

## Recorded Lectures - Multiple Choice Answers

What is the Difference, and Can I Check it?

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Six of the following questions were presented online following a recorded lecture video to entrants to comply with the General Optical Council's best practice specification for this type of CET.

**Q1. In the UK in 2020, how many soft contact lens new fits and refits were with silicone hydrogel materials?**

- a) 84%
- b) 96%
- c) 74%
- d) 57%

**c is the correct answer.** 74% of soft contact lens new and refits were with silicone hydrogel materials. More information on contact lens prescribing trends can be found at: Morgan P. Trends in UK Contact Lens Prescribing 2020. *Optician*. 2020; 262(6768). Available from: <https://www.opticianonline.net/features/trends-in-uk-contact-lens-prescribing-2020> Accessed 30th October 2020

**Q2. With reference to contact lens materials, which of the following statements is true?**

- a) Oxygen transmissibility is a physical property of the contact lens material and not a function of the shape or thickness
- b) Oxygen transmissibility is denoted by 'Dk'
- c) Oxygen transmissibility is a measurement of the oxygen permeability divided by the thickness of the measured sample
- d) Oxygen transmissibility is the net volume of oxygen passing through the contact lens material under test conditions that include temperature, sample thickness and partial pressures of oxygen on both sides of the sample material

**c is the correct answer.** ISO 18369-1:2017 states oxygen transmissibility of a contact lens is defined as the oxygen permeability (Dk), divided by the thickness (t), in centimetres, of the measured sample under specified conditions. It is denoted by  $Dk/t$ . ISO 18369-1:2017 can be accessed via the membership area of the ABDO website.

**Q3. With reference to contact lens materials, which of the following statements is false?**

- a) Modulus is measured in Megapascals (Mpa)
- b) The modulus of a contact lens material is a constant ratio between the tensile stress and the tensile strain, in the range of the linear elastic behaviour of the material
- c) Modulus is also known as the tensile modulus of elasticity of a contact lens

- d) The higher the modulus of a contact lens material, the lower the oxygen permeability

**d is the correct (false) answer.** The oxygen permeability of a contact lens material is not a factor of the modulus of the material.

**Q4. According to the ISO System of Contact Lens Materials Classification, for Group 5 materials, a lower case 'w' means?**

- a) The material has an internal wetting agent within the polymer
- b) The material can be worn of extended periods of wear
- c) The surface of the material has been chemically modified
- d) The material contains water

**a is the correct answer.** Contact lens materials in Group 5 are soft lens materials with enhanced oxygen permeability. In this group, a lower case 'w' is used for materials having internal wetting agents within the polymer. A lower case 'c' indicates the surface has been chemically modified.

**Q5. The key factor(s) in the stabilisation of soft toric contact lens are?**

- a) The back surface of the contact lens being toric
- b) The patient's palpebral aperture, lid position, tightness of lids and intercanthal angle
- c) Gravity
- d) The contact lens total diameter

**b is the correct answer.** In their 2002 study of factors influencing toric soft contact lens fits Young, Hunt & Covey, found palpebral aperture and angles relating to lid anatomy were the main patient factors associated with lens orientation and stability.

**Q6. A peri-ballast method of stabilising a soft toric contact lens**

- a) Utilises thin zones above and below the optic zone
- b) Features more prism in the optic zone than a prism ballast
- c) Utilises thick zones above and below the optic zone
- d) Is manufactured with a minus carrier

**d is the correct answer.** The peri-ballast is a modified version on a prism-ballast manufactured using a minus carrier. It features less prism in the optic zone comparable to a full prism-ballast and can improve oxygen transmission in the inferior portion of the lens.

**Q7. Which of the following soft toric contact lenses only feature a single orientation marking in the 6 o'clock position?**

- a) Air Optix Plus Hydroglyde for Astigmatism and 1-Day Acuvue moist for Astigmatism
- b) Air Optix Plus Hydroglyde for Astigmatism and Biofinity Toric
- c) Biofinity Toric and Acuvue Oasys for Astigmatism

d) Myday Toric and Biofinity Toric

**d is the correct answer.** Biofinity Toric, Biomedics Toric, Clariti 1-day Toric, Clariti Toric, Myday Toric, Gentle 59, Gentle 80, Blu gen and Blu Kidz all feature a single orientation marking in the 6 o'clock position only.

**Q8. Which of the following is true when measuring the Back Vertex Power of a soft contact lens in practice?**

- a) A standard focimeter can be used in exactly the same way as measuring spectacle lenses
- b) The lens should have excess fluid removed and placed on the focimeter contact lens support stop within 10 seconds
- c) The lens should be measured within 60 seconds of taking out of the case or packaging
- d) It is not possible to measure the Back Vertex Power of a soft contact lens in practice.

**b is the correct answer.** Excess fluid can be removed using a lint free cloth and it is recommended to take several readings noting the order.

**Q9. It is a legal requirement to include which of the following details on a contact lens specification**

- a) The GOC registration number of the contact lens practitioner, the date the fitting was completed and the date of the patient's last eye examination
- b) The GOC registration number of the contact lens practitioner, the date the fitting was completed and the date the specification expires
- c) The GOC registration number of the contact lens practitioner, the GOC registration number of the optometrist who conducted the patient's last eye examination and the date the specification expires
- d) The GOC registration number of the optometrist who conducted the eye examination, the address of the practice where the patient had their eye examination and the specification expiry date

**b is the correct answer.** It is a legal requirement to include on the contact lens specification: sufficient details so that the lenses can be replicated, the patient name and address, the patient's date of birth if under sixteen, the name and GOC registration number of the contact lens practitioner signing the specification, the practice address where the fitting was carried out, the date the fitting was completed, the specification expiry date and any relevant clinical information, modality of wear and recommended cleaning products/regime. More information can be found at <https://www.abdo.org.uk/regulation-and-policy/advice-and-guidelines/clinical/contact-lenses/>