

CERTIFICATE IN DISPENSING OPTICS (CDO)

Term-End Examination

00318

December, 2015

OAH-002 : OPHTHALMIC OPTICS

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 Sheet**.
 - (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 Sheet**.
 - (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.

1. The Snellen eye chart has a series of letters or letters and numbers, with the largest at the top.
(1) True (2) False
(3) None of the above (4) Can't say
2. Acuity and colour vision can be affected independently.
(1) True (2) False
(3) None of the above (4) Can't say
3. Hyperopia is also known as Farsightedness.
(1) True (2) False
(3) None of the above (4) Can't say
4. Coma aberration is dependent upon lens shape.
(1) True (2) False
(3) None of the above (4) Can't say
5. The optics of eye is very complex.
(1) True (2) False
(3) None of the above (4) Can't say
6. The bifocal segment height should be selected such that jump is minimised.
(1) True (2) False
(3) None of the above (4) Can't say
7. Glass lenses are suitable for everyday usage.
(1) True (2) False
(3) None of the above (4) Can't say

8. In spherical aberration off-axis rays are brought to a focus closer to the lens than are on-axis rays.
- (1) True (2) False
(3) None of the above (4) Can't say
9. Aberration leads to blurring of the image produced by an image-forming optical system.
- (1) True (2) False
(3) None of the above (4) Can't say
10. Density is a measurement of :
- (1) Weight (2) Speed
(3) Velocity (4) Size
11. Which of the following lenses provides a smooth transition from distance correction to near correction ?
- (1) Progressive (2) Bifocal
(3) Single (4) Double
12. A bifocal adds a second lens called :
- (1) Second (2) Add
(3) First (4) Small
13. Which retinopathy is the most common retinal vascular cause of visual acuity loss ?
- (1) Diabetic (2) Optic neuritis
(3) Both (1) and (2) (4) None of the above
14. Legal Blindness is when a person's best-corrected vision is worse than :
- (1) 20/200 (2) 20/20
(3) 200/20 (4) 20/2

15. The most common chart used in the doctor's clinic is :
- (1) Snellen chart
 - (2) LogMAR chart
 - (3) Pelli-Robenson chart
 - (4) None of the above
16. Hyperopia is the condition in which the image of a distant object falls :
- (1) Behind the retina
 - (2) Front of the retina
 - (3) Middle of the retina
 - (4) Along the retina
17. An eye is said to be normal or emmetropic if the image of a distant object falls on the :
- (1) Retina
 - (2) Lens
 - (3) Cornea
 - (4) Sclera
18. Coma aberration can be corrected by using corrective :
- (1) Lenses
 - (2) Angle
 - (3) Both (1) and (2)
 - (4) None of the above
19. 0.5 mm is the Position of Posterior Surface of :
- (1) Lids
 - (2) Cornea
 - (3) Eyelashes
 - (4) None of the above
20. 6.70 mm is the radius of curvature of :
- (1) Anterior surface of cornea
 - (2) Posterior of cornea
 - (3) Front of cornea
 - (4) Middle of cornea
21. Which of the following type of lens has the same optical focal point or correction over the entire area of the lens ?
- (1) Single vision
 - (2) Double vision
 - (3) Both (1) and (2)
 - (4) None of the above

22. The metric equivalent is 6/6 vision where the distance is 3 meters.
- (1) True (2) False
(3) None of the above (4) Can't say
23. Departures of the performance of an optical system from the predictions of paraxial optics are :
- (1) Aberrations (2) Oblique
(3) Rays (4) Light
24. Radius of curvature of posterior surface of lens core is :
- (1) 2.33 mm (2) 5.76 mm
(3) 4 mm (4) 3 mm
25. Which eye is a mathematical construction of which the dimensions and optical properties approximate those of the ordinary living eye ?
- (1) Schematic (2) Artificial
(3) Strong (4) Weak
26. At the center of the retina is a small depression known as the :
- (1) Fovea (2) Nerve cell
(3) Both (1) and (2) (4) None of the above
27. Radius of curvature of Anterior surface of cornea is :
- (1) 1.0 mm (2) 2.0 mm
(3) 5.0 mm (4) 7.70 mm
28. Position of Anterior Surface of cornea is :
- (1) 3 mm (2) 7 mm
(3) 0 mm (4) 6 mm

29. Which of the following aberrations is positive when off-axis rays focus farthest from the axis and negative when they are closest ?

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| (1) Spherical | (2) Oblique |
| (3) Coma | (4) None of the above |

30. Two main effects of a Distortion :

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| (1) Barral | (2) Pincushion |
| (3) Both (1) and (2) | (4) None of the above |

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