**Section B**

Structured Questions, 14 marks

Write your answers in the spaces provided.

19. Match the seeds/fruits shown in the left column to the correct method of dispersal shown in the right column. [K] (3m)

<table>
<thead>
<tr>
<th>Seeds/Fruits</th>
<th>Method of dispersal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angsana</td>
<td>By splitting of fruits</td>
</tr>
<tr>
<td>Love grass</td>
<td>By wind</td>
</tr>
<tr>
<td>Pea</td>
<td>By animals</td>
</tr>
</tbody>
</table>
20. The stages of the life cycle of a mosquito are shown below. 
Fill in the boxes in the diagram to complete the life cycle of the mosquito. [K](2m)
21. Ken used a datalogger to find out the amount of light passing through materials A, B, C and D. He drew a bar graph as shown below. [C]

Based on the graph, group the materials A, B, C and D according to the classification below. (2m)

<table>
<thead>
<tr>
<th>Allows almost all light to pass through</th>
<th>Allows some light to pass through</th>
<th>Allows no light to pass through</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
22. Fill in the blanks below with the helping words given in the box. You can only use each helping word or phrase \textbf{ONCE}. [K] \hfill (2m)


\begin{tabular}{|c|c|c|}
\hline
\textbf{gas} & \textbf{solid} & \textbf{contraction} \\
\hline
\textbf{gains heat} & \textbf{loses heat} & \\
\hline
\textbf{expansion} & \\
\hline
\end{tabular}

(a) When water is heated, it \( (i) \) \underline{\hspace{2cm}} \hspace{0.5cm} and changes from

liquid to a \( (ii) \) \underline{\hspace{2cm}}  

(b) Heat gain causes \( (iii) \) \underline{\hspace{2cm}} \hspace{0.5cm} and heat loss causes

\hspace{0.5cm} \( (iv) \) \underline{\hspace{2cm}} \hspace{0.5cm}.
*23. Two syringes, P and Q, contain substances X and Y respectively. One end of each syringe is sealed. [C]

The plunger in syringe P could not be pushed in while the plunger in syringe Q could be pushed in slightly as shown in the diagram below.

Read the statements below. Write ‘T’ in the box given for statements that are true and ‘F’ in the box for statements that are false. (2m)

X can be a liquid

Y can be a solid

This experiment shows that matter has mass

This experiment shows that matter takes up space
24. Two beakers of the same size are filled with the same volume of water as shown below. [A]

A layer of oil covers the surface of the water in the two beakers to prevent evaporation. A plant is put into Beaker A.

(a) What will happen to the water level in each beaker after 4 days? Put a tick (√) in the correct boxes. (2 m)

<table>
<thead>
<tr>
<th>Beaker</th>
<th>Water Level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Increase</td>
</tr>
<tr>
<td>A</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td></td>
</tr>
</tbody>
</table>

(b) What is the aim of the experiment? Put a tick (√) in the box next to the correct answer. (1 m)

- To show that plants absorb water
- To show that oil absorbs water
- To show that plants need water to survive
Open-Ended Questions, 20 marks
Write your answers in the spaces provided.

*25. The diagram below shows 2 bulbs and a battery. [A]

(a) Draw wires to complete the circuit to make the bulb light up. (2m)

(b) Suggest a way to make the bulbs glow brighter.

______________________________________________________________ (1m)

(c) The diagram below shows a picture of a bulb.

Which parts of the bulb is a conductor of electricity?

______________________________________________________________ (1m)
26. The graphs below show the number of grasshoppers in Habitat A and B over time.

(a) Which habitat shows a decrease of grasshopper over time?

(b) Name 2 possible reasons for the decrease of grasshopper in the habitat.

(i) ____________________________ (1m)

(ii) ____________________________ (1m)
27. The classification table below shows the properties of materials M, N, P, Q and R.

(a) Mr Yat needs a material that would be suitable to make the handle of a cooking pan. Which material would be suitable? Explain your answer. (2m)

(b) Sally says that Material R will be suitable for making a raincoat. Do you agree? Explain your answer. (1m)
28. Nufail placed some ice cubes in a glass as shown below. He left the glass in the room for 2 hours. After some time, he noticed some **Liquid M** on the outer surface of the glass. [A]

(a) He thinks that **Liquid M** came from the melting ice. However, his teacher told him that is not true. Why does his teacher say so? (1m)

(b) What is liquid M? (1m)

(c) Explain how liquid M was formed. (2m)
29. In the following diagram, 3 magnets A, B and C are suspended in the air. It shows the position of the magnets when they are hung. The poles of Magnet B are labelled. [A]

(a) **Label** the poles of Magnet A and C in the boxes found in the diagram, with the letters “N” and “S” respectively. (2m)

(b) What will happen to Magnets A and C if Magnet B is removed from the set-up? (1m)

________________________________________________________________________

________________________________________________________________________
30. Bala wanted to find out how much force is needed to start pulling a block across the table. He increased the number of blocks each time and recorded his results in a table as shown. [A]  

(a) Draw a line graph to show the amount of force needed to pull each block.  

(b) State the relationship between the number of blocks and the pulling force.  

(c) If Bala were to pour some oil on the table, what will be the amount of force needed to pull one block?  

End of Booklet B