BACHELOR OF CLINICAL OPTOMETRY
II-B. Optometry Sem-III : WINTER :- 2021
SUBJECT: DISPENSING OPTICS - II

Day : Monday   Time : 02:00 PM-05:00 PM
Date 7/3/2022   W-837-2021   Max. Marks: 70

N.B.
1)   There are **THREE** Sections as
           Section- A = objective type questions   **20 Marks**
           Section-B = Long questions   **20 Marks**
           Section-C= Short questions   **30 Marks**
2)   Section A is given on a SEPERATE sheet and has to be answered on the same
           sheet. This sheet should be completed with the first 30 minutes of starting of
           the examination. This sheet with Section - A 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 labeled diagrams **WHEREVER** necessary.

SECTION-B

Q.4   Answer **ANY TWO** of the following: **(20)**

1)   Write in detail about various types of bifocals. Discuss about various
           measurement required for fitting bifocal.
2)   Create the ideal order form for ordering PAL. Discuss the form in detail with
           its importance.
3)   Differentiate between organic and mineral photochromic lenses. Describe in
           detail about factors influencing photochromic performance.

SECTION-C

Q.5   Attempt **ANY FIVE** of the following: **(30)**

1)   Write a short note on manufacturing and fitting of poloroid lenses.
2)   Taking your own example calculate the total displacement in following:
           a) 22 mm round kryptok bifocal
           b) D- bifocal
           c) Executive bifocal
3)   Write in detail about Tscherining's ellipse. Discuss the advantages and
           disadvantages of the lenses obtained by using Jalie's expression.
4)   Explain in short:
           a) Memory metal
           b) Epoxy resin
           c) Titanium
5)   Explain in detail with example:
           a) Occupational PAL
           b) Personalize PAL
6)   Write a short note on types, advantages, disadvantages and indications of
           aspheric lenses.

*****

BACHELOR OF CLINICAL OPTOMETRY
II-B. Optometry Sem-III : WINTER :- 2021
SUBJECT: DISPENSING OPTICS - II

Day : Monday   Time : 02:00 PM-05:00 PM
Date 7/3/2022   W-837-2021   Max. Marks: —

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

Seat.No:_____

SECTION-A

Q.1   Fill in the blanks: **(10)**

1)   Minkwitz's Theorem is _____
_____.

2)   Transitions photochromic lenses are manufactured using _____ Technology.

3)   For water Brewster's angle is _____ degrees.

4)   Heat-treated lens viewed through a colmascope will show a _____ pattern.

5)   Frames without temples are called as _____.

6)   Minimum blank size (MBS) for single vision lenses= _____.

7)   In case of _____ bifocal, distance and near optical centres are on same horizontal line.

8)   Power of prism in PALs can be calculated at _____.

9)   If the lens power is +2.50 DS and it is decentered nasally by 3mm, then prismatic effect will be _____.

10)   _____ amount of pantoscopic tilt should be given for bifocals.

Q.2   Match the following: **(05)**

1)	Optyl	a)	hand-held
2)	Lorgnettes	b)	Straight back
3)	Half-eyes	c)	Only nasal
4)	Convertible	d)	has memory
5)	Numont	e)	reading

Q.3   State true or false: if false give reason.   **(05)**
1)   Yoked base up prisms are added to PAL for prism thinning.
2)   Aspheric surface is rotationally asymmetrical.
3)   Minimum fitting height for short corridor PALs is 18-20 mm.
4)   Total inset = Outset + Inset.
5)   Polycarbonate material has highest impact resistance.

Marks Obtained: _____   Signature of the Invigilator: _____

Signature of the Examiner: _____