



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)

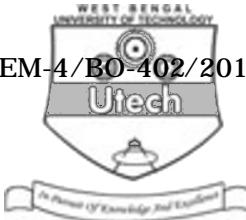
1. Choose the correct alternatives for the following :

$10 \times 1 = 10$

- 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.



- 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
- a) Physiological scotoma
 - b) Negative scotoma
 - c) Absolute scotoma
 - d) Highest point in hill of vision.

GROUP - B

(Short Answer Type Questions)

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

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

GROUP - C

(Long Answer Type Questions)

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

6. a) Discuss briefly the basic principle of perimetry.
b) Discuss the reliability indices (factors) in a HVF Perimetry report.
c) 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 program.
c) Discuss Nd-Yag laser and its uses. 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