FEBRUARY 2017

DIPLOMA IN OPTOMETRY TECHNOLOGY

SECOND YEAR

PAPER I – REFRACTION TECHNIQUES, CONTACT LENSES, LOW VISION AIDS AND OPTICAL DISPENSING

Q.P. Code: 841536

Answer All Questions

Maximum : 100 Marks

I. Elaborate on:

Time: Three Hours

- 1. Define Low Vision according to WHO? Write about the different types of optical and non Optical devices.
- 2. What is cycloplegic refraction? Mention few drugs used few cycloplegic refraction its action and duration. Give few important indication of doing a cycloplegic refraction.
- 3. Elaborate on different types of lens material with its physical properties and advantage.

II. Write notes on:

- 1. Write a short note on chromatic aberration and its application.
- 2. Short note on spherocylindrical lenses.
- 3. Types of Intraocular lenses and its features.
- 4. Mention the different types of field defects seen glaucoma.
- 5. Indications and contraindications of contact lenses.
- 6. Fitting of a toric contact lenses.
- 7. Explain the procedure of taking monocular Interpupillary distance.
- 8. Write a short note on phochromatic lenses.
- 9. Electroptical devices in low vision.
- 10. Explain in brief the optics of contact lens.

III. Short answers on:

- 1. Write the prescription in plus cylinder form -1.00Dsph /-0.50Dcylx90.
- 2. Difference between cylinder and spherocylinder.
- 3. Name four special visual acuity test for children.
- 4. A patient with his RE reads three letters in 0.9 line of a Log MAR chart. What is his visual acuity?
- 5. Define Oxygen permeability.
- 6. What is the effect of accommodation on a myopic patient who changes from spectacle to contact lens.
- 7. A low vision patient with distance visual acuity of 6/60. What will be the add required?
- 8. Characteristics of retinoscopic reflex.
- 9. Name the different types of bridges.
- 10. Define pantascopic tilt.

 $(3 \times 10 = 30)$

 $(10 \times 5 = 50)$

 $(10 \ge 2 = 20)$