II-B.OPTOM.SEM-III·WINTER-2017

SUBJECT : DISPENSING OPTICS – II

Note : Section – A is given on a **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 – A only will be collected by the supervisor.

Seat No. _____ W-2017-3474 **Day:** Tuesday **Date:** 28-11-2017

SECTION – A

Q.1 A True or False: **[15]**

1) The higher the RI, the lesser will be the chromatic aberration.

2) Polarized lenses are available without tint.

3) Best form lenses reduce chromatic aberration.

4) Blue tinted lenses absorb blue end of the spectrum.

5) The higher the refractive index of the Glass the higher will be the efficiency of an ARC.

6) For high plus lenses the diameter of the lens should be ordered as large as possible.

7) The higher the base curve the lesser will be the magnification.

8) High index lenses make the lens more steeper.

9) Glass D bifocal is lighter in weight as compared to Glass executive bifocal of same power.

10) Segment inset varies according to near addition.

11) Retroscopic tilt is given in low powered prescription lenses.

12) The lesser the curve variation factor the lesser is the thickness of the lens.

13) While fitting bifocal lenses if the head posture of the patient is chin up, the fitting height should be increased.

14) In PAL myopia of 8 D with near add +1.0, the peripheral astigmatism are more intense than the lens with 20 D myopia with same addition.

15) Tints which have lesser transmission than 10%, reduce visual acuity.

B) Fill in the blanks: **[05]**

1) _____ tint is preferred when the outdoor atmosphere is smoggy (smoky + foggy).

2) _____ tint is preferred for night driving.

3) Segment depth means _____.

4) Segment inset is dependent on _____.

5) For 7^0 pantoscopic tilt the OC should be lowered by _____ while fitting the lens.

Marks Obtained: _____ **Signature of Invigilator:_____**

Signature of Examiner: _____

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II – B. OPTOM. SEM– III : WINTER - 2017

SUBJECT : DISPENSING OPTICS – II

Day : **Tuesday** Time : **10.00 AM TO 01.00 PM**
Date : **28/11/2017** Max. Marks : 70

W-2017-3474

N.B.:

1) There are **THREE** section 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 separate and has to be answered on the same sheet. This sheet should be completed with in 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 an **ANY TWO** questions have to be answered on the separate answer sheet.
4) Section C has short questions and **ANY FIVE** questions have to be answered on the separate answer sheet.
5) Draw neat labeled diagrams **WHEREVER** necessary.

SECTION – B

Attempt **ANY TWO** of the following: **[20]**

Q.1 Explain four types of monochromatic aberrations and different ways to eliminate those aberrations.

Q.2 Explain the advantages of PAL over other presbyopic correction options and explain how PAL are manufactured.

Q.3 Calculate Total Displacement, Image Jump and DDRL in bifocals:
DP = – 1.0 / – 2.0 × 90
NP = – 1.0 / + 2.0 × 180
28mm round fused KRBF, D bifocal, Executive bifocal and 40mm round ultex.
Reading level = 9mm and segment drop 2mm.

SECTION – C

Explain the detailed dispensing management in following condition **ANY FIVE**: **[30]**

Q.1 Accommodative esotropia.

Q.2 Anisometropia where RE plano and LE – 5.00 DS.

Q.3 38 year old computer engineer complaining about eyestrain and headache while near work.

Q.4 Albinism patient with high hypermetropia (office clerk).

Q.5 50 year old Quality control analyst in chemical factory.

Q.6 CEO of MNC 35 year old has active lifestyle.

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