

Bahagian B

[40 marks]
[40 markah]

Answer any **two** questions from this section.
*Jawab mana-mana **dua** soalan daripada bahagian ini*

- 6 (a) Enzymes is produced by living cells. There are two types of enzyme which are intracellular enzyme and extracellular enzyme.

Diagram 6.1 shows the organelles involved in the synthesis and secretion of extracellular enzymes in an animal cell.

Enzim dihasilkan oleh sel hidup. Terdapat dua jenis dua jenis iaitu enzim intrasel dan enzim luar sel.

Diagram 6.1 menunjukkan organel-organel yang terlibat dalam sintesis dan rembesan enzim-enzim luar sel di dalam sel haiwan.

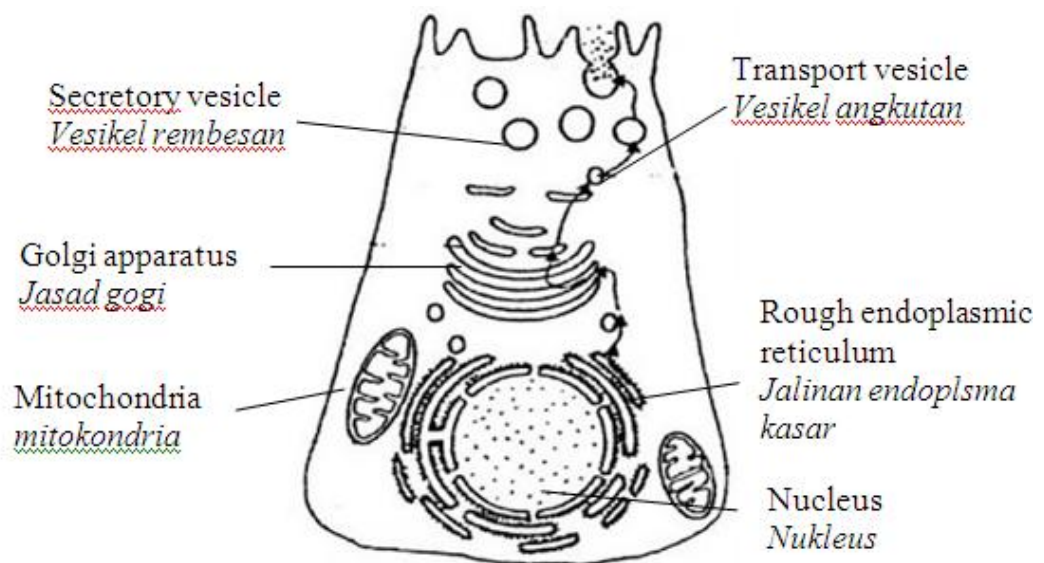


Diagram 6.1
Rajah 6.1

- (i) Explain the differences between intracellular enzymes and extracellular enzymes.
Terangkan perbezaan di antara enzim intrasel dan enzim luar sel.

[4 marks]
[4 markah]

- (ii) Describe the involvement of the organelles in the production of extracellular enzymes.

Huraikan penglibatan organel-organel di dalam penghasilan enzim-enzim luar sel.

[8 marks]
[8 markah]

- 6 (b) Diagram 6.2 shows three stages in an enzyme reaction.

Rajah 6.2 menunjukkan tiga peringkat di dalam suatu tindakan enzim.

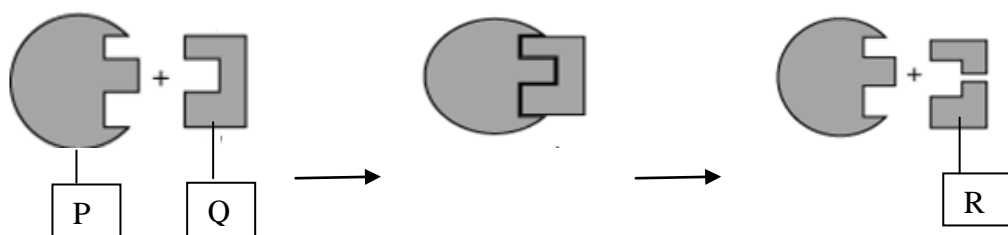


Diagram 6.2
Rajah 6.2

- (i) Based on diagram above, explain the lock and key hypothesis in the mechanism of enzyme reaction.

Berdasarkan gambarajah di atas, terangkan hipotesis kunci dan manga di dalam mekanisma tindak balas enzim.

[8 marks]
[8 markah]

- 7 Diagram 7.1 shows transport of nutrients from small intestine to the liver
Rajah 7.1 menunjukkan pengangkutan nutrient dari usus kecil ke hati.

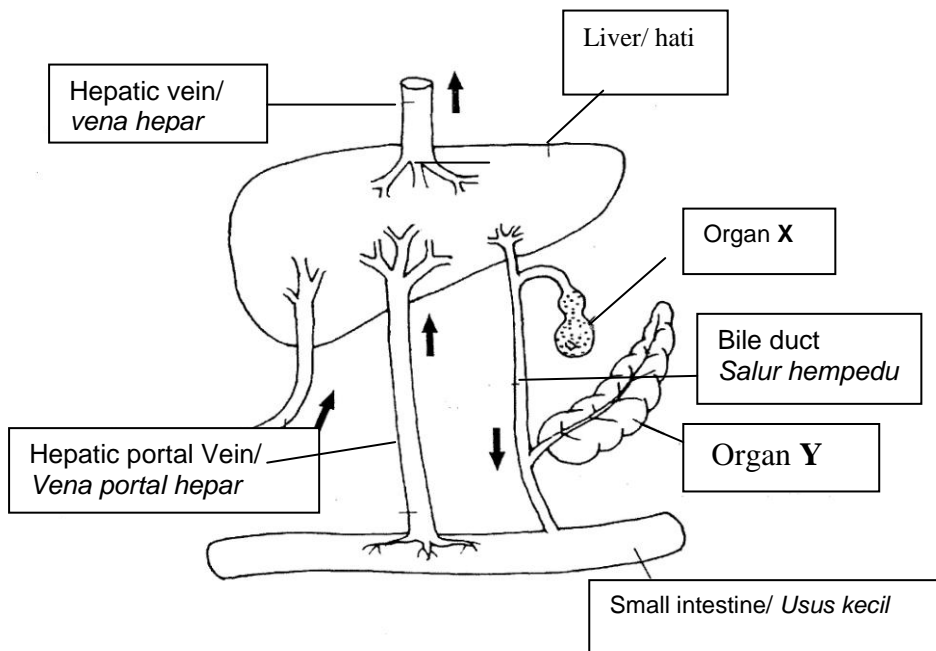


Diagram 7.1
Rajah 7.1

- (a) (i) Organ X and organ Y plays an important role in digestive system.
 Explain the role of organ X and organ Y in digestion of lipid.

Organ X and organ Y memainkan peranan yang penting dalam sistem pencernaan .

Terangkan peranan organ X dan Y dalam pencernaan lipid

[6 marks]
 [6 markah]

- (ii) A person who use to consume a lot of protein food will produce high content of urea in his urine .
 Explain why?

Seorang yang mengambil makanan berprotein dengan banyak akan menghasilkan kandungan urea yang tinggi dalam air kencingnya.

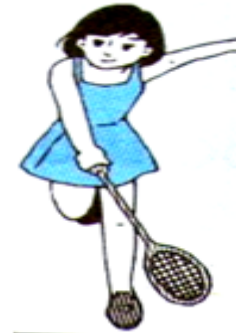
Terangkan mengapa?

[6 marks]
 [6 markah]

- 7 (b) Diagram 7.2 shows two different individuals
Rajah 7.2 menunjukkan dua individu yang berbeza.



Pregnant woman
Wanita mengandung



Teenager
Remaja

Diagram 7.2
Rajah 7.2

Explain the dietary requirements of each group represented by the individuals.

Terangkan keperluan gizi bagi setiap kumpulan yang diwakili oleh individu tersebut.

[8 marks]
[8 markah]

- 8 (a) Diagram 8(a) shows how a frog carry out inhalation and exhalation.

Explain the processes.

Rajah 8(a) menunjukkan bagaimana seekor katak menjalankan inspirasi dan ekspirasi.

Terangkan proses-proses yang berlaku.

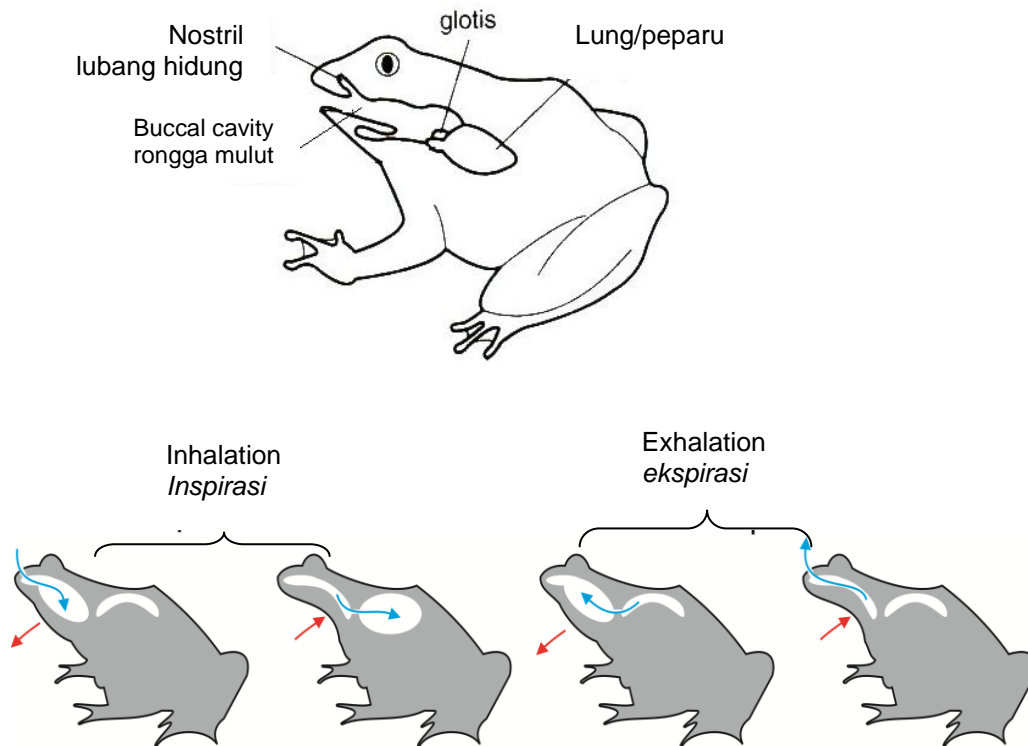


Diagram 8(a)
Rajah 8(a)

[6 marks]
[6 markah]

- 8 (b) Diagram 8(b) shows two athletes who have just completed the running, both of them suffer from muscle fatigue and lead to muscle pain. Athlete A choose to sit down to wait for the pain to disappear while Athlete B choose to walk slowly.

Rajah 8(b) menunjukkan dua orang atlet yang baru tamat dari larian, kedua-duanya mengalami keletihan otot dan membawa kepada sakit otot.

Atlet A memilih duduk dan rehat untuk menunggu keletihan itu hilang manakala atlet B memilih berjalan perlahan-lahan bagi menghilangkan keletihan otot.



Diagram 8 (b)
Rajah 8 (b)

Explain which athlete will recover faster from the muscle fatigue ?

Terangkan atlet manakah akan terlebih dahulu pulih dari keletihan otot ?

[8 marks]

[8 markah]

- 8 (c) Diagram 8(c) shows the changes of atmospheric pressure with the altitude. Diagram 8(d) shows the equipments wore by a mountain climber.
Rajah 8(c) menunjukkan perubahan tekanan atmosfera dengan altitude.
Rajah 8(d) menunjukkan kelengkapan yang dipakai oleh seorang pendaki gunung

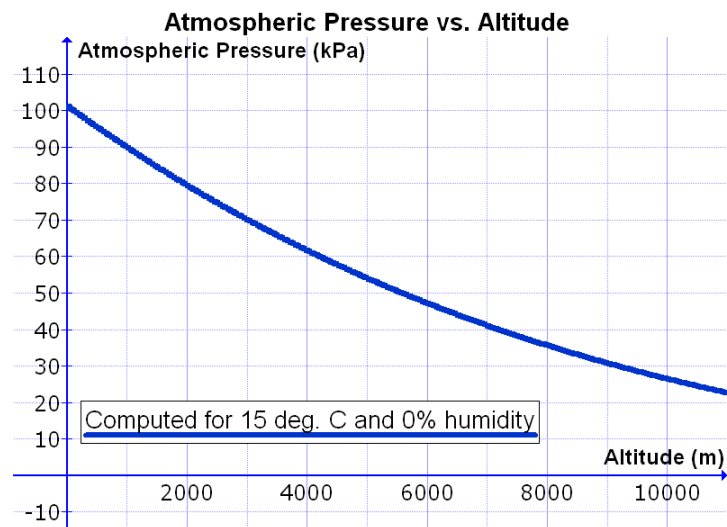


Diagram 8(c)
Rajah 8(c)



Diagram 8(d)
Rajah 8(d)

Explain why the mountain climber needs to wear such equipments?

Terangkan kenapa pendaki gunung perlu memakai kelengkapan yang sedemikian ?

[6 marks]
 [6 markah]

- 9 (a) The following is a newspaper clipping about illegal logging in Malaysia

PUTRAJAYA August 30 - The government will enforce the law to impose a mandatory jail sentence of one year or a maximum of 20 years without a compound of the offenders involved in illegal logging .

Firm decision was made at the Meeting of the National Forestry Council (NCC) 19th chaired by Deputy Prime Minister Datuk Seri Najib Tun Razak here today.

Accordingly, the Attorney General will conduct a study and research about which is expected to take about six months to ensure that law enforcement can be carried out immediately due.

Najib firm , the decision was taken in view of the compound which has no effect on fighting illegal logging even involve the millions of dollars .In addition to the loss of millions of dollars , illegal logging has affected the well-being of people with problems involving the environment , air and water .

Illegal logging is still going on in this country is done by the same group , but this did little syndicate numbers. So now MPN agree that we do not use the compound (to deal with) but continued to be charged in court , " he said. He was speaking at a press conference after chairing the meeting at Perdana Putra Building here today.

Meetings involving all the Chief Minister and the Chief Minister was also attended by the Minister of Natural Resources and Environment Minister Datuk Seri Adenan Satem .

According to Najib , the results were much better because it involves action against offenders prison more restrictive than the existing enforcement .He added that a prison sentence will be carried out in accordance with the provisions of a special law that would be formed under the National Forestry Act 1984 (Amendment 1993) .

- 9 (a) Keratan akhbar berikut adalah mengenai kegiatan pembalakan haram yang berlaku di Malaysia .

PUTRAJAYA 30 Ogos - Kerajaan akan menguat kuasa undang-undang untuk mengenakan hukuman penjara mandatori setahun atau maksimum 20 tahun tanpa dikenakan kompaun bagi pesalah terlibat dalam aktiviti pembalakan haram.

Keputusan tegas itu dicapai pada Mesyuarat Majlis Perhutanan Negara (MPN) ke-19 dipengerusikan Timbalan Perdana Menteri, Datuk Seri Najib Tun Razak di sini hari ini.

Sehubungan itu, Peguam Negara akan membuat kajian dan penelitian mengenainya yang dijangka mengambil masa kira-kira enam bulan untuk memastikan penguatkuasaan undang-undang itu dapat dijalankan serta-merta kelak.

Tegas Najib, keputusan itu diambil memandangkan tindakan kompaun yang selama ini tidak mendatangkan kesan bagi membanteras pembalakan haram walaupun melibatkan nilai berjuta-juta ringgit.

Selain kerugian berjuta-juta ringgit, kegiatan pembalakan haram turut menjejaskan kesejahteraan rakyat dengan melibatkan masalah terhadap alam sekitar, udara dan air.

Pembalakan haram di negara ini masih berterusan yang dilakukan oleh kumpulan yang sama tetapi sindiket ini tidak banyak jumlahnya. Jadi sekarang ini MPN bersetuju bahawa kita tidak guna kompaun (untuk menanganinya) tetapi terus didakwa di mahkamah," kata beliau. Najib berkata demikian pada sidang akhbar selepas mempengerusikan mesyuarat itu di Bangunan Perdana Putra di sini hari ini.

Mesyuarat yang melibatkan semua Menteri Besar dan Ketua Menteri itu turut dihadiri Menteri Sumber Asli dan Alam Sekitar, Datuk Seri Adenan Satem.

Menurut Najib, keputusan itu jauh lebih baik kerana melibatkan tindakan penjara terhadap pesalah yang lebih tegas berbanding penguatkuasaan yang ada sekarang. Tambah beliau, hukuman penjara akan dilaksanakan mengikut peruntukan undang-undang khas yang akan dibentuk di bawah Akta Perhutanan Negara 1984.

(Pindaan 1993).

Based on the above article describe how the activity affect the ecosystem.

Berdasarkan artikel di atas , jelaskan bagaimana aktiviti di atas memberi kesan ke atas ekosistem

[10 marks]
[10 markah]

- 9 (b) Ozone layer found in the second layer of the atmosphere, the stratosphere layer. Diagram 9 shows a reactions occurring in the ozone layer that has highly significant impact on life on Earth.

Lapisan ozon terdapat di lapisan kedua atmosfera, iaitu lapisan stratosfera.

Gambarajah 9 menunjukkan tindakbalas yang berlaku dilapisan ozon dan memberi kesan yang sangat ketara kepada hidupan di bumi.

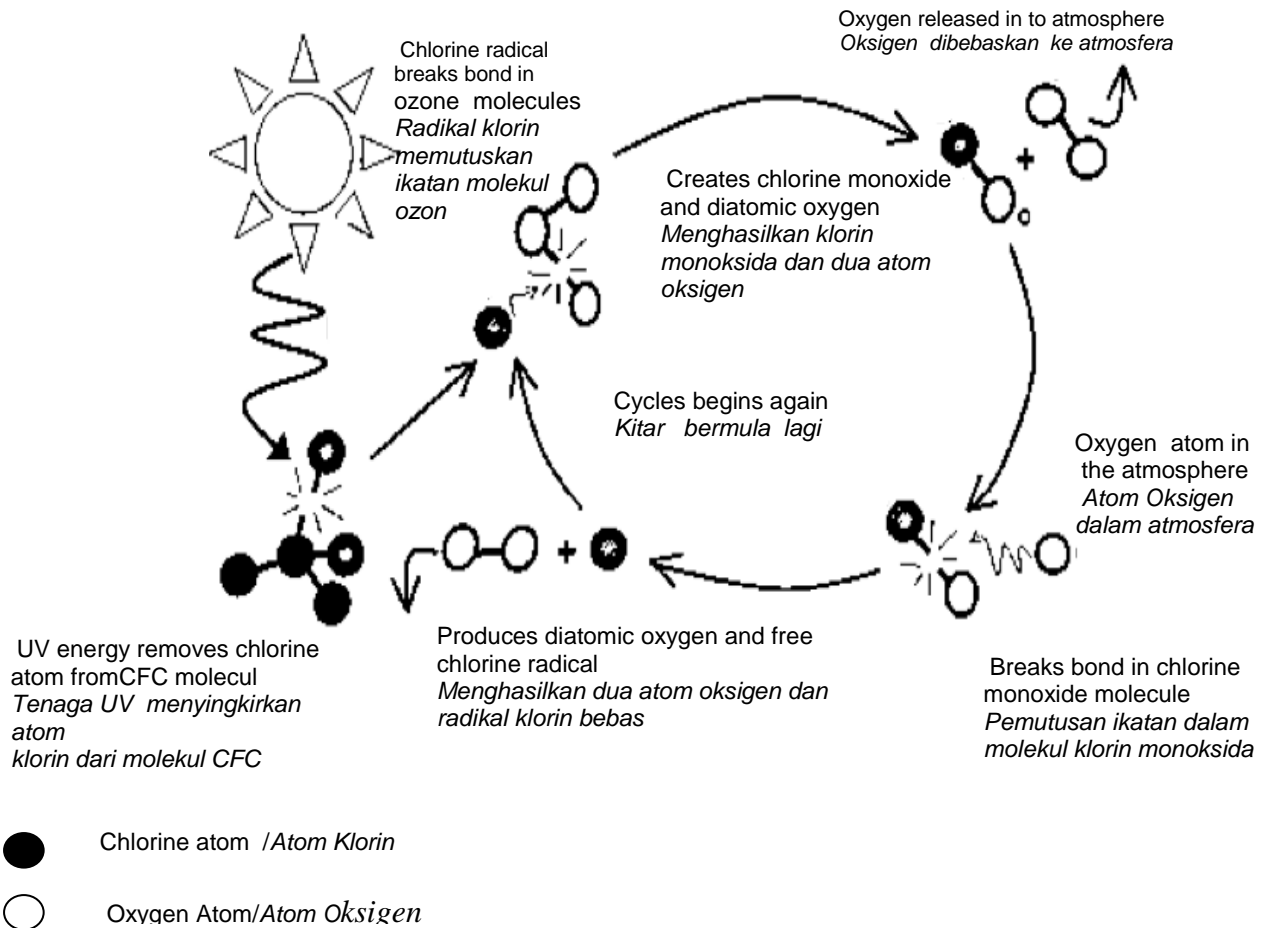


Diagram 9
Rajah 9

- (i) Explain the impact on the environment
Jelaskan kesan tersebut terhadap alam sekitar

[8 marks]
[8 markah]

- (ii) Suggest ways to reduce the impact on the environment
Cadangkan cara untuk mengurangkan impak di atas terhadap alam sekitar.

[2 marks]
[2 markah]

KERTAS SOALAN TAMAT