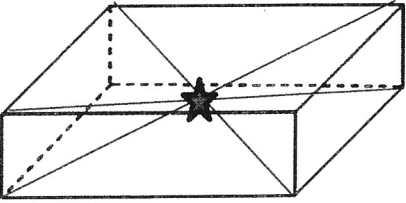
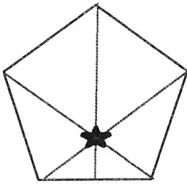


SKEMA SAINS PMR KERTAS 2

| Question | Answer Scheme | Marks | |
|---|--|---|----------|
| <p>1(a)</p> <p>(b)</p> <p>(c)</p> | <p>P= Stigma Q= Anther</p> <div style="display: flex; justify-content: space-between; align-items: center;"> <div style="border: 1px solid black; padding: 5px; width: 20%;"> Produces ovule. <i>Menghasilkan ovul</i> </div> <div style="border: 1px solid black; padding: 5px; width: 20%;"> Produces pollen grains <i>Menghasilkan butir</i> </div> <div style="border: 1px solid black; padding: 5px; width: 20%;"> Enables pollen grains to stick on it <i>Membolehkan butir debunga</i> </div> <div style="text-align: center;"> </div> </div> <p>Becomes seed</p> | <p>1</p> <p>1</p> <p>1</p> <p>3</p> <p>1</p> | <p>6</p> |
| <p>2 (a)</p> <p>(b)</p> <p>(c) (i)</p> <p>(c) (ii)</p> <p>(d) (i)</p> <p>d (ii)</p> | <p>Air occupies space</p> <p>R= gas</p> <p>Gas → Liquid</p> <p>Condensation</p> <div style="display: flex; align-items: center; justify-content: center;"> <div style="border: 1px solid black; padding: 5px; margin-right: 10px;"> </div> <div style="font-size: 2em; margin-right: 10px;">→</div> <div style="border: 1px solid black; padding: 5px;"> </div> </div> <p>Distance between water particles decrease//water particles become closer/ closely packed/vibrate at fixed position/loses kinetic energy/kinetic energy decreases</p> <ul style="list-style-type: none"> • Reject- particles <u>move</u> slower/move less freely | <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> | <p>6</p> |

| Question | Answer scheme | Marks | | | | | | | | | |
|---|--|--|---------------------------------------|--------------------------------|-----------------|---------------------|------------------------------------|------------------|--|---|-------------------------------|
| 3 (a) 3(b) (i) (b) (ii) (c) (i) (c) (ii) (c)(iii) | Nuclear fusion Sunspot Affect the earth's weather/ causes drought// disrupt the telecommunication system/tv/telephone /satellite/radio on Earth Gravitational force in the core Star explode// supernova// Explosion//star expand and blow up Strong gravitational force// very dark//absorb light | 1 1 1 1 1 1 | 6 | | | | | | | | |
| 4(a) (b) (i) (b) (ii) (c) (i) & (c) (ii) (d) | Transpiration P Drier air /dry air/ low/lower humidity <table border="1"> <thead> <tr> <th>Method/Way</th> <th>Reason</th> </tr> </thead> <tbody> <tr> <td>Cover with plastic/ damp paper</td> <td>Higher humidity</td> </tr> <tr> <td>Put under the shade</td> <td>Lower temperature/ light intensity</td> </tr> <tr> <td>Put in the house</td> <td>Avoid wind/ Lower temperature/ light intensity</td> </tr> </tbody> </table> <ul style="list-style-type: none"> • Reason related to method Higher humidity// decrease/lower rate of transpiration To decreases the loss of water/decreases the number of stoma /decreases the rate of transpiration | Method/Way | Reason | Cover with plastic/ damp paper | Higher humidity | Put under the shade | Lower temperature/ light intensity | Put in the house | Avoid wind/ Lower temperature/ light intensity | 1 1 1 1 + 1 1 | 6 |
| Method/Way | Reason | | | | | | | | | | |
| Cover with plastic/ damp paper | Higher humidity | | | | | | | | | | |
| Put under the shade | Lower temperature/ light intensity | | | | | | | | | | |
| Put in the house | Avoid wind/ Lower temperature/ light intensity | | | | | | | | | | |
| 5 (a) (b)(i) (b)(ii) (c) (d)(i) (d) (ii) |   P Shorten the leg// lower the centre of gravity//biggest angle of inclination to topple off// Lower the centre of gravity//use shorter suspension// lower the body of the car// use the wider tyres/ increase the base area. Accept any 2. # Reject- bigger tyre J has lower centre of gravity/ is lower/ has smaller tyres To increases the base area | 1 + 1 1 1 2 1 1 | 8 | | | | | | | | |

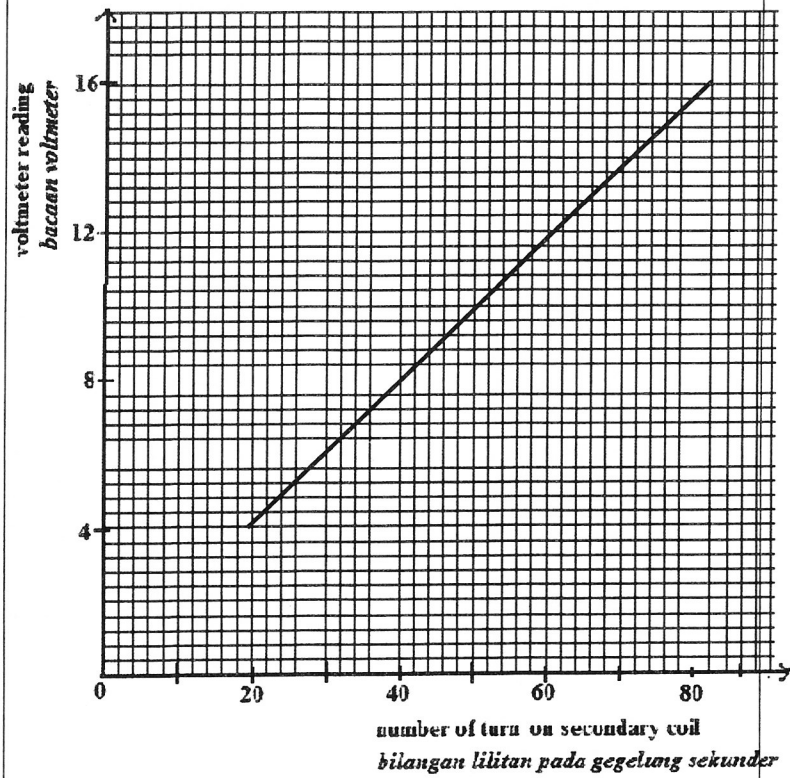
| Question | Answer scheme | Marks | | | | | |
|--|---|--|----------------------|---|---------|--|--|
| 6 (a)(i) (a) (ii) (a) (iii) (b) (c) (i) (c)(ii) | $\frac{100-80}{100} \times 100$ $= 20 \%$ <p>Inhaled air contains more oxygen than exhaled air</p> <p>Exhaled air contains less oxygen/ more carbon dioxide</p> <p>Candle + oxygen → carbon dioxide + water + energy</p> <p>3 correct- 2m 2 correct- 1 m 1 correct- 0m</p> <p>Open burning// smoke from factory/motor vehicles</p> <p>Wear face mask</p> | 1 1 1 1 1 1 | 8 | | | | |
| 7(a)(i) (a) (ii) (a) (iii) (b) (i) (b) (ii) (b) (iii) | <p>U = 25</p> <p>Time taken for sugar to dissolve completely in activity S longer than activity U/ vice versa</p> <p>Time taken for sugar to dissolve completely in S is longer because the volume of water used is less/ Time taken for sugar to dissolve completely in U is shorter because the volume of water used is more</p> <p>Mv = temperature of water/solvent Rv = time taken for the sugar to dissolve completely Cv = volume of water</p> <p>The higher the temperature of water, the shorter the time taken for sugar to dissolve completely/ vice versa</p> <p>Less than 23 s / any number less 23</p> | 1 1 1 1 1 1 1 1 | 8 | | | | |
| 8 (a) (b)(i) (b)(ii) (c)(i) (c)(ii) (d)(i) | <table border="1"> <thead> <tr> <th>Renewable energy</th> <th>Non renewable energy</th> </tr> </thead> <tbody> <tr> <td>Z</td> <td>W, X, Y</td> </tr> </tbody> </table> <p>#Reject if any letter appear in both columns</p> <p>-Bulb Q is brighter because there are more number of turns in secondary coil/ high voltage - Bulb P is dimmer because there are less number of turns in secondary coil/ low voltage</p> <p>Reading = 4.6 v</p> <p>16 (v)</p> <p>The more/higher number of turns on secondary coil, the higher the reading of voltmeter .</p> <p>Rv = reading of voltmeter</p> | Renewable energy | Non renewable energy | Z | W, X, Y | 4 1 1 1 1 1 | |
| Renewable energy | Non renewable energy | | | | | | |
| Z | W, X, Y | | | | | | |

(e)

Step up transformer is the reading of voltmeter

1

(f)



transfer of all points correctly -

1

join all the points correctly -

1

12