

# Worshipful Company of Spectacle Makers



## Level 2 Optical Support

### Unit 3 - The Eye and Ametropia

Summer 2018

Duration: 24 mins

Candidate Number:

Date:

### Answer ALL Questions

Number of Supplementary Sheets used (if any), including graph paper.

#### For office use only

Question number	Questions			Total	
	1	2	3	Marks	%
Marks					
Moderated					

Examiner's signature

Moderator's signature

This booklet is the property of the WCSM and **must not be removed** by the candidate from the examination room.

This page  
has been  
left blank.

**Question 1**

Examiner's  
use only

<b>Q1a)</b>	What is tonometry?  What is the difference between non-contact and contact tonometry?	<b>(4 marks)</b>
-------------	---	------------------

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

<b>Q1b)</b>	From the following list which condition would cause a central vision loss?  <b>1)</b> Myopia <b>2)</b> Conjunctivitis <b>3)</b> Intra Ocular Pressure <b>4)</b> Age related macular degeneration	<b>(2 marks)</b>
-------------	---	------------------

---

---

<b>Q1c)</b>	What is accommodation?  What happens to accommodation with age?	<b>(4 marks)</b>
-------------	---	------------------

---

---

---

---

---

---

---

---

---

---

---

---

**Question 2**

Examiner's  
use only

<b>Q2a)</b>	You are presented with the following prescription  R +2.00/+1.00 x 175 L +1.00/ +2.00 x 5 Add 1.00 VDU Add 2.00 Near  Write down the prescription you would order for <b>i)</b> Distance and near bifocals <b>ii)</b> VDU and near bifocals	<b>(4 marks)</b>
-------------	---	------------------

---

---

---

---

---

---

---

---

---

---

---

<b>Q2b)</b>	What is Diplopia?  What element is usually prescribed to overcome this?	<b>(3 marks)</b>
-------------	---	------------------

---

---

---

---

---

---

---

---

---

---

---

<b>Q2c)</b>	What is astigmatism?  What lenses are used to correct it?	<b>(3 marks)</b>
-------------	---	------------------

---

---

---

---

---

---

---

---

---

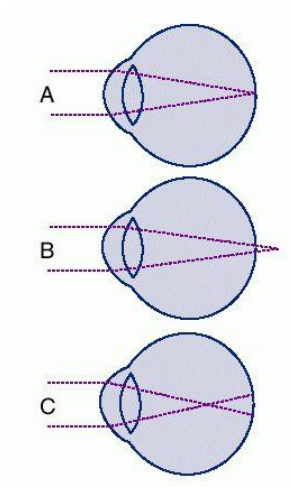
---

---

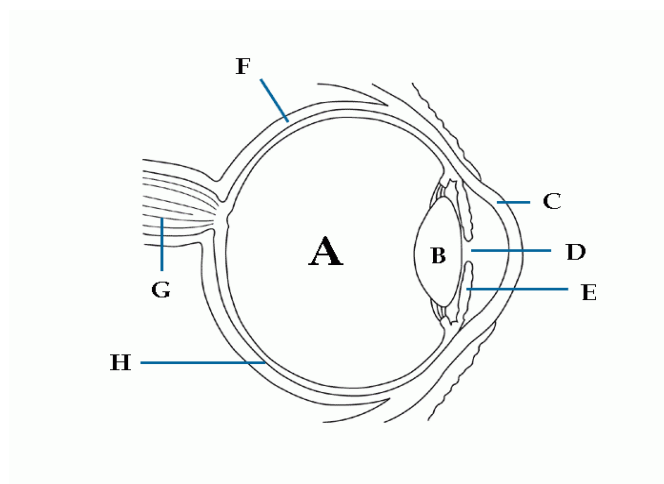
**Question 3**

<p><b>Q3a)</b></p>	<p>Place the terms for the following sight conditions next to the corresponding letter:</p> <p>Hypermetropia                  Emmetropia                  Myopia</p>	<p>(3 marks)</p>
--------------------	--	------------------

Examiner's use only



<p><b>Q3b)</b></p>	<p>Place the correct structure by the corresponding letter:</p> <p>Cornea, Pupil, Iris, Vitreous, Lens, Optic Nerve,                  Sclera, Retina</p>	<p>(4 marks)</p>
--------------------	--	------------------



<b>Q3c)</b>	Where is the Aqueous Humour?  1) Between the lens and the cornea 2) Between the eye and the orbit 3) Between the lens and the retina 4) Between a contact lens and the cornea	<b>(1 marks)</b>
-------------	--	------------------

---

---

---

<b>Q3c)</b>	When handing a pair of reading spectacles out the prescriber has written ADD 4.00 V/A, N 12 on the prescription.  What does the term N 12 mean?  Given the addition is 4.00D, what advice would you give to the patient?	<b>(2 marks)</b>
-------------	---	------------------

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

**End of questions for this paper**

This page  
has been  
left blank.

**DO NOT TURN THIS PAPER OVER UNTIL ADVISED TO DO SO BY THE INVIGILATOR**

**Important Instructions for Candidates**

Please read carefully and follow these instructions when told do so by the Examiner/Invigilator.

1. Before you start to answer any question, take a few minutes to read through the paper.
2. Please ensure your membership number and date are in the boxes on the front cover of this booklet.
3. Please **DO NOT** write your name on this booklet. Candidates must remain anonymous for marking purposes.
4. Write your answers as clearly as you can using a black/blue pen only. Do not use a pencil. If the examiner cannot read your writing or figures you may lose marks, or even receive no marks at all. **Pencils may only be used for graphs and diagrams.**
5. You should read each question carefully, and make sure that you know what you have to do before you start to answer.
6. You must write your answers in the space provided. Additional paper may be used if necessary, but you must show your candidate number and the question number at the top of each sheet; not your name. You must also annotate the box on the front cover of this booklet to show how many extra sheets you used.
7. Please do not write in the margins.
8. Make sure your diagrams are as clear and neat as possible; you will get marks for doing so. If you need to draw a graph, use as large a scale as practicable; this will give the most accurate answer.
9. When answering mathematical questions, write **ALL YOUR CALCULATIONS IN FULL**. Even if you get the final answer wrong, you may get credit for the parts of the calculation that are correct.
10. After you have completed each answer, re-read the question to make sure you have answered it fully.
11. Try to leave yourself enough time to check the completed paper through before handing it in.
12. Do not tear out any part of this booklet. All work must be handed in.
13. Before handing your paper in, ensure your Candidate number is entered clearly on the front of this booklet and on any extra sheets you may have used.
14. Attach any sheets to this booklet and annotate how many there are in the box on the front of this booklet.

**When told to do so by the Invigilator, you may turn the paper over and begin**