

Worshipful Company of Spectacle Makers



Level 3 Optical Support

Unit 9: Process Optical Work Instructions and Provide Technical Service

Summer 2018

Duration: 40 minutes

Candidate Number:

Date:

Answer **TWO out of the three** 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

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Question 1

Q1a)	<p>The following order has been received:</p> <p>n=1.67 Single vision Aspheric, MAR coat, Full Brown Tint 50% ABS. Right: -12.25 / -1.25 X 125 Left: -13.25 / -2.25 X 65 55mm Diameter uncut.</p> <p>Explain how this order will be processed.</p>	(5 marks)
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Q1b)	<p>A round eye frame with an 'A' box measurement of 48mm and DBL of 17mm is to be glazed with centration distances of 28mm in each eye, with optical centres on the horizontal centre line. The lens is a CR39 single vision non-aspheric. What is the minimum effective diameter lens required?</p>	(4 marks)
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Q1c)	In (b) the available diameter is smaller than the effective diameter by 2mm , give 3 options you can discuss with your customer.	(6 marks)
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Q1d)	What is the main benefit of good stock control?	(5 marks)
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Question 2

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Q2a)	A customer has ordered a pair of S28 bifocals in n=1.74 . This is not a lens that is possible, what course of action should be taken?	(5 marks)
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Q2b)	Explain the benefits of good record keeping.	(5 marks)
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Q2c)	A customer has called to say that his patient is experiencing double vision, the lenses are single vision and the patient has worn the same prescription previously. What could be the issue?	(5 marks)
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Q2d)	A patient is having distance problems with their progressive lens. When looking direct the vision is blurred but if the patient pulls their chin in and looks higher in the lens vision improves. What could be the issue and how would this be resolved?	(5 marks)
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Question 3

Q3a)	An order has come in for a pair of n=1.67 single vision. Why would a Multi Anti Reflection coating be recommended for this lens?	(5 marks)
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Q3b)	Transpose the following into alternate sphere-cy form: (i) +3.00/-3.25 X 65 (ii) -7.50/-1.00 X 5 (iii) +4.75/+4.25 X 180 (iv) -0.25/+0.50 X 135 (v) +9.00/-7.75 X 43	(10 marks)
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Q3d)	A stock lens is out of stock, what procedure would you follow?	(2 marks)
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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 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 before handing it in.
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