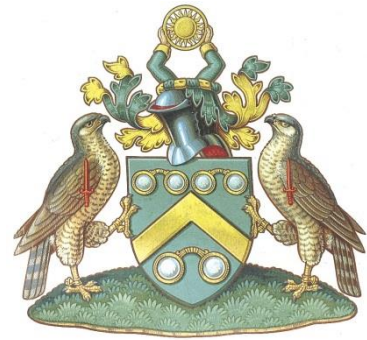


Worshipful Company of Spectacle Makers



Level 3 Optical Support

Unit 4 – Supporting the Provision of Optical Screening

Duration: 1 hour

Candidate Number:

Date:

Answer **ALL** questions.

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

For office use only

Question number	Unit 4			Total	
	1	2	3	Marks	%
Marks					
Moderated					

Examiner's signature

Moderator's signature

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Question 1

- a)** Transpose the following prescription into alternate sphere cylinder form

Examiner's
use only

R: + 3.00DS/-0.75DC x 70 **L:** +2.00/-2.50DCDC X 35

(2 marks)

- i)** **R:** +2.25DS/-0.75DC x 150 **L:** -0.50DS/-2.50DC X 145
- ii)** **R:** +2.25DS/+0.75DC x 160 **L:** -0.50/+2.50DC X 125
- iii)** **R:** +3.00DS/+2.25DC x 150 **L:** +2.00DS/-0.50DC X 145
- iv)** **R:** +3.00DS/+2.25DC x 160 **L:** +2.00DS/-0.50DC x 125

- b)** A patient attends for visual screening wearing a pair of **bifocal** spectacles which measure

R: -2.00/-0.50 x 180 **L:** -1.00DS Add +2.00

Which trial lenses would you use during the testing?

(2 marks)

- i)** **R:** Plano/-0.50x180 **L:** Plano
- ii)** No lenses
- iii)** **R:** No lens **L:** +1.00
- iv)** **R:** +2.00/+0.50 x 180 **L:** +2.00DS

- c)** A patient attends for visual screening wearing a pair of **PPL** spectacles which measure

R: -5.00/-0.50 x 180 **L:** -6.00DS Add +3.00

Which trial lenses would you use during the testing?

(2 marks)

- i)** **R:** Plano/-0.50x180 **L:** Plano
- ii)** No lenses
- iii)** **R:** -2.50/+0.50 x 90 **L:** -3.00DS
- iv)** **R:** -2.50/-0.50 x 90 **L:** -3.00DS

Question 1

- d)** Which of the following is a **contact tonometer**?

(2 marks)

- i) IntelliPuff
- ii) Goldmann
- iii) Reichert
- iv) Pulsair

e) Which of the following might reduce the accuracy of **tonometry**? (2 marks)

- i) Breathing normally
- ii) Relaxed lids
- iii) Tight neck wear
- iv) Angling the tonometer

f) Which of the following would not be classed as an **Optical Emergency**? (2 marks)

- i) Iritis
- ii) Wet macular degeneration
- iii) Open angle glaucoma
- iv) Fungal keratitis

g) Which of the following might limit the clarity of a **fundus** photograph? (2 marks)

- i) Large pupil
- ii) Contact lens
- iii) Steeply curved cornea
- iv) Lens opacities

Question 1

h) Which instrument is used to create **3D images** of **internal retinal tissues**? (2 marks)

- i) Gonioscope
 - ii) Auto refractor
 - iii) Optical coherence tomography
 - iv) Digital fundus imaging
-
-

i) Which of the following actions could improve the accuracy of an **auto refractor** result? **(2 marks)**

- i) Increasing the background light level in the screening area
 - ii) Encouraging patient to look to one side of the target
 - iii) Instructing patient to close their other eye
 - iv) Advising the patient they should allow their eyes to 'relax'
-
-

j) Which technique may be used in place of an auto refractor? **(2 marks)**

- i) Volk Indirect Ophthalmoscopy
 - ii) Retinoscopy
 - iii) Fluorescein Angiography
 - iv) Optical Coherence Tomography
-
-

Question 2

a) How can **auto refractors** be used in practice to improve the effectiveness of the eye examination? **(5 marks)**

Question 2

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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 once more, 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.
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