PRIMARY 6 STANDARD SCIENCE
Answer Key

BOOKLET A (30 x 2m = 60m)

1.	(2)	6	(4)	11.	(3)	16.	(2)	21.	(3)	26.	(3)
2	(4)	7	(3)	12.	(3)	17.	(1)	22.	(1)	27.	(2)
3.	(4)	8.	(2)	13.	(4)	18	(2)	23.	(1)	28.	(3)
4.	(3)	9.	(4)	14.	(3)	19.	(2)	24.	(4)	29.	(2)
5.	(1)	10.	(4)	15.	(1)	20.	(2)	25.	(2)	30.	(3)

BOOKLET B (40 marks)

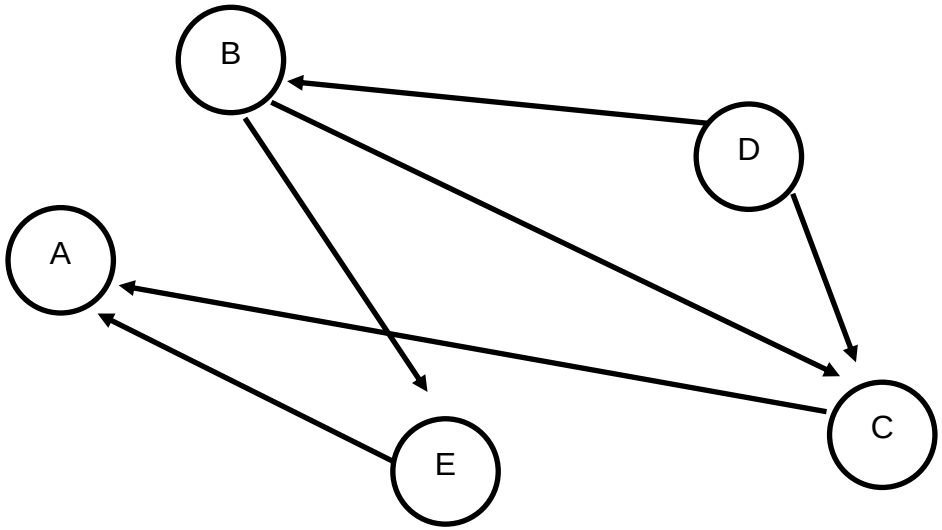
Qns.	Suggested Answers	Marks	Remarks
31(a)	The young of the mosquito breathe through air tubes / breathing tubes (that stick out above the water surface). [1m]	1m	
31 (b)	Spraying oil on the water surface will prevent the young / larvae/ wrigglers / pupa of the mosquito from breathing / taking in the air / oxygen from the atmosphere, [1m] thus the young of the mosquito will eventually die and the population will be reduced. [1m]	2m	- mosquito will suffocate and die [0m] (if no reference to the young) - kill the young [0m] (for not mentioning how)
32 (a)	By animals. [1m]	1m	
32 (b)	Hair hooks onto the fur of animals passing by / in contact with the fruit. [1m]	1m	
33 (a)	B	1m	
33 (b)	The stigma from flower B has been removed. Pollination cannot take place. [1m] The ovary has been removed. Fertilization cannot take place. [1m] **OR** The female parts from flower B have been removed. Pollination and fertilization cannot take place. [2m]	2m	

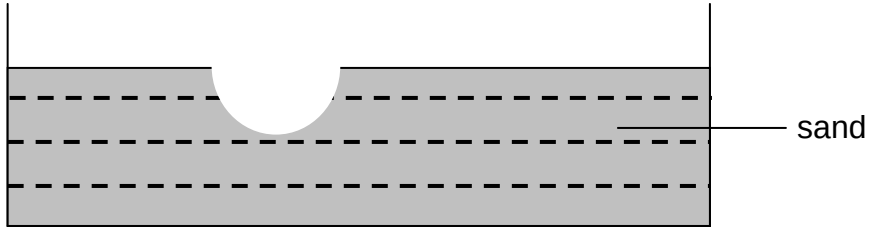
<table>
<tr><th>Qns.</th><th>Suggested Answers</th><th>Marks</th><th>Remarks</th></tr>
<tr><td>34 (a)</td><td>They have swollen leaf stalks that are filled with air. [1m]</td><td>1m</td><td></td></tr>
<tr><td>34 (b)</td><td>Plant B. [1m]

Plant B is fully submerged / completely in the water. [½m]. When the water is muddy, less / no sunlight will be able to reach the plant for it to photosynthesise. [½m]

Muddy water blocked the plant from receiving sunlight. [½m]
The plant will not be able to receive sufficient sunlight. [½m]
The plant cannot make food without the presence of light. [½m]
Muddy water reduces the amount of sunlight. [½m]
Not much light can penetrate through the water. [½m]</td><td>2m</td><td>Pupil must answer the question to which plant will die first. No mention of plant [0m] in total.</td></tr>
<tr><td>35 (a)</td><td>D. [1m]

The blood is from the lungs (Evidence) [½m] and therefore it receives the most amount of oxygen. (Reasoning) [½m]</td><td>2m</td><td></td></tr>
<tr><td>35 (b)</td><td>Q has more oxygen as it is returning from the lungs [½m] but S has blood where the oxygen has been used in the parts of the body (so lesser amount of oxygen) [½m].</td><td>1m</td><td></td></tr>
<tr><td>36 (a)</td><td><table><tr><td colspan="2">Brightness of the bulbs</td></tr><tr><td>Brightest</td><td>Dimmest</td></tr><tr><td>Q</td><td>R</td></tr></table></td><td>1m</td><td>No partial mark</td></tr>
<tr><td>36 (b)</td><td>The brightness remains the <u>same / constant / does not change</u>.</td><td>1m</td><td></td></tr>
<tr><td>37 (a)</td><td><u>Rate of condensation</u> increases when the <u>temperature of the water in the metal tray</u> decreases. [1m]
<u>OR</u>
<u>Rate of condensation</u> decreases when the <u>temperature of the water in the metal tray</u> increases. [1m]</td><td>1m</td><td></td></tr>
</table>

Qns.	Suggested Answers	Marks	Remarks
37 (b)	To provide a colder / cooler surface for condensation to take place.	1m	
37 (c)	To investigate the effect of presence of wind on the rate of evaporation.	1m	
37 (d)	Temperature of water / humidity / exposed surface area. [1m]	1m	
38 (a)		2m	No partial mark
38 (b)	The population of E will decrease / become lesser. / There will be less / lesser E.	1m	
39 (a)	He should measure the volume / amount of (air) empty column produced in the test-tubes after some time / a time limit / a few hours. [1m]	1m	Count the number of bubbles. [0m] Measure the amount of oxygen. [0m]
39 (b)	This set-up acts as a control to show that without plants, there will not be any air (column) produced after some time / the time limit / a few hours. [1m]	1m	Act as a control. [0m]
40 (a)	The longer the extension of the elastic band, the further the toy car moves. [1m]	1m	
40 (b)	Apply lubricant on the surface / table top / counter top. [1m]	1m	
41 (a)	(i) Xylem [1m] (ii) Phloem [1m]	1m 1m	
41 (b)	The plant will eventually die [1m]. If the water-carrying tubes were destroyed, the plant will not be able to make food without water. [1m]	2m	

Qns.	Suggested Answers	Marks	Remarks
42 (a)	The more cement there is in the mixture, the stronger the beam. [1m]	1m	
42 (b)	Between 3.5 kg and 4 / 4.0 kg. [1m]	1m	No partial mark.
42 (c)		1m	As long as circular dent is between first and second dotted line, answers are accepted.
43 (a)	Diana is walking away from the lamp during period Y. [1m] A longer shadow will be cast when Diana is moving further away from the lamp. [1m]	2m	
43 (b)	The time intervals for period X and period Y are the same. The change in length of the shadow is less for period X than period Y. [1m]	1m	
44 (a)	No. [1m] She must bring / test the same end of the object R near to South-seeking pole of the magnet. If there is repulsion**,** the object is a magnet. [1m] **OR** No. [1m] She must bring / test the other end of object R and place it on the North seeking pole. If it still attracts, the object is a magnetic material and not a magnet (because magnetic material is attracted to both poles of the magnet). [1m] It can be a magnetic material. [½m] She did not check if the other end repels. / Test **if** the other end repels. (So what if it repels? Must explain the difference between magnet and magnetic material) [½m] Test whether there is repulsion. (without indicating which end to be tested) [½m]	2m	Test the other end of the object. See if it is attracted or repelled. [0m] She must check if the end of object R will be attracted or repelled to the magnet. [0m]
44 (b)	To find out if the magnetic force/magnetism of a magnet decreases when heated. [1m] **OR** To find out if the magnet loses its magnetism if it is heated. [1m]	1m	To find out if the magnet power decreases. [0m]