

**CERTIFICATE IN DISPENSING OPTICS (CDO)**

**Term-End Examination**

**June, 2015**

**OAH-005 : PROGRESSIVE LENS**

*Time : 90 Minutes*

*Maximum Marks : 30*

**Note :**

- (i) *There will be multiple choice type of questions in this examination which are to be answered in **OMR Answer Sheets**.*
- (ii) *All questions are **compulsory**.*
- (iii) *Each question will have four options and only one of them is correct. Answers have to be marked in figures in the appropriate rectangular boxes corresponding to what is the correct answer and then blacken the circle for the same number in that column by using **HB** or lead pencil and not by ball pen in **OMR Answer Sheets**.*
- (iv) *If any candidate marks more than one option, it will be taken as the wrong answer and no marks will be awarded for this.*
- (v) *There will be 30 questions in this paper and each question carries one mark.*
- (vi) *There will be no negative marking for wrong answers.*
- (vii) *No candidate shall leave the examination hall at least for one hour after the commencement of the examination.*

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1. Trifocal lens type has
  - (1) One segment line
  - (2) Two segment line
  - (3) Three segment line
  - (4) Four segment line
  
2. Which of the following lenses claims to provide natural vision like a young individual ?
  - (1) Progressive lenses
  - (2) Bifocal lenses
  - (3) Single vision lenses
  - (4) Trifocal lenses
  
3. In progressive addition lenses, increase in power is caused by an increase in
  - (1) Curvature in progressive zone
  - (2) Radius of progressive zone
  - (3) Diameter of progressive zone
  - (4) None of the above
  
4. Shorter corridors produce more
  - (1) Rapid power changes
  - (2) Slow power changes
  - (3) Moderate power changes
  - (4) None of the above
  
5. With a progressive lens the criterion for good binocular vision is to enable
  - (1) Artificial fusion
  - (2) Natural fusion
  - (3) Both (1) and (2)
  - (4) None of the above

- 6. The eyes naturally**
- (1) Diverge while gazing for hear
  - (2) Converge while gazing for hear
  - (3) Both (1) and (2)
  - (4) None of the above
- 7. The power progression must be positioned on the lens in order to follow the eye's path of convergence downwards in the**
- (1) Nasal direction
  - (2) Temporal direction
  - (3) Both (1) and (2)
  - (4) None of the above
- 8. To ensure what kind of fusion must the retinal images formed in each eye be similar in all directions of gaze ?**
- (1) Sensorial
  - (2) Motor
  - (3) Both (1) and (2)
  - (4) None of the above
- 9. The original Varilux design, is now known as**
- (1) Varilux 1
  - (2) Varilux 2
  - (3) Varilux 3
  - (4) Varilux 4
- 10. There is no image**
- (1) Shift in PALs
  - (2) Jump in PALs
  - (3) Both (1) and (2)
  - (4) None of the above

11. In what types of progressive lens design are large areas of the lens free from astigmatism ?
- (1) Hard design
  - (2) Soft design
  - (3) Both (1) and (2)
  - (4) None of the above
12. Which one of the following is the process of modelling the theoretical optical performance of the lens as perceived by the wearer with the lens ?
- (1) Ray tracking
  - (2) Ray tracing
  - (3) Both (1) and (2)
  - (4) None of the above
13. For which of the following molds, often used for cast materials like hard resin, the mill may cut a progressive surface onto a ceramic former ?
- (1) Glass
  - (2) Plastic
  - (3) Both (1) and (2)
  - (4) None of the above
14. A single vision reading lens consists of a single sphere of appropriate radius providing correction for near vision only.
- (1) True
  - (2) False
  - (3) None of the above
  - (4) Can't say
15. A progressive addition lens has no disadvantage.
- (1) True
  - (2) False
  - (3) None of the above
  - (4) Can't say

- 16. Advantage of wider field of clear vision but produce higher amounts of unwanted astigmatism.**
- (1) True
  - (2) False
  - (3) None of the above
  - (4) Can't say
- 17. Space and form perception is provided by the retina's periphery and is directly influenced by the distribution of prism on the progressive lens surface.**
- (1) True
  - (2) False
  - (3) None of the above
  - (4) Can't say
- 18. Variable power lenses rely on some mechanical means of adjusting the power, operating by the wearer.**
- (1) True
  - (2) False
  - (3) None of the above
  - (4) Can't say
- 19. The eyes do not naturally converge when the gaze is lowered for near vision.**
- (1) True
  - (2) False
  - (3) None of the above
  - (4) Can't say
- 20. Soft design concentrates the intense aberrations into small regions adjacent to the progressive corridor and near add area.**
- (1) True
  - (2) False
  - (3) None of the above
  - (4) Can't say

- 21. Hard designs impose a lower location of the near vision add area, which forces greater eye or head movements to use that area.**
- (1) True
  - (2) False
  - (3) None of the above
  - (4) Can't say
- 22. The surface astigmatism inherent in progressive lenses produces a significant amount of cylinder power, which the wearer perceives as blur.**
- (1) True
  - (2) False
  - (3) None of the above
  - (4) Can't say
- 23. Early progressive lenses were symmetrical in design, so that the right and left lenses were identical.**
- (1) True
  - (2) False
  - (3) None of the above
  - (4) Can't say
- 24. In dispensing a pair of progressive power of lenses, it is imperative to ensure that each lens is correctly positioned with respect to the pupil.**
- (1) True
  - (2) False
  - (3) None of the above
  - (4) Can't say
- 25. The frame should be closely fitting with the smallest possible vertex distance and the correct pantoscopic angle.**
- (1) True
  - (2) False
  - (3) None of the above
  - (4) Can't say

- 26.** When there is need of separate corrections for distance, intermediate and near vision, prescription can be given in one pair of spectacles as trifocal lenses.
- (1) True
  - (2) False
  - (3) None of the above
  - (4) Can't say
- 27.** The Omnifocal lens was the plastic lens.
- (1) True
  - (2) False
  - (3) None of the above
  - (4) Can't say
- 28.** With a progressive lens the eye can find some region of the progression zone where the power is correct for the viewing distance.
- (1) True
  - (2) False
  - (3) None of the above
  - (4) Can't say
- 29.** Perception of movement is perceived by the whole of the cornea which is almost uniformly sensitive to motion.
- (1) True
  - (2) False
  - (3) None of the above
  - (4) Can't say
- 30.** Bifocals help matters by providing one fixed amount of extra power, while trifocals provide two, usually in steps of one diopter or more.
- (1) True
  - (2) False
  - (3) None of the above
  - (4) Can't say

**SPACE FOR ROUGH WORK**