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MANIPAL UNIVERSITY

THIRD YEAR B.Sc. OPTOMETRY DEGREE EXAMINATION – JUNE 2011

SUBJECT: SQUINT AND BINOCULAR VISION

(COMMON FOR BOTH OLD AND NEW REGULATION)

Tuesday, June 07, 2011

Time: 14:00-17:00 Hrs.

Max. Marks: 80

✍ **Draw diagrams wherever necessary.**

1. Fill up the blanks:

- 1A. Optical axis touches the posterior pole of the globe _____ to the fovea.
- 1B. Lateral rectus muscle is inserted into the sclera at about _____ distance from the limbus.
- 1C. Absence of elevation in adduction is a feature of _____.
- 1D. For measuring right esotropia, prism to be placed before left eye is _____.
- 1E. Exodeviations in which distance deviation is approximately equal to near deviation is termed _____.

(1×5 = 5 marks)

2. Write short notes on (any SEVEN):

- 2A. Clinical features, diagnosis and management in microtropia.
- 2B. Uniocular and binocular movements of the eye with examples.
- 2C. Types of convergence, insufficiency of convergence –its diagnosis and management.
- 2D. Duane's Retraction Syndrome.
- 2E. Horopter and Panum's area.
- 2F. Pseudo strabismus.
- 2G. Fusion training and antisuppression training used in orthoptics.
- 2H. Write briefly on:
 - i) After image test
 - ii) Four prism base out test

(5×7 = 35 marks)

3. Answer BOTH the questions:

- 3A. Tests used for squint assessment if it is a tropia.
- 3B. Define stereopsis. Differentiate between stereoscopic clues and non stereoscopic clues. Brief on 3 quantitative tests for assessing stereopsis.

(10×2 = 20 marks)

4. Answer any ONE of the following:

- 4A. i) Define amblyopia. Write briefly on the types of amblyopia.
ii) Brief on the principles of non surgical treatment of strabismus.

(10+10 = 20 marks)

4B. Write briefly on:

- i) Cranial sixth nerve paralysis.
- ii) Specific tests used for finding out the paralyzed muscle.
- iii) 6 points to differentiate a paralytic from non paralytic squint.
- iv) Non surgical management options of paralytic squint.

(5+6+6+3 = 20 marks)



MANIPAL UNIVERSITY

THIRD YEAR B.Sc. OPTOMETRY DEGREE EXAMINATION – JUNE 2011

SUBJECT: CONTACT LENS

(COMMON FOR BOTH OLD AND NEW REGULATION)

Thursday, June 09, 2011

Time: 14:00-17:00 Hrs.

Max. Marks: 80

Attempt questions as instructed. Draw diagrams and flowcharts wherever necessary.

1. Answer the following questions as instructed:

1A. State true or false:

The reference marks of soft toric contact lenses are representing the axis of the cylinder.

1B. State true or false:

The life span of ionic contact lenses is more.

1C. Fill in the blank:

Radiuscope works on the principle of _____

1D. Fill in the blank:

The effective power of plus lens _____ as it is moved towards the corneal plane from spectacle plane.

1E. Pick the correct one:

Which of the following condition is indicated for Rose K Lenses?

i) Sector iridectomy

ii) Keratoconus

iii) High myopia

iv) Presbyopia

(1×5 = 5 marks)

2. Answer any SEVEN of the following questions:

2A. What is Lower lid push up test? How will you perform this test? Briefly explain about its interpretation with example.

(5 marks)

2B. Briefly explain about indications of tinted (cosmetic) contact lens.

(5 marks)

2C. What are the properties should be present in an ideal contact lens material? Briefly explain each.

(5 marks)

2D. Write a short note on SEAL under the heading of symptom, sign, etiology and management.

(5 marks)

2E. What are the fitting philosophies used in spherical RGP contact lens to correct Keratoconus? Discuss briefly with the help of suitable diagram.

(2+3 = 5 marks)

2F. How will you check ocular dominancy? Briefly explain following contact lens correction:

- i) Enhanced Monovision.
- ii) Modified Monovision.

(2+1½+1½ = 5 marks)

2G. Write a short note on Jelly Bumps.

(5 marks)

2H. Write a short note on instructions for initial soft contact lens user under the heading of Do's and Don'ts.

(5 marks)

3. **Answer the following questions:**

3A. Describe in brief about soft contact lens manufacturing process with diagram.

3B. Classify and describe about lens wear modalities and lens replacement schedule with example available in market.

(10×2 = 20 marks)

4. **Answer any ONE of the following questions:**

4A. What is tear film? Explain the role of tear film in contact lenses.

Describe common diseases and medication that can affect the tear film and can cause problem in contact lens fitting.

What are the different ways to assess tear film? Describe each procedure briefly.

(2+5+5+8 = 20 marks)

4B. Write in detail about fitting assessment for spherical RGP contact lenses under the heading of Static and Dynamic Fitting assessments.

Describe in brief about optimum, Steep and flat fitting characteristics for spherical RGP contact lenses.

(14+6 = 20 marks)



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MANIPAL UNIVERSITY

THIRD YEAR B.Sc. OPTOMETRY DEGREE EXAMINATION – JUNE 2011

SUBJECT: GERIATRIC OPTOMETRY AND PAEDIATRIC OPTOMETRY

(NEW REGULATION)

Saturday, June 11, 2011

Time: 14:00-15:30 Hrs.

Max. Marks: 40

☞ All Questions are compulsory. Draw diagrams wherever necessary

1. Fill in the blanks:

- 1A. At birth _____ cpd value is a generally accepted estimate of visual acuity.
- 1B. _____ in infants can give rise to an impression of pseudostrabismus.
- 1C. Convergence can be demonstrated in infants by _____ months of age.
- 1D. _____ is a corneal degenerative condition where lipid deposition in the peripheral stroma occurs in the age group of 40-70 years.
- 1E. A _____ eyewire is the ideal frame shape to minimize weight in geriatric patients.

(1×5 = 5 marks)

2. Write short notes on any THREE of the following:

- 2A. Write a note on visual acuity tests available for use with preschool children.
- 2B. Explain briefly about the diseases of orbit seen most commonly in pediatric patients.
- 2C. Write a note on normal age related vision changes.
- 2D. Mention about the factors for successful contact lens wearing and factors for failure in geriatric patients.

(5×3 = 15 marks)

3. Write in detail about the following:

- 3A. Explain about the fitting techniques followed for the trial of an aphakic contact lens in 10 year old child.
- 3B. Write briefly about Age Related Macular Degeneration. Write a note on low vision management of the patient suffering from it.

(10×2 = 20 marks)



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MANIPAL UNIVERSITY

THIRD YEAR B.Sc. OPTOMETRY DEGREE EXAMINATION – JUNE 2011

SUBJECT: OCULAR DISEASES + EYE AND SYSTEMIC DISEASES


(COMMON FOR BOTH OLD AND NEW REGULATION)

Tuesday, June 14, 2011

Time: 14:00-17:00 Hrs.

Max. Marks: 80

 **All questions are compulsory.**

 **Draw diagrams wherever necessary.**

1. Define Myopia. Describe etiology, classification, clinical features and its management. Write a note on fundus picture of Pathological Myopia.

(20 marks)

2. Describe etiology, clinical features and management of Congenital Cataract.

(20 marks)

3. **Write short notes on:**

3A. Intermediate Uveitis.

3B. III Nerve palsy.

3C. Siderosis bulbi.

3D. Visual rehabilitation in Retinitis Pigmentosa.

3E. Optic disc changes in primary open angle glaucoma.

(8×5 = 40 marks)



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MANIPAL UNIVERSITY

THIRD YEAR B.Sc. OPTOMETRY DEGREE EXAMINATION – JUNE 2011

SUBJECT: LOW VISION AIDS

(NEW REGULATION)

Thursday, June 16, 2011

Time: 14:00-15:30 Hrs.

Max. Marks: 40

 Draw diagrams wherever necessary.

1. Fill in the Blanks:

- 1A. The method of magnification applied in 'large print text books' is _____.
- 1B. _____ is an example for a visual handicap.
- 1C. If a patient reads 4M print at 40 cm, the near visual acuity is recorded as _____.
- 1D. The field of view of spectacle magnifier will be _____ when we compare the same of a stand magnifier of equal power.
- 1E. Iris transillumination is seen in _____.

(1×5 = 5 marks)

2. Short Notes (Answer any THREE):

- 2A. Corneal and lenticular causes of Low Vision.
- 2B. Spectacle Magnifier.
- 2C. Hand-held monocular telescopic trial and dispensing.
- 2D. Methods of visual field assessment and refraction in Low vision patients.

(5×3 = 15 marks)

3. Essay:

- 3A. Explain albinism and its clinical features. What are the aspects of Optometric management in this condition?
- 3B. History taking in Low vision patients.

(10×2 = 20 marks)

