Get It Right

State whether each of the following statements is true or false. Then, correct the false statement(s). Revise the relevant section(s) if you got the answer wrong or are unsure of the concept(s).

<table>
<thead>
<tr>
<th>Statement</th>
<th>True/False</th>
<th>Relevant section(s) to revise</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) The choroid protects the eyeball from mechanical damage.</td>
<td>True</td>
<td>14.1</td>
</tr>
<tr>
<td>(b) The retina is where images are normally focused.</td>
<td>True</td>
<td>14.1</td>
</tr>
<tr>
<td>(c) Rods enable us to see colours in bright light.</td>
<td>False</td>
<td>14.1</td>
</tr>
<tr>
<td>(d) To focus on a distant object, the ciliary muscles contract, the suspensory ligaments slacken, and the lens becomes thicker and more convex.</td>
<td>True</td>
<td>14.2</td>
</tr>
</tbody>
</table>

Answers are available on page 447.

Let's Review

Section A: Multiple-Choice Questions

1. A man saw a bus approaching from a distance. He looked at his watch and then waved to his friend across the street. Which of the following shows the order of changes of the shape of the lens in his eye?

   - A
   - B
   - C
   - D

2. Which part of the eye causes the greatest refraction of light?

   - A Aqueous humour
   - B Cornea
   - C Lens
   - D Vitreous humour

3. A reflex action involves a receptor and an effector. Which of the following shows the receptor and effector when pupil of the eye constricts?

   - A Fovea Ciliary muscles
   - B Fovea Iris muscles
   - C Pupil Ciliary muscles
   - D Pupil Iris muscles

Section B: Structured Questions

The diagram shows a section of the eye of a person who is looking at a distant object.

(a) Copy and complete the diagram by continuing the light rays into the eye to show how the light rays can be focused onto the retina.

(b) Name and label the structure that:
   (i) controls the amount of light entering the eye;
   (ii) alters the focal length of the lens; and
   (iii) prevents internal reflection of light.

Section C: Free-Response Questions

1. (a) What is focusing or accommodation?
   (b) Suppose you are sitting outdoors, under an umbrella, reading a book. You suddenly look up at the sky to see an aeroplane fly past. Explain the sequence of events in your eyes that enable you to see both the printed page in your book and the aeroplane.

2. Describe the nerve pathways and reactions involved when a bright light is suddenly shone into the eye.