



Roll No.

Sig. of Candidate. _____

Answer Sheet No. _____

Sig. of Invigilator. _____

OPHTHALMIC TECHNIQUES HSSC-I

SECTION – A (Marks 20)

Time allowed: 25 Minutes

NOTE:- Section-A is compulsory and comprises pages 1-2. All parts of this section are to be answered on the question paper itself. It should be completed in the first 25 minutes and handed over to the Centre Superintendent. Deleting/overwriting is not allowed. Do not use lead pencil.

Q. 1 Circle the correct option i.e. A / B / C / D. Each part carries one mark.

- (i) What is **NOT** true about Pneumococci?

A. Rod-shape	B. In pairs or chains
C. Encapsulated	D. Non – motile
- (ii) Which of the following are **NOT** the important media for growth of bacteria?

A. Nutrient agar	B. Blood agar
C. Antibiotic agar	D. Chocolate agar
- (iii) Wound infections are caused by _____.

A. Cocci and Bascillie	B. Clostridium Tetanie
C. Pseudomonas	D. All of these
- (iv) The bacterial staining is done by _____.

A. Gram's staining	B. Zeil Nelson's staining
C. Both A and B	D. None of these
- (v) Presbyopia occurs in _____.

A. Childhood	B. Below 40 years
C. After 40 years	D. In females only
- (vi) Glaucoma may be due to _____.

A. Raised intraocular pressure	B. Decreased pressure
C. Decreased production of aqueous	D. Deficiency of Vitamin A
- (vii) Tarsal plate is situated in _____.

A. Eye brows	B. Eye lids
C. Lacrimal apparatus	D. Conjunctiva
- (viii) Suspensory ligaments extend between lens and _____.

A. Iris	B. Ciliary body
C. Choroid	D. Limbus
- (ix) Aqueous humor is secreted by _____.

A. Angle of ant. chamber	B. Ciliary processes
C. Iris	D. Lens
- (x) Lacrimal gland is present in the _____.

A. Fossa for lacrimal gland	B. Fossa for lacrimal sac
C. Lower orbital margin	D. Apex of bony orbit
- (xi) Which of the following is **NOT** a cause of blindness?

A. Retinal detachment	B. Cataract extraction
C. Glaucoma	D. Loss of corneal transparency
- (xii) The best method for measuring I.O.P is _____.

A. Digital tonometry	B. Schiotz's Tonometer
C. Applanation tonometry	D. Gonioscopy

DO NOT WRITE ANYTHING HERE

- (xiii) Maximum field of vision is on the _____.
 A. Temporal side B. Nasal side
 C. Above D. Below
- (xiv) Near vision is recorded at a distance of _____.
 A. 35 cm B. 25 cm
 C. 2 feet D. 1 meter
- (xv) Peripheral field of vision is tested by _____.
 A. Bjerrum's screen B. Snellen's chart
 C. Lister's perimeter D. Indirect ophthalmoscopy
- (xvi) The normal trichromatic colour vision consists of _____.
 A. Red – Blue – Green B. Red – Blue – Yellow
 C. Red – Black – White D. Red – Violet – Yellow
- (xvii) The major cause of blindness is _____.
 A. Cataract B. Deficiency of Vitamin A
 C. Trauma D. Glaucoma
- (xviii) Which of the following is **NOT** correct as regards prevention of blindness?
 A. Eye health education B. Dietary Vitamin A supplements
 C. Control on eye infections D. Walking on and looking on green grass
- (xix) Staining of a corneal ulcer can be done by _____.
 A. Fluoresceine B. Iodine
 C. Litmus D. Alcohol
- (xx) Avascular structure of the eye is _____.
 A. Lens and Cornea B. Lens and Iris
 C. Cornea and Retina D. Retina and Sclera

For Examiner's use only:

Total Marks:

20

Marks Obtained:

— 1HA-1146 —

Time allowed: 2:35 Hours

Total Marks Sections B and C: 80

NOTE:- Answer any twenty five parts from Section 'B' and any two questions from Section 'C' on the separately provided answer book. Use supplementary answer sheet i.e. Sheet-B if required. Write your answers neatly and legibly.

SECTION – B (Marks 50)

Q. 2 Attempt any TWENTY FIVE parts. The answer to each part should not exceed 2 to 4 lines.

(25 x 2 = 50)

- (i) Write about nerve supply of all the extra-ocular muscles.
- (ii) Which are the structures responsible for focusing of light on the retina?
- (iii) Name the bones taking part in formation of the upper, lower, medial and lateral walls of orbit.
- (iv) Name all the glands forming tears.
- (v) What is Optic disc? What causes its atrophy?
- (vi) What do you know about visual cortex?
- (vii) List the common diseases caused by viruses.
- (viii) Define Commensals and Pathogenic micro-organisms.
- (ix) Classify Bacteria.
- (x) How do the bacteria reproduce?
- (xi) How can the spread of eye infection be controlled?
- (xii) What are the general symptoms of an infected eye?
- (xiii) What are the precautions in taking I.O.P?
- (xiv) What do you understand by distant and close visual acuity?
- (xv) How can cataract cause slow and gradual onset of dimness of vision?
- (xvi) What will happen to the field of vision in glaucoma?
- (xvii) How can the staining of a corneal ulcer be done?
- (xviii) Is pad and bandage required in corneal laceration?
- (xix) What is Virology?
- (xx) Give the seven colours of light when it passes from a prism.
- (xxi) What can a traumatic shock-wave do to the lens?
- (xxii) Write down the prevention of ophthalmia neonatorum.
- (xxiii) What are the uses of Laser in cornea?
- (xxiv) Define Myopia.
- (xxv) Define Presbyopia?
- (xxvi) Draw the diagram of a biconcave lens. In which refractive error is it used?
- (xxvii) What is the treatment of Aphakia?
- (xxviii) Draw a simple diagram of eye showing refractive error after removal of lens.
- (xxix) Write down the advantages of contact lenses.
- (xxx) How does the cornea get its nutrition?
- (xxxi) What is the important structure situated at the meeting site of cornea and iris? What is its importance?

SECTION – C (Marks 30)

Note: Attempt any TWO questions. All questions carry equal marks.

(2 x 15 = 30)

- Q. 3 Describe the different causes of blindness, in order of their importance. Also discuss how they can be prevented.
- Q. 4 Discuss the types of injuries to the eye. What first aid is required in each case.
- Q. 5 What are the different methods of sterilization and disinfection? What is the importance of sterilization of eye instruments and equipment?