

Bahagian B

[20 markah]

Bahagian ini mengandungi dua soalan. Jawab satu soalan.

9. (a) Jadual 1 menunjukkan kadar pernafasan seorang pelajar semasa berehat dan semasa melakukan aktiviti cergas.

Table 1 shows the breathing rate of a student during resting and during vigorous activity.

Kadar pernafasan (Pernafasan per minit) <i>Breathing rate (Breath per minute)</i>	 Semasa rehat <i>During resting</i>	 Semasa aktiviti cergas <i>During vigorous activity</i>
	16	30

Jadual 1 / Table 1

- (i) Namakan proses respirasi yang berlaku sewaktu rehat dan semasa menjalankan aktiviti cergas.

Name the process happen during resting and during vigorous activity.

[2 markah/marks]

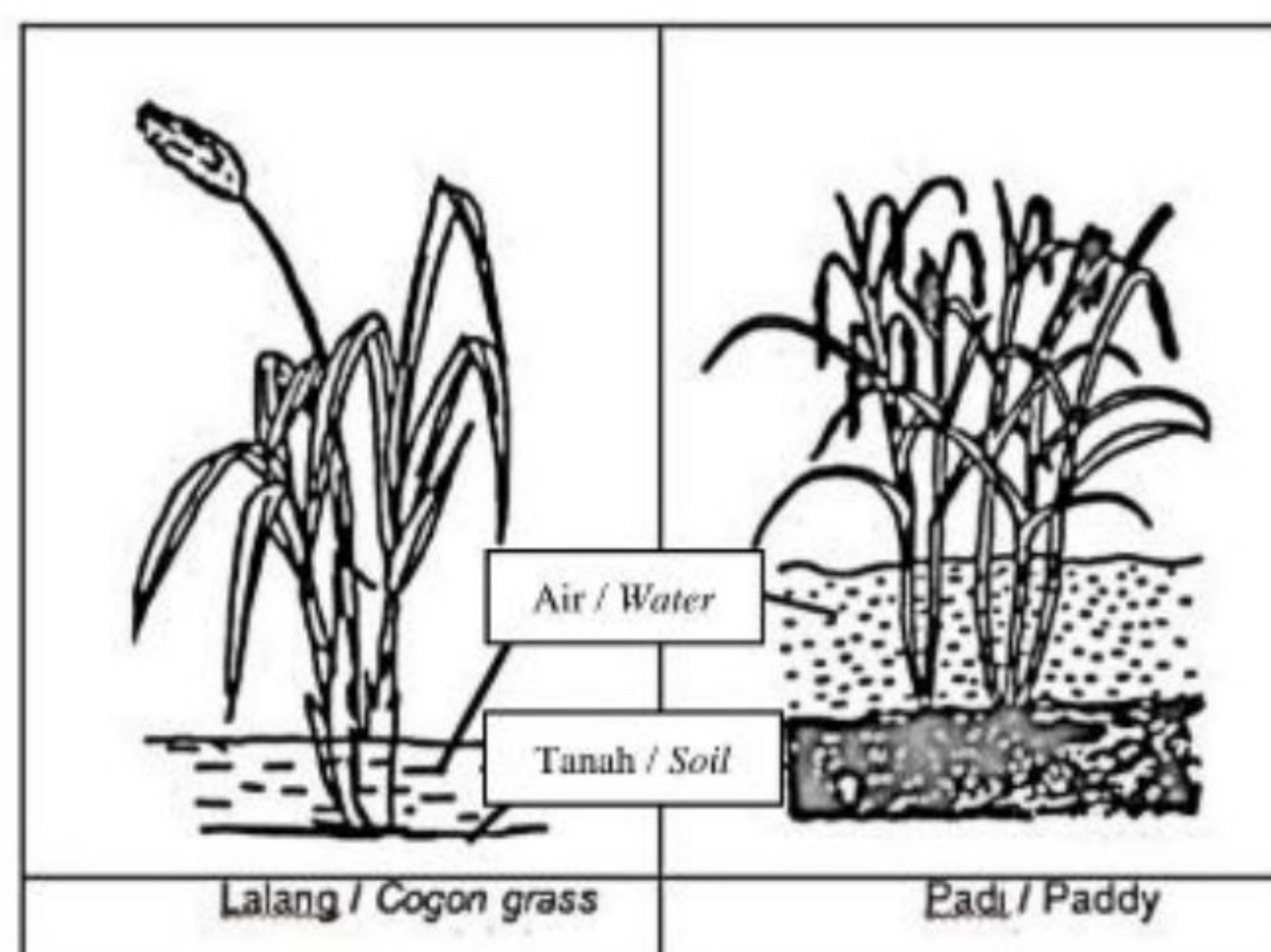
- (ii) Terangkan mengapa kadar pernafasan pelajar itu berbeza semasa berehat dan semasa aktiviti cergas.

Explain why the breathing rate of the student is different during resting and during vigorous activity.

[6 markah/marks]

- (b) Rajah 9.1 menunjukkan dua jenis tumbuhan di kawasan sawah padi berair.

Diagram 9.1 shows two plants in waterlogged paddy field.



Rajah 9.1 / Diagram 9.1

- (i) Pokok padi mempunyai kemandirian yang lebih baik berbanding lalang di kawasan air bertakung.
Terangkan mengapa.

Paddy plant can survive better compared to cogon grass in waterlogged area.

Explain why.

[6 markah/marks]

SULIT

8. Rajah 8.1 menunjukkan seorang individu yang menjalankan fermentasi X.
Diagram 8.1 shows an individual that carry out fermentation X.



Rajah 8.1/ *Diagram 8.1*

- (a) (i) Terangkan kepentingan proses fermentasi X.
Explain the importance of fermentation X process.

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[2 markah / 2 marks]

- (ii) Nyatakan perbezaan antara proses fermentasi X dan respirasi aerob berdasarkan aspek berikut:

State the difference between fermentation X and aerobic respiration based on the following aspects:

Aspek <i>Aspect</i>	Fermentasi X <i>Fermentation X</i>	Respirasi Aerob <i>Aerobic respiration</i>
Penguraian glukosa <i>Breakdown of glucose</i>		
Hasil tindak balas penguraian glukosa <i>The product of the breakdown of glucose</i>		
Tempat berlaku <i>Places occur</i>		

[3 markah / 3 marks]

- (iii) Penghasilan yogurt menggunakan kaedah fermentasi X.

Terangkan mengapa yogurt menjadi rosak sekiranya tidak disimpan di dalam peti sejuk.

Yogurt production uses the fermentation X method.

Explain why yogurt spoils if it is not kept in the refrigerator.

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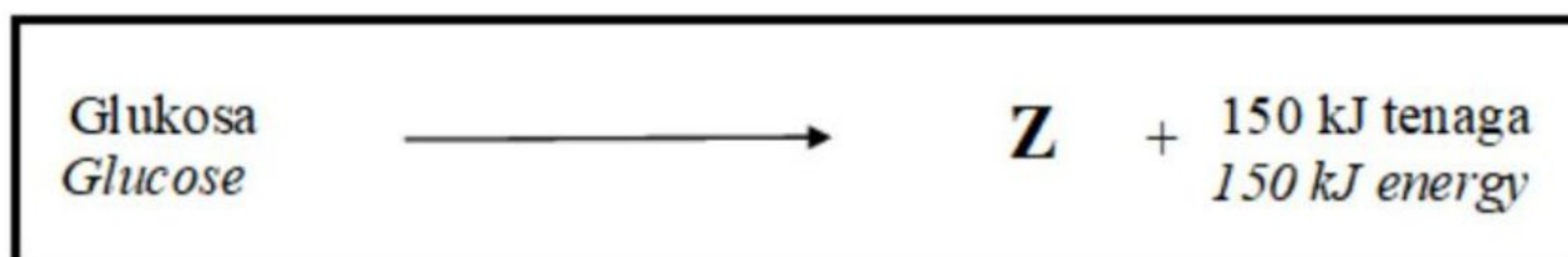
[2 markah / 2 marks]

For
Examiner's
Use

3. Rajah 3.1 menunjukkan dua persamaan penguraian glukosa di dalam sel badan manusia.
Diagram 3.1 shows two equation of glucose breakdown in the cells of the human body.



Proses S / Process S



Proses T / Process T

Rajah 3.1 / Diagram 3.1

- (a) Berdasarkan persamaan dalam Rajah 3.1, namakan:
Based on Diagram 3.1, name:

3(a)

	2
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Proses S / Process S:

Proses T / Process T:

[2 markah / marks]

- (b) Apakah yang berlaku sekiranya Z terkumpul di dalam sel otot manusia?
What would happen when Z accumulates in human muscle cell?

3(b)

	1
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[1 markah / mark]

- (c) Mengapakah penguraian glukosa melalui proses T menghasilkan kurang tenaga berbanding proses S?
Why does the broken down of glucose through the process T produced less energy than process S?

3(c)

	1
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[1 markah / mark]

For
Examiner's
Use

- (d) Rajah 3.2 menunjukkan sejenis tumbuhan di sawah padi.
Diagram 3.2 shows a type of plant in paddy field.



Rajah 3.2 / Diagram 3.2

Terangkan mengapa tumbuhan itu dapat beradaptasi dalam persekitarannya?
Explain why the plant can adapt in its surrounding?

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[3 markah / marks]

3(d)

3

Total

7
