

FEDERAL UNIVERSITY OF TECHNOLOGY OWERRI
SCHOOL OF HEALTH TECHNOLOGY
DEPARTMENT OF OPTOMETRY
RAIN SEMESTER 2012/2013 EXAMINATION
OPT 406 -- GENERAL OPTOMETRY - 4 UNITS
ANSWER 5 QUESTIONS, 1 FROM EACH SECTION AND ANY OTHER 2
TIME ALLOWED – 3 HOURS

SECTION A

1. (a) What is headache? How can you differentiate ocular headaches from non-ocular headaches?
(b) Write a short note on any of the following (i) Migraine headache (ii) Tension headache
2. Pregnancy can induce radical changes to the eye. Discuss
3. Write short notes on any two of the following (a) Asthina (b) Anaemia (c) Toxoplasmosis

SECTION B

1. (a) Enumerate the various methods of slit lamp illumination and indicate their respective uses.
(b) Explain the following factors used to determine the reliability of auto-perimetry (i) Fixation losses (ii) False negative errors (iii) False positive errors
2. (a) Explain the following: (i) Corneal astigmatism (ii) Refractive astigmatism (iii) Physiological astigmatism
(b) The keratometric readings of a subject are as follows OD $41.00@180$, $42.00@90$;
OS $42.50@160$, $44.00@70$; Using Javals rule, find the total astigmatism of the subject

SECTION C

1. Patient Profile: 20 year old female whose chief complaint is blurred vision at distance for 2 years, has no problems while reading.

6m unaided acuity: OD 6/18, OS 6/18	40 cm unaided acuity: OD 20/20, OS 20/20
Keratometry: OD $47.00@180$, $47.50@90$;	OS 46.50, 46.50
Distance Retinoscopy: OD -2.00DS 6/5;	OS -1.50/-0.75x085 6/5
Near Retinoscopy: OD -0.75DS 20/20,	OS plano/-0.75x085 20/20
6m unaided phoria: 4 exo	40cm unaided phoria: 4 eso
Manifest Refraction: OD -1.50DS 6/5;	OS -1.25/-0.75x085 6/5
6m aided lateral phoria: 4 exo	6m aided vertical phoria: ortho
6m aided BO vergence: 20/24/16	6m aided vertical duction: 4/4
6m aided BI vergence: x/12/8	
40 cm unfused cross cylinder: OD -0.25DS 20/20	OS plano/-0.75x085 20/20
40 cm fused cross cylinder: OD +0.25DS 20/20	OS +0.50/-0.75x085 20/20
40 cm Fused Cross Cyl Phoria: 6 exo	

40 cm Aided Lateral Phoria: 6 eso

40 cm Aided BO vergence: 20/26/18

40 m PRA net: -2.00

40 cm Aided BI vergence: 4/14/6

40 cm NRA net: +3.00

- (a) Represent these findings on the graph of zone of single clear binocular vision
- (b) Assess the patient's result. Explain your assessment
- (c) Make a diagnosis based on your assessment.
- (d) How will you manage this patient?

2. Patient Profile: 13 year old male whose chief complaint is blurred vision at distance which is worse sometimes and better sometimes, he cannot read for a long time, has frontal headache and eyes feel tired after reading.

6m unaided acuity: OD 6/6, OS 6/6

Keratometry: OD 42.00, 42.00;

Distance Retinoscopy: OD -0.75DS 6/6;

Near Retinoscopy: OD -0.75DS 20/20,

6m unaided phoria: 4 eso

Wet manifest refraction: OD +4.50DS 6/6

Manifest Refraction: OD -0.75DS 6/6;

6m aided lateral phoria: 6 eso

6m aided BO vergence: 12/20/10

6m aided BI vergence: 4/8/2

40 cm unfused cross cylinder: OD -0.75DS 20/20

40 cm fused cross cylinder: OD -0.50DS 20/20

40 cm fused cross cyl phoria: 10 eso

40 cm aided lateral phoria: 12 eso

40 cm aided BO vergence: 20/28/14

40 cm PRA net: -0.75

40 cm unaided acuity: OD 20/40, OS 20/40

OS 42.00, 42.00

OS -0.75DS 6/6

OS -0.75DS 20/20

40cm unaided phoria: 10 eso

OS +4.50DS 6/6

OS -0.75DS 6/6

6m aided vertical phoria: ortho

6m aided vertical duction: 3/3

OS -0.75DS 20/20

OS -0.50DS 20/20

40 cm Aided BI vergence: 9/15/2

40 cm NRA net: +0.75

- (a) Represent these findings on the graph of zone of single clear binocular vision
- (b) Assess the patient's result. Explain your assessment
- (c) Make a diagnosis based on your assessment.
- (d) Manage the patient?

5

5
5
5

20
12