

# Worshipful Company of Spectacle Makers

## Level 4 Year 1 Diploma for Optical Assistants



Unit 4 – The Provision of Spectacles In Optical Practice

**Summer 2018**

**Duration: 2 hours**

Candidate Number:

Date:

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**Answer ALL questions.**

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

**For office use only**

	Questions				Question	
Question number	1	2	3	4	Marks	%
Marks						
Moderated						

Examiner's signature	
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Moderator's signature	
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### Question 1

Examiner's  
use only

<b>Q1a)</b>	A patient wears the prescription <b>R &amp; L -4.50DS/-1.50DC x 90</b> in a round-eye frame.  Where is the thickest point on the lens edge?	<b>(2 marks)</b>
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<b>Q1b)</b>	If the patient in part Q1a) complains that their previous lenses were too thick, make <b>five</b> recommendations in relation to lens and frame choice that could reduce the edge thickness.	<b>(10 marks)</b>
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<b>Q1c)</b>	An anti-reflection coating is suggested to the patient in part Q1a).  Why are high index lenses generally anti-reflection coated as standard?	
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**(2 marks)**

Examiner's  
use only

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<b>Q1d)</b>	How are anti-reflection coatings applied?	
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**(2 marks)**

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<b>Q1e)</b>	State <b>four</b> benefits of anti-reflection coatings.	
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**(4 marks)**

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**Question 2**

<b>Q2a)</b>	<p>A presbyopic patient requires the prescription:</p> <p><b>R +1.50DS L +1.25DS / - 0.50DC x 180 Add +2.00 DS R&amp;L</b></p> <p>The patient has previously worn bifocal lenses and wants to try progressive power lenses (PPLs) for the first time.</p> <p>Discuss <b>four</b> advantages that PPLs would offer the above patient over bifocals.</p>	<p><b>(4 marks)</b></p>
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<b>Q2b)</b>	Discuss <b>four</b> disadvantages of PPLs over bifocals.	<b>(4 marks)</b>
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Examiner's  
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<b>Q2c)</b>	What is the generally accepted fitting position of the segment dividing line in a <b>D-segment bifocal</b> ?	<b>(1 mark)</b>
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<b>Q2d)</b>	State <b>two</b> essential measurements for the dispensing of standard PPLs.	<b>(2 mark)</b>
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Examiner's  
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<b>Q2e)</b>	If a personalised PPL is chosen then additional measurements are required.  State <b>three</b> of these additional measurements.	<b>(3 mark)</b>
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<b>Q2f)</b>	State <b>six</b> pieces of advice in relation to wear and care of their spectacles that you would you give to a patient who is collecting their first pair of PPL's.	<b>(6 mark)</b>
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<b>Q4a)</b>	Complete the following table in relation to safety spectacles conforming to <b>BS/EN/ISO 166/167</b>	<b>(16 marks)</b>
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Lens impact symbol	Impact grade	Lens material	Type of protective eyewear

<b>Q4b)</b>	State <b>four</b> pieces of advice which you would give to a patient collecting their protective eyewear from the practice.	<b>(4 marks)</b>
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**End of questions for this paper**

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1. Before you start to answer any question, take a few minutes to read through the paper.
2. Please ensure your candidate 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 once more, before handing it in.
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