday. What is the importance of water in the classes of food?
 - Merangsang peristalsis
To stimulate peristalsis
 - Mensintesis enzim, hormon dan antibodi
To synthesise enzymes, hormones and antibodies
 - Mengawal atur proses badan untuk mengekalkan kesihatan
To regulate body processes to maintain health
 - Sebagai medium pengangkutan bagi nutrien dan oksigen ke dalam sel
As a transportation medium of nutrients and oxygen into the cells

- Jadual di bawah menunjukkan pemerhatian bagi ujian makanan ke atas sampel makanan.
The table below shows the observations of food tests on food samples.

Ujian Test	Pemerhatian Observation
Ujian iodine Iodine test	Larutan berwarna biru tua Dark blue solution
Ujian Benedict Benedict's test	Larutan berwarna biru Blue solution
Ujian Millon Millon's test	Mendakan merah bata terbentuk A brick-red precipitate is formed

Apakah kemungkinan sampel makanan tersebut?
What are the possible food samples?

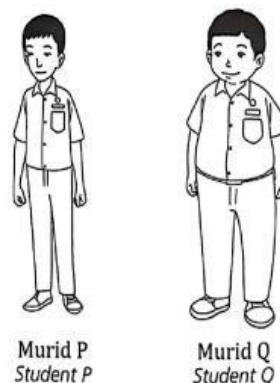
- | | |
|-----------------------------------|-----------------------------------|
| I Ubi kentang
<i>Potato</i> | III Cuka
<i>Vinegar</i> |
| II Nanas
<i>Pineapple</i> | IV Susu
<i>Milk</i> |
| A I dan II
<i>I and II</i> | C II dan III
<i>II and III</i> |
| B III dan IV
<i>III and IV</i> | D I dan IV
<i>I and IV</i> |

3.2 Kepentingan Gizi Seimbang Importance of a Balanced Diet

- Antara kelas makanan berikut, yang manakah perlu diambil lebih banyak dan sedikit dalam sajian orang dewasa?
Which of the following classes of food needs to be consumed more and less in the meals of adults?

	Makan banyak dalam sajian Consume more in a meal	Makan sedikit dalam sajian Consume less in a meal
A	Karbohidrat Carbohydrate	Lemak Fat
B	Pelawas Fibre	Protein Protein
C	Protein Protein	Pelawas Fibre
D	Protein Protein	Mineral Mineral

- Rajah di bawah menunjukkan dua orang murid yang berbeza saiz badan.
The diagram below shows two students with different body sizes.



Siapakah memerlukan kalori yang lebih banyak? Pilih sebab yang betul.
Who need more calories? Choose the correct reason.

	Murid Student	Sebab Reason
A	P	Dia kurang berotot <i>He is less muscular</i>
B	P	Dia mempunyai rangka badan yang kecil <i>He has small body frame</i>
C	Q	Dia mempunyai rangka badan yang besar <i>He has large body frame</i>
D	Q	Dia lemah <i>He is weak</i>

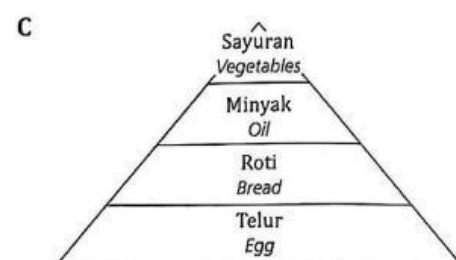
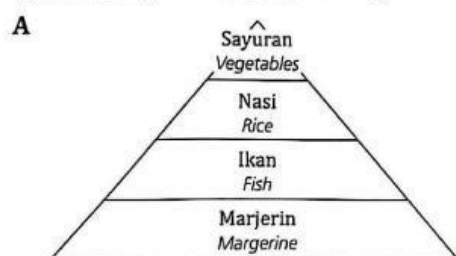
6 Apakah yang perlu kita lakukan untuk mengamalkan cara hidup sihat?

What should we do to practise a healthy lifestyle?

- I Elakkan merokok
Avoid smoking
 - II Bersenam dengan kerap
Exercise regularly
 - III Mendapatkan tidur yang baik, iaitu melebihi 10 jam
Have a good sleep which is more than 10 hours
 - IV Makan lebih banyak makanan bergula, bergaram, berminyak dan berlemak
Eating more food with high sugar, salt, oil and fat
- A I dan II
I and II
- B III dan IV
III and IV
- C II dan III
II and III
- D I dan IV
I and IV

7 Piramid makanan yang manakah menunjukkan gizi seimbang yang sihat?

Which food pyramid shows a healthy balanced diet?



8 Jadual berikut menunjukkan nilai kalori bagi beberapa jenis makanan.

The following table shows the calorific values of some food.

Makanan <i>Food</i>	Nilai kalori (kJ) <i>Calorific value (kJ)</i>
1 pinggan nasi lemak <i>1 plate of nasi lemak</i>	1 880
1 potong kek <i>1 piece of cake</i>	345
250 g betik <i>250 g of papaya</i>	317
100 ml susu <i>100 ml of milk</i>	183

Seorang tukang kebun bersarapan dengan mengambil satu pinggan nasi lemak, dua potong kek, 500 g betik dan 300 ml susu. Berapakah nilai kalori yang telah diambil oleh tukang kebun tersebut?

A gardener had his breakfast by taking a plate of nasi lemak, two pieces of cake, 500 g of papaya and 300 ml of milk. What is the calorific value taken by the gardener?

- A 2 725 kJ C 3 570 kJ
- B 3 225 kJ D 3 753 kJ

3.3 Sistem Pencernaan Manusia *Human Digestive System*

9 Antara berikut, yang manakah menunjukkan perbezaan yang betul antara pencernaan fizikal dengan pencernaan kimia dalam manusia?

Which of the following shows the correct difference between physical digestion and chemical digestion in humans?

	Pencernaan fizikal <i>Physical digestion</i>	Pencernaan kimia <i>Chemical digestion</i>
A	Dengan bantuan enzim <i>With the help of enzymes</i>	Dengan bantuan gigi, lidah dan air liur <i>With the help of teeth, tongue and saliva</i>
B	Berlaku di dalam mulut, perut, duodenum dan usus <i>Occurs in the mouth, stomach, duodenum and intestine</i>	Berlaku di dalam mulut <i>Occurs in the mouth</i>
C	Melibatkan peristalsis <i>Involves peristalsis</i>	Tidak melibatkan peristalsis <i>Does not involve peristalsis</i>
D	Proses pemecahan makanan dari molekul kompleks kepada molekul ringkas <i>Process of breaking down food from complex molecules into simple molecules</i>	Proses pemecahan makanan kepada zarah yang lebih kecil <i>Process of breaking down food into smaller particles</i>

- 10 Maklumat berikut menerangkan sistem pencernaan manusia.
The following information describes about the human digestive system.

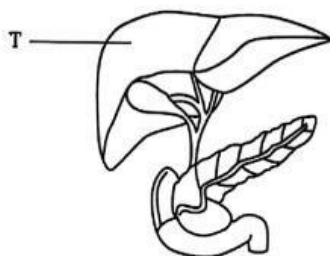
Satu sampel makanan diambil daripada organ P. Selepas dianalisis, nilai pH sampel tersebut ialah 3.
A food sample is taken from organ P. After being analysed, the pH value of the sample is 3.

Antara pernyataan berikut, yang manakah menerangkan situasi ini?

Which of the following statements explains this situation?

- A** Organ P menerima hempedu daripada hati untuk mengemulsikan lemak
Organ P receives bile from the liver to emulsify the fats
- B** Organ P merembeskan hormon untuk mengawal paras glukosa dalam darah
Organ P secretes a hormone to control blood glucose level
- C** Enzim di dalam organ P memecahkan lemak kepada asid lemak dan gliserol
Enzymes in organ P break down fats into fatty acid and glycerol
- D** Organ P menghasilkan jus gastrik yang mengandungi asid hidroklorik
Organ P produces gastric juice which contains hydrochloric acid

- 11 Rajah di bawah menunjukkan organ dalam sistem pencernaan manusia.
The diagram below shows the organs in the human digestive system.



Apakah yang akan berlaku apabila organ T dibuang?
What would happen when organ T is removed?

- A** Tidak dapat menghasilkan hempedu
Cannot produce bile
- B** Tidak dapat menghasilkan jus pankreas
Cannot produce pancreatic juice
- C** Tidak dapat mengemulsikan lemak kepada titisan
Cannot emulsify fats into droplets
- D** Tidak dapat merembeskan protease dan asid hidroklorik
Cannot secrete protease and hydrochloric acid

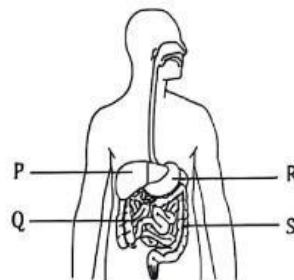
3.4

Proses Penyerapan dan Pengangkutan Hasil Pencernaan serta Penyahuteraan
Process of Absorption and Transportation of Digested Food and Defecation

- 12 Antara hasil pencernaan akhir berikut, yang manakah dipadankan dengan betul?
Which of the following end products of digestion is matched correctly?

	Kelas makanan Food class	Hasil akhir pencernaan End product of digestion
A	Karbohidrat Carbohydrate	Asid amino Amino acid
B	Protein Protein	Glukosa Glucose
C	Lemak Fat	Gliserol Glycerol
D	Pelawas Fibre	Tinja Faeces

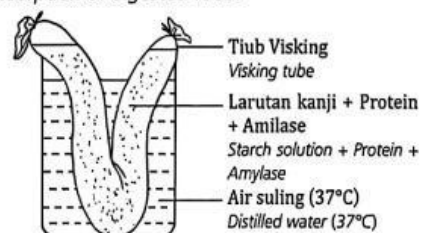
- 13 Rajah berikut menunjukkan sistem pencernaan manusia.
The following diagram shows the human digestive system.



Di manakah proses penyerapan makanan tercerna dan penyerapan semula mineral dan air berlaku?
Where does the process of absorption of digested food and reabsorption of minerals and water occur?

	Penyerapan makanan tercerna Absorption of digested food	Penyerapan semula mineral dan air Reabsorption of minerals and water
A	P	Q
B	R	S
C	P	R
D	Q	S

- 14 Rajah di bawah menunjukkan susunan radas untuk mengkaji penyerapan makanan tercerna.
The diagram below shows the apparatus set-up to study the absorption of digested food.



Apakah pemerhatian pada akhir eksperimen ini?
What is the observation at the end of this experiment?

- A** Hanya kanji hadir di dalam air suling
Only starch is present in the distilled water
- B** Hanya glukosa hadir di dalam air suling
Only glucose is present in the distilled water
- C** Kanji dan glukosa hadir di dalam air suling
Both starch and glucose are present in the distilled water
- D** Kanji dan glukosa tidak hadir di dalam air suling
Both starch and glucose are absent in the distilled water