



Name :
Roll No. :
Invigilator's Signature :

**CS/B.OPTM/SEM-2/BO-202/2011
2011**

PHYSIOLOGY (OCULAR)

Time Allotted : 3 Hours

Full Marks : 70

The figures in the margin indicate full marks.

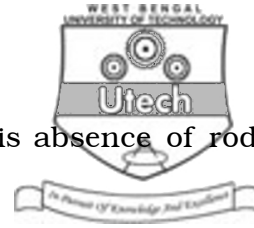
Candidates are required to give their answers in their own words as far as practicable.

GROUP – A

(Objective Type Questions)

1. Answer the following questions : 10 × 1 = 10
- A) Choose the correct alternatives for the following :
- i) The farthest distance which an eye can see clearly without accommodation is called
 - a) Infinity b) Far point
 - c) Near point d) Nodal point.
 - ii) The mucin layer of tear film is derived from
 - a) meibomian gland
 - b) conjunctival goblet cell
 - c) lacrimal gland
 - d) none of these.

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- iii) The area of retina where there is absence of rods & cone cells is called
- a) Macula b) Fovea
- c) Blind spot d) none of these.
- iv) The formation of aqueous humour takes place in
- a) retina b) ciliary processes
- c) choroids d) sclera.
- v) Trichromatism refers to
- a) normal colour vision
- b) colour blindness
- c) defective colour vision
- d) none of these.
- vi) All are true about pupil *except* that it
- a) controls the entry of light
- b) minimizes spherical aberration
- c) increases the depth of focus
- d) determines the colour of the eye.
- vii) The function of superior rectus muscle is
- a) depression
- b) extortion
- c) adduction
- d) none of these.



viii) All the following are true about Presbyopia *except*

- a) receding of near point
- b) decrease in amplitude of accommodation
- c) requires glasses for near vision
- d) is a type of refractive error.

B) Fill in the blanks of the following :

- ix) Primary action of superior oblique is
- x) The nucleus of amacrine and horizontal cell is found in layer of retina.

GROUP – B

(Short Answer Type Questions)

Write short notes on any *three* of the following.

3 × 5 = 15

- 2. E.R.G. and E.O.G.
- 3. Blood retinal barrier.
- 4. Maurice and Goldman's theory.
- 5. Microscopic structure of ciliary body.

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GROUP – C

(Long Answer Type Questions)

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

6. What is vitreous humour ? Discuss its composition and functions.
7.
 - a) Discuss the Trabecular Pathway of Aqueous outflow.
 - b) Discuss briefly the structure and function of the visual cortex. $5 + 10$
8. Discuss the organisation, function and regional peculiarities of the retina.
9.
 - a) Describe the supranuclear control of eye movements.
 - b) Give the attachments (origins and insertions), actions and nerve supply of the different extraocular muscles in a table/tabular format.
 - c) What is yoke muscle ? Give an example. $5 + 8 + 2$

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