

Ist. B. Optom. Sem-I: Winter-2017

SUBJECT: DISPENSING OPTICS- (I)

Note: Section-A is given on a SEPARATE sheet and has to be answered On the same sheet. The sheet should be completed within the first 30 minutes of starting of the examination. This sheet with Section-A only will be collected by the Supervisor.

Seat No _____ W-2017-3469 Day & Date: Wednesday, 29.11.2017

SECTION-A

Q.1 Fill in the blanks: (10)

- 1) Pure Titanium frames are lighter than _____ frames.
- 2) The _____ bridge follows the bridge of the nose smoothly.
- 3) An ophthalmic Lens is a combination of _____.
- 4) $+3.00/-1.00 \times 90$ is _____ type of astigmatic power.
- 5) During hand neutralizing a lens, against movement indicates a _____ lens.
- 6) According to sine conventions, light always travels from _____ to _____.
- 7) One point touch of a lens on a plane surface indicates a _____ lens.
- 8) _____ is the point from which a ray of light goes undeviated.
- 9) The strength of a prism is indicated by the amount of its _____.
- 10) _____ is a nylon- based materials that is quite strong.

Q.2 State true or False: (10)

- 1) R.I. of Polycarbonate is lesser than crown glass.
- 2) Abbe value tells about how good a lens is in controlling chromatic Aberrations.
- 3) GCD is same as Bridge width.
- 4) Apical angle tells about power of prism.
- 5) Lensometer can calculate the surface power of any lens.
- 6) In a toric lens $+2.00/+1.00 \times 90$, vertical line focus will be formed first.
- 7) In the notation $50 \square 22, 135$, frame P.D. is 62.
- 8) Convex mirror diverges the reflecting rays.
- 9) Minus Meniscus lens has steep front surface.
- 10) Against movement should be neutralized with plus lenses.

I -B.OPTOM. SEM – I : WINTER - 2017

SUBJECT: DISPENSING OPTICS (I)

Day: **Wednesday**

Date: **29/11/2017**

W-2017-3469

Time: **10.00 AM TO 01.00 PM**

Max Marks: 70

N.B:

- 1) There are **THREE** section as.
Section-A = Objectives type questions.
Section-B= Long questions
Section-C= Short questions
- 2) **Section A** is given on **SEPARATE** sheet and has to be answered on the Same sheet. This sheet should be completed within the first **30** Minutes of starting of the examination. This sheet with section an only Will be collected by the Supervisor.
- 3) **Section-B** has **3** long questions and **ANY TWO** questions have to be Answered on the separate answer sheet.
- 4) **Section-C** has **6** short questions and **ANY FIVE** questions have to be Answered on the separate answer sheet.
- 5) Draw neat and labeled diagrams **WHEREVER** necessary.

SECTION-B

Q.3 Attempt **ANY TWO** of the following: **(20)**

- 1) Describe in detail about lens material types with different types of lens design and their uses.
- 2) Elaborate about spectacle frame materials with different types of frame marking system.
- 3) Describe the different types of image formations by Lenses and mirrors in details.

Q.4 Attempt **ANY FIVE** of the following: **(30)**

- 1) Prisms with properties and its uses.
- 2) Sign conventions
- 3) Describe sturm's conoid
- 4) Explain sag formula
- 5) Classification of Aberrations
- 6) Boxing system