THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[AHS 0122] JANUARY 2022 Sub. Code: 2751
(FEBRUARY 2021 & AUGUST 2021 EXAM SESSION)

B.OPTOM
THIRD YEAR (Regulation 2018-2019)
PAPER I – OPTOMETRIC OPTICS II AND DISPENSING OPTICS
Q.P. Code : 802751

Time: Three hours **Answer ALL Questions** **Maximum: 100 Marks**

I. Elaborate on: **(3 x 10 = 30)**

1. What are progressive lenses? Discuss about various parameters required to fit progressive lenses.
2. Write in detail about mounting of ophthalmic lenses.
3. Write in detail about antireflection and UV coating in spectacle lenses.

II. Write notes on: **(8 x 5 = 40)**

1. Pupillary distance measurement.
2. ANSI standards.
3. Polaroid lenses and their benefits.
4. Frames for special purpose.
5. Pantascopic tilt and its effect.
6. Bifocal lenses.
7. Aspheric lenses.
8. Reflecting filters.

III. Short answers on: **(10 x 3 = 30)**

1. Define refractive index and give the refractive index for CR39 and crown glass.
2. Advantages of lenticular lenses.
3. Field of view of a lens.
4. Occupational lenses.
5. Abbe value.
6. Benefits of yellow tint.
7. Different types of bevels.
8. Distometer.
9. Markings seen on progressive lenses.
10. Patient selection for progressive lenses.

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THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[AHS 0922] SEPTEMBER 2022 Sub. Code: 2751
(FEBRUARY 2022 & AUGUST 2022 EXAM SESSIONS)

B.OPTOM
THIRD YEAR (Regulation from 2018-2019)
PAPER I – OPTOMETRIC OPTICS II AND DISPENSING OPTICS
Q.P. Code : 802751

Time: Three hours **Answer ALL Questions** **Maximum: 100 Marks**

I. Elaborate on: **(3 x 10 = 30)**

1. Write in detail about different types of coatings of spectacle lenses.
2. Write in detail about mounting of ophthalmic lenses.
3. Write in detail about frames for special purpose.

II. Write notes on: **(8 x 5 = 40)**

1. Steps in fitting progressive lenses.
2. Field of view of lenses.
3. Trifocal lenses.
4. Safety wear spectacles.
5. Brown tinted lens.
6. Chromatic aberration, abbe value and its effect.
7. Lenticular lenses.
8. Photochromatic lenses.

III. Short answers on: **(10 x 3 = 30)**

1. Types of progressive lenses.
2. Aspheric lenses.
3. Optical density.
4. Types of blocks.
5. Fitting height.
6. Benefits of antireflection coating.
7. Edger.
8. Uses of pupillometer.
9. Polaroid lenses.
10. Describe reflection with bifocals.

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THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[AHS 0423] **APRIL 2023** **Sub. Code: 2751**

B.OPTOM
THIRD YEAR (Regulation 2018-2019 onwards)
PAPER I – OPTOMETRIC OPTICS II AND DISPENSING OPTICS
Q.P. Code : 802751

Time: Three hours **Answer ALL Questions** **Maximum: 100 Marks**

I. Elaborate on: **(3 x 10 = 30)**

1. ANSI STANDARDS.
2. PAL – Progressive addition lenses.
3. Protective glasses.

II. Write notes on: **(8 x 5 = 40)**

1. Absorptive glasses.
2. Bifocals.
3. Pupilo meter.
4. Anti reflective coating.
5. Spherical aberration.
6. Photochromic filters.
7. Abbe's value.
8. Reflecting filters.

III. Short answers on: **(10 x 3 = 30)**

1. Gradient lenses.
2. Pantoscopic tilt.
3. Trifocal lenses.
4. Flint glasses.
5. High index lenses.
6. Principle of prism and its uses.
7. Ghost images.
8. Vertex distance.
9. Image jump.
10. Sphero cylinder.

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THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[AHS 1123] **NOVEMBER 2023** **Sub. Code: 2751**

B.OPTOM

THIRD YEAR (Regulation 2018-2019 onwards)

PAPER I – OPTOMETRIC OPTICS II AND DISPENSING OPTICS

Q.P. Code: 802751

Time: Three hours **Answer ALL Questions** **Maximum: 100 Marks**

I. Elaborate on: **(3 x 10 = 30)**

1. Write about the progressive lenses and its advantages.
2. Write the different types of special purpose frames and its uses.
3. What are the different types of tints used and characteristics of each?

II. Write notes on: **(8 x 5 = 40)**

1. Photochromic filters.
2. Aspheric lenses.
3. Edge coating and Hard Multi Coating.
4. ANSI standards.
5. Safety wear.
6. Pupillometer.
7. Lenticular lens.
8. Absorptive glasses.

III. Short answers on: **(10 x 3 = 30)**

1. Advantages of Polaroid lens.
2. Advantages and disadvantages of Bifocal lens.
3. Blue light hazards.
4. Measuring Aspheric Surface.
5. Cemented Bifocal.
6. Testing procedure for Safety lenses.
7. Anti-fog coating.
8. Factors in Bifocal fitting.
9. Frame selection in Progressive lens.
10. Distometer.

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