

## **FAQS for Refraction Certificate Examination – Hybrid format (use of artificial eyes AND real patients)**

### **1. How are marks awarded for Retinoscopy stations?**

The marks for retinoscopy are awarded for your refraction only and this is performed completely objectively by a computer algorithm which analyses the residual refractive error i.e. that existing between your refraction answer and the correct refraction.

Please note that the refractions for all retinoscopy, subjective refraction and the focimetry station in this examination are marked in this manner. However, not all are worth the same number of marks. The computer marking is performed after the OSCE is complete and NOT by the invigilators present at the time of the OSCE.

Please note that there is no mark for technique in the retinoscopy stations.

12 marks are awarded using both your gross retinoscopy answer (Q1) and the final transposed answer (Q3) so that if errors are made in one or both of these answers the final mark will be penalised.

If no sphere entry OR cylinder entry OR axis entry is made in the answer boxes then this will be marked as an unmarkable result. However, if an answer is placed in the sphere answer box then this will be recognised as a spherical result if no entry is made in the cylinder AND axis answer boxes.

1 mark is awarded for entering the working distance in centimetres and equivalent dioptres.

The entry made in the working distance (in centimetres) is the answer used with the algorithm to calculate the correct answer from the gross retinoscopy. It is important this answer corresponds with the dioptric equivalent and is accurate to gain maximum marks. If an error is made on entering this answer, then this can significantly impact the total score as it will impact the marks given for transposition and retinoscopy.

2 marks are awarded for transposing your gross retinoscopy result using your working distance. Small errors in the spherical equivalent OR axis will be penalised 1 mark. Larger errors will result in no marks.

***IMPORTANT:*** Please DO NOT email the College to query your results if you fail your exam. The marking explanation given above covers how the exam is marked and this marking system is the one that has been used for many years. All marks for every candidate are correct and are thoroughly checked by the senior examiner.

### **2. How are marks awarded for the Subjective Refraction: Sphere station?**

Please note that we provide you with the cylinder power and axis for this OSCE so you will not score marks for merely writing this down correctly.

5 marks are awarded for your prescription following refinement of the sphere. The prescription **MUST** be completed for both right and left eyes to gain marks.

1 mark is awarded for a final LogMAR visual acuity for each eye.

9 marks are awarded for the technique demonstrated in the station.

**3. How are marks awarded for the Subjective Refraction: Binocular Balance station?**

Please note that we provide you with the cylinder power and axis for this OSCE so you will not score marks for merely writing this down correctly.

5 marks are awarded for your prescription following binocular balance. The prescription **MUST** be completed for both right and left eyes to gain marks.

1 mark is awarded for a final LogMAR visual acuity for each eye.

9 marks are awarded for the technique demonstrated in the station.

**4. How are marks awarded for the Subjective Refraction: Cylinder station?**

8 marks are awarded for your prescription following refinement of the cylinder. The marks are calculated as described above.

1 mark is awarded for a final visual acuity. This **MUST** be in LogMAR notation.

6 marks are awarded for the technique demonstrated in the station.

**5. How are marks awarded for the Focimetry station?**

To be awarded marks in each part of this station all answer boxes **MUST** be completed.

Q1 is worth 10 marks and both right and left distance prescriptions must be completed to gain marks. If only one side is entered in the answer boxes then this will be marked as an unanswered result.

Q2 is worth 2 marks and the near addition **MUST** be completed for both eyes to be awarded marks.

Q3 is worth 3 marks and both the power and direction of the prism **MUST** be completed to gain marks.

**6. For the retinoscopy on artificial eyes, will we be given/will be required to measure a visual acuity before conducting the retinoscopy?**

No – this would not be possible with an artificial eye.

**7. Will we be asked any questions by the examiners in the stations?**

No. Within the retinoscopy stations no examiner will be present during the exam. For the subjective refraction stations an examiner will be present and marking your technique but will not be asking questions.

**8. Is it possible to know the model of focimeter that we will be expected use during the examination in station 10?**

Please see the candidate instructions on our website.

**9. Would it be possible to know the margins of error allowed for the sphere, cylinder and axis measurements during retinoscopy?**

There is no specific margin of error allowed. The marks are calculated using an algorithm which determines how blurred the candidate's refraction would leave the patient compared to the correct refraction.

**10. Will we be given a chance to become familiar with the iPad answer screens prior to the exam?**

Candidates are strongly recommended to read this [iPad Screenshots for Electronic Refraction Certificate Examination](#) document and view the video below that details the look of the iPad marking system and how answers are inputted, how it is timed etc.

**[Refraction Certificate Examination – iPad Marking System Tutorial Video](#)**

We also have an online demo of the iPad exam, where candidates can practice a mock exam using the iPad software used, which will be identical to the real examination:

To use the demo, click this link <http://rcophthexams.org>

And then select **Refraction** from the top of the screen, which will launch the demo exam.

**11. Are we provided with a pencil and scrap paper in the examination station to do any calculations?**

Yes

**12. Is there a certain number of spherical/cylindrical stations?**

The website explains the layout of the exam and the number of stations of each type.

**13. For the stations with artificial eyes, do we have to introduce and present ourselves like we would with a patient?**

No

**14. Is there a specific artificial eye model that is used?**

Heine Retinoscope trainer (model eye)

**15. Do we have to write our answers on the same model of "refractive recording sheets" as in previous years?**

This exam will be electronic and results will be entered on an iPad. The answers will follow the layout of the previous marksheets.

**16. Would candidates be allowed to bring in their own protractors and/or cross-markings for hand-neutralisation?**

Yes.

**17. Do I have to use the focimeter in the lens neutralisation station?**

You do not have to use the focimeter and a trial lens tray is available for neutralisation. If you require a cross for lens neutralisation you will need to draw your own on a piece of paper.

**18. Would you be able to comment on the make of retinoscopes provided for the examination?**

The brand of retinoscope will vary, however all equipment provided will be of the required standard to complete the examination. The retinoscopes will be streak retinoscopes.

**19. What equipment do you provide?**

In OSCEs where specific equipment is required, this will be provided e.g. retinoscopes (streak), trial lenses, cross-cylinders, trial frames, pinholes, occluders, fixation targets / vision charts and a focimeter. However, we do not provide tape measures and it is best to bring your own ruler. It is important that you ensure that you leave any equipment which is not your own behind – failing to do so may inadvertently delay the examination or make a fellow candidate's experience less favourable. It is not infrequent that, despite the vigilance of the examiner, for candidates to remove items which are not theirs.

Inevitably, examination venues vary. However, the equipment provided is of the standard required to conduct these examinations.

**20. Can I bring my own equipment?**

Yes, within reason you can bring anything you wish provided that it is not judged to be likely to interfere with the running of the examination or be to the detriment of other candidates. Retinoscopes, trial frames, rulers, tape-measures will be allowed, however, a phoropter head or large lens box will not be permitted.

**21. Will the lenses be organised before I start the station?**

The examiners and examination helpers have instructions to ensure that each OSCE is set up identically for each candidate. However, inevitably you have to accept that occasionally a lens may be misfiled in the trial lens tray and that occasionally if they are not handled correctly fingerprints can get on them. It is beholden of the candidate to check the lens they have selected and that it is clean, to handle them and replace them correctly, as in normal practice.

**22. How is the OSCE timed?**

Please note that during the examination there are usually 2 carousels of candidates being examined contemporaneously. However, in order to keep the overall examination running approximately to time the 2 carousels are NOT synchronised. Whilst they usually start at the same time, the carousels often desynchronise slightly as the examination progresses for examination related issues. There are therefore 2 sets of invigilators and therefore there is not a single timing signal. Each OSCE will receive a bespoke signal to indicate a '5 minute warning' and "1 minute to go" and then the i-Pad will close the marking page at 10 minutes preventing any further data entry.

**23. Can I use a watch or my phone to time each station?**

There is no need to bring your own timer as the iPads have a timer on the screen.

**24. How should I record any prism found in the focimetry station?**

The electronic system has been designed so that the recording of any prism found needs to be entered as though the total amount of prism is in the left spectacle lens. Therefore, you either need a technique which results in any prism measurement found being in the left spectacle lens or understand how to combine prism corrections in the right and left lenses to determine the total strength of prism and direction if it was only in the left lens.

**25. Will the 'patient's' IPD be given to me in the focimeter station?**

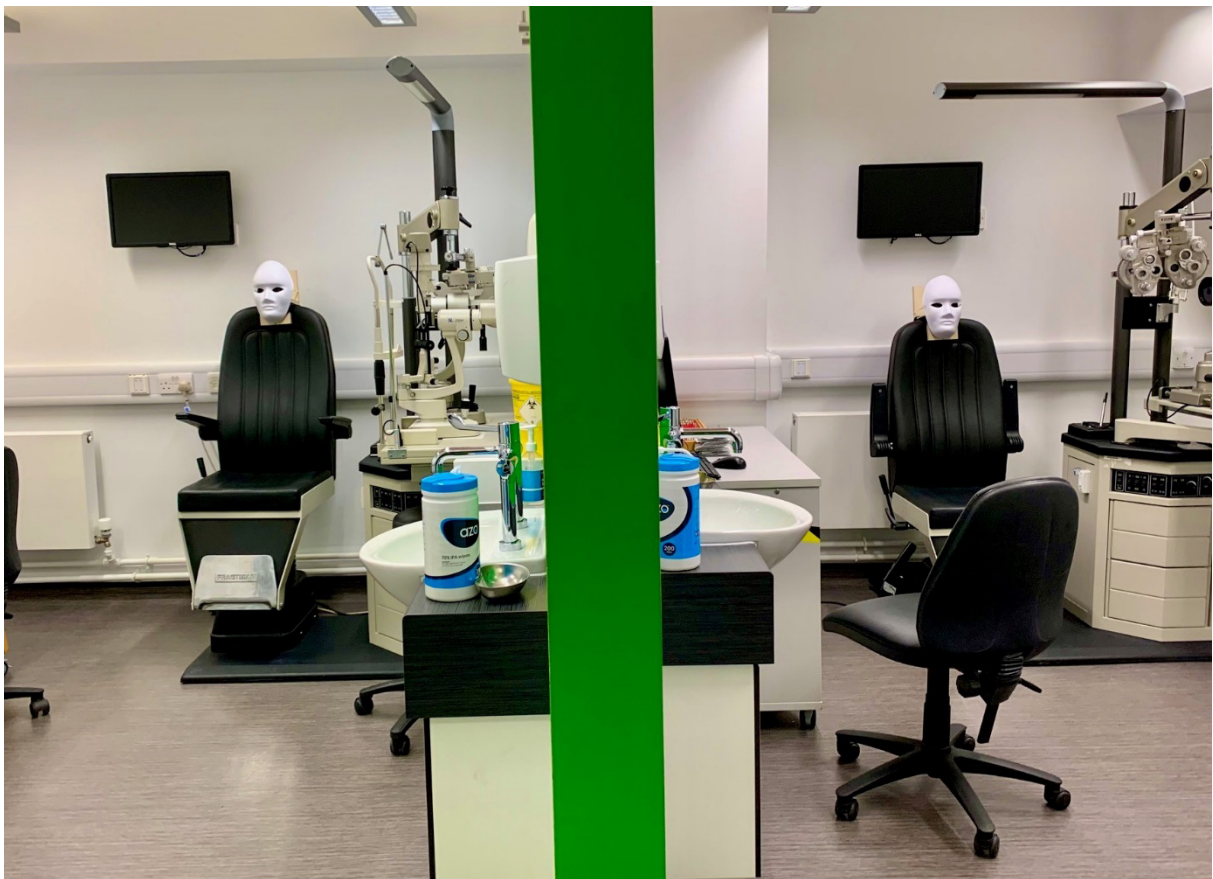
No, the IPD is not necessary.

**26. Will the measurement markings be visible on the artificial eyes?**

No, these will be covered up.

**27. How will the artificial eyes look when presented for the examination?**

The eyes are hidden inside a model head mounted on a chair, to mimic how a real patient would be presented and sat for the exam. Please see pictures below:



**28. Are the tasks in each station the same for each candidate?**

Candidates are set approximately the same tasks to perform. However, different candidates will find some tasks more challenging and others easier than fellow candidates. This is a reflection of the real world and is taken into consideration during the marking and standard setting.

**29. Prior to examining the Refraction Certificate, are the examiners offered specific training?**

All examiners are provided with detailed, explicit instructions in preparation for the examination. They attend training at the college and have observed or examined in the examination previously. They receive an examination presentation briefing immediately before the examination. All this is in an effort to ensure that they are completely prepared for the OSCE.

**30. Why were there more than 2 examiners in my OSCE?**

It is necessary to have both observer examiners and assessor examiners present in these examinations to train future examiners, and for quality assessment. You may therefore be aware that for some OSCEs there may be 2 examiners present. They do not make marking recommendations to examiners and their presence will not affect the marks awarded.

**31. Are the examiners given guidance on how to mark?**

In OSCEs where the examiner is required to mark technique, detailed marking guides are provided both before the examination and hard copy for use during the examination.

**32. Will the charts at the exam venue be given in Snellen or LogMAR?**

As is mentioned in the Instructions to Candidates document on the college website, you will be required to record vision in LogMAR nomenclature.