II-B.optom-Sem-III : Winter-2018

SUBJECT: DISPENSING OPTICS-II

Day: Tuesday
Date: 27-11-2018

Time: –
Max. Marks: 20

W-2018-3724

N.B:

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._____

SECTION-A

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

1) Frames without an eye wire going completely around the lens are called_____.

2) _____instrument is used to measure the vertex distance.

3) When compared with conventional metal frame materials titanium is _____% lighter.

4) To check for strain in a lens _____ instrument is used.

5) If a person with a high minus spectacle Rx switches to contact lens, the power in contact lens would be _____ than the power in the spectacle lens.

6) The highest refractive index available in mineral material is_____.

7) In executive bifocal addition power is given on _____surface.

8) Curvature of image is controlled by_____.

9) _____ is added in plastic lens material for photo chromatic property.

10) Wollaston form lenses, though they correct the oblique astigmatism are not used routinely because_____.

P.T.O.

Q.2 State **True** or **False** : (If false give reason) **(10)**

1) Cellulose acetate is an example of thermo plastic.

2) For every 2 degrees of pantoscopic tilt the optical centre should be raised 1 mm above the pupil centre.

3) Segment height is always greater than or equal to segment depth.

4) An executive bifocal is an example of fused bifocal.

5) Micro etching is a temporary marking.

6) In conventional PAL asphericity is given to front surface.

7) In boxing system the effective diameter is the diagonal of the box.

8) Plastic photo chromatic lens darkens more in hot temperature.

9) For horizontal reflecting surface the plane of polarization is vertical.

10) Brewster angle for water is 53°.

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

Signature of Examiner:_____

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II – B. OPTOM. SEM– III : WINTER - 2018

SUBJECT: DISPENSING OPTICS-II

W-2018-3724

Day: Tuesday
Date: 27/11/2018

Time: 10.00 AM TO 01.00 PM
Max. Marks: 50

N.B:

1) There are **THREE** sections as:
   Section A = Objective type questions = 20marks
   Section B = Long questions = 20marks
   Section C = Short questions = 30marks
2) **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.
3) Section B has 3 long questions and **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 What are aspheric lenses? Explain uses of asphericity in detail.

Q.2 What is progressive addition lens? Write in detail about various designs of PALs.

Q.3 Taking your own example calculate image jump, differential displacement at reading level and total displacement for kryptok, executive and D bifocal lens.

SECTION-C

Write short notes on (**ANY FIVE**): **(30)**

a) Best form lenses.

b) Manufacturing of polarizing lens.

c) Plastic photo-chromatic lens.

d) High index lens.

e) Curve variation factor with an example.

f) Indication and contraindication of PAL.

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