

update!

2016-17 S.1 Integrated Science First Examination -- Suggested Answer

Section A:

1. B	2. B	3. D	4. C	5. D	6. B	7. B	8. B	9. A	10. C
11. C	12. D	13. A	14. C	15. C	16. C	17. D	18. A		

Section B:

<p>1a.(i) Bunsen burner</p> <p>(ii) A: chimney B: collar C: rubber tubing D: air hole</p> <p>(iii) 1. Close the air hole.</p> <p>2. Ignite the gas lighter. (Procedure in point form: 1 mark)</p> <p>3. Turn on the gas tap.</p> <p>4. Open the air hole.</p>	<p>1</p> <p>4</p> <p>4+1</p>
<p>b. 1. We should tie up the long hair.</p> <p>2. We should wear safety goggles when heating something in laboratory.</p> <p>3. We should hold the test tube with a test tube holder when heating.</p> <p>4. We should not point the mouth of test tube towards any one.</p> <p>(any 3 reasonable answers)</p>	<p>3</p>
<p>c. He should tell the teacher immediately.</p> <p>He should wash the affected area in running water.</p>	<p>2+1</p>
<p>d.(i) Correct diagram (diagrams and labels of beaker, water, wire gauze, tripod, Bunsen burner, heat proof mat) (1 mark × 6)</p> <p>(not using ruler / not in proportion : - 1 mark)</p> <p>(ii). Fire extinguisher / fire blanket / sand bucket (2, any two)</p>	<p>6</p> <p>2</p>
<p>2.a. A: objectives</p> <p>B: stage</p> <p>C: mirror</p> <p>D: eyepiece</p> <p>E: coarse adjustment knob</p>	<p>5</p>
<p>b. To roughly focus the image</p>	<p>1</p>
<p>c. the magnification of part D = <math>(50 \div 10)</math></p> <p>= 5X</p>	<p>2</p>
<p>3.a. balance / top-pan balance (electronic balance: - 0.5 mark)</p>	<p>1</p>
<p>b. 200g</p>	<p>1</p>
<p>c. <math>\frac{395-45}{2}</math> (1+1)</p> <p>= 175g (1) *(no/wrong unit: - 0.5)</p>	<p>3</p>

4.a. The heavier ball takes a shorter time to drop to the ground..	1
b. mass of ball	1
c. size of balls, height of dropping point (any other reasonable answers)	2
d. The average time taken by two balls both are 2.1 s. The mass of the ball does not affect the falling time to the ground.	2+1
5a. If he pulls the toy car farther backward, it will go farther forward when he releases it.	1
b. (i) Correct scales: (1) Correct labeling of two axes: (1) Correct points plotted : (1) Title: (1)	4
(ii) If the toy car is pulled farther backward, it will go farther forward.	1
6a. The women working in milk farms seldom suffered from smallpox.	1
b. Women seldom suffered from smallpox if they got cowpox.	1
c. He did a lot of experiments.	1
d. His discovery can save lots of lives.	1