



Name :
Roll No. :
Invigilator's Signature :

**CS/B.OPTM/SEM-4/BO-402/2012
2012**

**OPATHALMIC & OPTICAL INSTRUMENTATION &
PROCEDURE-II**

Time Allotted : 3 Hours

Full Marks : 70

The figures in the margin indicate full marks.

*Candidates are required to give their answers in their own words
as far as practicable.*

GROUP - A

(Multiple Choice Type Questions)

1. Choose the correct alternatives for the following :

10 × 1 = 10

- i) Tangent Screen Perimetry is a kind of
 - a) one dimensional perimetry
 - b) kinetic perimetry
 - c) static perimetry
 - d) threshold perimetry.
- ii) The standard background illumination of automated perimeter is
 - a) 31.2 apostilb
 - b) 31.8 apostilb
 - c) 31.5 apostilb
 - d) 31.0 apostilb.

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[Turn over



- iii) The excitation peak of fluorescein dye is at
- | | |
|-----------|------------|
| a) 555 nm | b) 350 nm |
| c) 490 nm | d) 250 nm. |
- iv) Blind spot is a type of scotoma called
- | | |
|-----------------|-------------------|
| a) positive | b) relative |
| c) pathological | d) physiological. |
- v) During late phase, fluorescein is present only at the
- | | |
|---------------|-------------|
| a) Macula | b) FAZ |
| c) Optic disc | d) Choroid. |
- vi) PAM measures
- | |
|---------------------------|
| a) retinal visual acuity |
| b) corneal thickness |
| c) visual field |
| d) intra-ocular pressure. |
- vii) The standard area applanated in Applanation Tonometry is
- | | |
|-----------|------------|
| a) 1.5 mm | b) 3.06 mm |
| c) 2.5 mm | d) 3 mm. |
- viii) Normal Arm to Retina Circulation time in FFA is
- | | |
|---------------|----------------|
| a) 30 min | b) 30 - 45 sec |
| c) 8 - 12 sec | d) 1 - 2 min. |
- ix) PRK utilities
- | | |
|-------------------------|------------------|
| a) dye laser | b) excimer laser |
| c) carbon dioxide laser | d) Yag laser. |



- x) Blind spot signifies all except
- Physiological scotoma
 - Negative scotoma
 - Absolute scotoma
 - Highest point in hill of vision.

GROUP - B

(Short Answer Type Questions)

Answer any *three* of the following. $3 \times 5 = 15$

- Write the significance of MD and PSD values in a H.V.F. printout of a case of advanced glaucoma.
- Discuss the importance of the 'PRISM' head in the applanation tonometer. Explain the 'special features' of its construction.
- State Scleral Rigidity and Imbert Flicks law.
- Write on a scan ultrasonography.

GROUP - C

(Long Answer Type Questions)

Answer any *three* of the following. $3 \times 15 = 45$

- Discuss briefly the basic principle of perimetry.
 - Discuss the reliability indices (factors) in a HVF Perimetry report.
 - Discuss about gray scale, total deviation and pattern deviation. $5 + 5 + 5$

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7. a) Describe the different phases of FFA.
b) What are the indicatives of doing FFA ?
c) Mention two important cases of Hypofluorescence and Hyperfluorescence.
8. a) Describe Perkins hand held tonometer.
b) Mention the differences between a 30 - 2 and a 24 - 2 HVF test programe.
c) Discuss Nd-Yag laser and its uses. 5 + 5 + 5
9. Discuss Lasik under the following heads :
- a) Basic technique of Lasik
b) Complications that can occur, during the surgery and after surgery. 5 + 10
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