GENESIS

Post Graduation Medical Orientation Centre
230, New Elephant Road (4th floor), Katabon More, Dhaka-1205
Phone: 01404-432 530, 01404-432 515

FCPS PART-I MOCK TEST-II

SUBJECT : Ophthalmology
PAPER : II

Exam Date	:	**Mock-I : 13-12-20/17-12-20/20-12-20**
		Mock-II : 25-12-20/26-12-20/27-12-20
Exam Time	:	**2.30.pm-4.00pm**
Total Number	:	**100**

Question 26-50 based on single answer

1. About oculomotor nerve-
a) Caudate nucleus supplies ipsilateral LPS
b) Paramedial nucleus supplies ipsilateral superior rectus
c) Accessory motor nucleus is situated posterior to the main nucleus mass.
d) Efferent fibres pass from the main motor nucleus to red nucleus.
e) Lies below the superior cerebellar artery.

2. Cilliary ganglion -
a) Lies between optic nerve and lateral rectus muscle
b) Sympathetic root traverse the annular ring at the superior orbital fissure to enter into the ganglion
c) Closely related to ophthalmic artery
d) Motor root arises from nerve to inferior rectus muscle
e) Sensory root is short and arise from frontal nerve

3. About abducent nerve
a) Nucleus lies at the upper part of pons near the midline)
b) Nerve bends under petro-sphenoidal ligament
c) Lies medial to the internal carotid artery in the cavernous sinus
d) Passes through the annulus of Zinn
e) Connected to oculomotor nerve through medial longitudinal fasciculus.

4. Regarding oculomotor nerve lesion-
a) Supranuclear lesion causes conjugate paresis of both eyes
b) Nuclear lesion causes defective divergence and abduction
c) Isolated 3rd nerve palsy occurs in basilar lesion
d) Intracavernous lesion may be associated with 4th, 5th and 6th nerve palsy
e) DM and HTN may cause pupil involving 3rd nerve palsy

5. Regarding Gasserian ganglion-
a) Crescentic in shape
b) Convexity posteriorly from where 3 divisions emerge
c) Concavity anteriorly which receives sensory root
d) Located in Meckel's cave
e) Ophthalmic and maxillary divisions are sensory

6. Regarding pterygopalatine ganglion-
a) Sensory component comes from mandibular nerve
b) Parasympathetic comes from lacrimatory and sup. Salivatory nucleus
c) Sympathetic component comes through deep petrosal nerve
d) Greater petrosal and deep petrosal nerve are called nerve to pterygoid canal
e) Sympathetic fibres synapse at the ganglion

7. Branches of ophthalmic nerve –
a) Frontal, lacrimal and nasocilliary are the main branches
b) Supraorbital nerve is a branch of nasocilliary nerve
c) Long cilliary nerve is a branch of nasocilliary nerve
d) Supratrochlear nerve is a branch of frontal nerve
e) Ant. Ethmoidal nerve is a branch of nasocilliary nerve

8. Components of BSV are –
a) Simultaneous perception
b) Visual acuity
c) Fusion
d) Stereopsis
e) Convergence

9. Regarding Horopter-
a) Imaginary point in external space
b) Stimulates non corresponding retinal elements
c) Object is seen singly in the same plane
d) Stimulates corresponding retinal elements
e) It is the basis of physiological diplopia

10. Regarding Panum fusional space-
a) Stimulates slightly non corresponding retinal elements
b) Stimulates corresponding retinal elements
c) Produces depth perception
d) Objects are seen singly and stereoscopically
e) Objects outside Panum fusional are also seen singly

11. Regarding abnormal retinal correspondence-
a) Stimulates non corresponding retinal elements
b) occurs in manifest squint
c) Diplopia occurs
d) BSV is present
e) BSV is as good as normal bifoveal BSV

12. Following nerves pass outside Annulus of Zinn-
a) Lacrimal
b) Frontal
c) Trochlear
d) Abducent
e) Oculomotor

13. High IOP can be caused by
a) High Arterial blood pressure
b) Systemic acidosis
c) Mechanical pressure on globe
d) Low plasma osmolarity
e) Low episcleral venous pressure

14. Mechanisms of formation of aqueous humor
a) Diffusion
b) Ultrafiltration responsible for 20% formation
c) Active transport is responsible for 20% formation
d) 70% of sodium transportation occurs actively
e) Passive transportation has no role

15. About drug permeability through cornea-
a) Polar drugs pass through stroma
b) Molecular wt less than 100 pass easily
c) Ionized drugs pass through the epithelium
d) Non ionized drugs pass through epithelium
e) Large molecular sized drugs passes easily

16. About rhodopsin bleaching
a) Occurs both in dark and in light
b) Rhodopsin converts into Bathrhodopsin within microsecond
c) Metarhodopsin 2 is converted to all trans retinal
d) Metarhodopsin 2 requires one second to be formed
e) This process is called photo-recomposition

17. About lens
a) There is 20% protein
b) Oxidized glutathione is important for lens clarity
c) There is 15 times more ascorbic acid than plasma
d) High glucose level initiates sorbitol pathway
e) There is more crystallines in lens nucleus

18. Events of accomodation
a) Ciliary muscle relaxation
b) Cilliary muscle movement towards apex of ciliary body
c) Posterior capsule of lens moves posteriorly
d) Anterior capsule of lens moves anteriorly
e) Zonular tension is increased

19. Plateau of cardiac muscle
a) Is due to K+ efflux
b) Due to opening of transient Ca2+ channel
c) Due to opening of slow Calcium-sodium channel
d) Results in prolonged refractory period
e) It is a period of repolarization

20. Short term Blood pressure regulating mechanisms
a) Baroreceptor mechanism
b) Chemoreceptor mechanism
c) CNS ischaemic response
d) Renin-angiotensin mechanism
e) Capillary fluid shift mechanism

21. During normal quiet breathing
a) Most of the tidal air enters into the apex of lungs
b) Intrapleural pressure is lowest at the apex of lungs
c) Intra-alveolar pressure is lowest at mid-inspiration
d) Intra-alveolar pressure is lowest at the end of inspiration
e) Intrapleural pressure is lowest at the end of inspiration

22. Hormones acting through gene activation
a) Cortisol
b) Testosterone
c) Aldosterone
d) Glucagon
e) Insulin

23. Cortisol plays a permissive role in
a) Lipolytic effect of catecholamines
b) Vasopressor effect of catecholamines
c) Lipolytic effect of glucagon
d) Calorigenic effect of glucagon
e) Lipolytic effect of thyroxine

24. Membrane potential of rod –
a) Depends on Na+-k+ ATP ase in outer segment
b) C GMP gated cation channel in inner segment
c) RMP is -40 mV
d) Depends on Sodium calcium channel
e) Hyperpolarization occurs

25. LGB
a) 6 well defined layers
b) Magnocellular layer receives input from W ganglion cellls
c)Parvocellular layer receives input from X ganglion cells
d) 1,4,6 layer receive input from ipsilateral eye
e) Layer 2,3,5 have parvocellular cells

Each question below contains five suggested answers- choose the <u>one best</u> response to each question (26-50)

26. Factors causing corneal edema.
a) Low Stromal swelling pressure
b) If endothelial cell count is 2000/ mm2
c) Low IOP
d) High stromal swelling pressure
e) Endothelial cell count 2000 /mm2

27. About Perkinje image.
a) 1st image is real and erect
b) 2nd image is formed by lens
c) 3rd image is formed by cornea
d) Hirschberg reflex is 1st image
e) 4th image is formed by convex surface

28. What will not be the Sequelae of Right Superior oblique palsy.
a) Over action of right Inferior oblique
b) Over action of left inferior rectus
c) Under action of left superior rectus
d) Under action of right Inferior oblique
e) Contracture of right inferior oblique

29. Which factor is responsible for lens transparency.
a) Multiple layer of epithelial cells
b) Loosely packed nature of cells
c) High concentration of reduced glutathione
d) Vascularity of lens
e) Impermeability of lens capsule

30. In which position of gaze only one muscle in each eye is responsible.
a) Primary position
b) Elevation
c) Depression
d) Dextro-version
e) Abduction

31.Which is the electrophysiological test for eye-
a) ECG
b) Electroretinogram
c) Nerve conduction test
d) Visual evoked potential
e) Electromyogram

32. Regarding conjunctiva which is not true?
a) Tear secretion
b) Stratified squamous epithelium
c) Antimicrobial release
d) Sodium potassium pump
e) Lymphoid cells

33.Which is the strongest cycloplegic?
a) Atropine
b) Cyclopentolate
c) Homatropine
d) Tropicamide
e) Scopolamine

34. Which collagen is more in vitreous?
a) Collagen I
b) Collagen II
c) Collagen IV
d) Collagen III
e) Collagen V

35. Normal tear film break up time is –
a) Less than 5 sec
b) Less than 10 sec
c) Less than 15 sec
d) Less than 20 sec
e) Less than 25 sec

36.Normal rate of tear production is –
a) 1.2 ml/min
b) 2.1 ml/min
c) 1.2 ul/min
d) 2 ul/min
e) 2 ml/min

37.Which one is true for Dark adaptation –
a) First 5 mins depends on Rods
b) First 5 mins depends on Cones
c) Total duration is 15 mins
d) The curve consists of 4 phases
e) Rods become active at the beginning

38.Which one is true for pannum'sfusionale -
a) Imaginary line passing through fixation point
b) Wide centrally & narrow peripherally
c) Stimulates corresponding retinal points
d) Diplopia occurs inside this area
e) Stimulates slightly non-corresponding retinal points

39. Which one is correct about prism –
a) Image formed in same plane
b) Image formed towards apex
c) Image formed towards base
d) Base out in exotropia
e) Base in in esotropia

40. Which rectus muscle is the farthest from limbus –
a) Superior
b) Inferior
c) Medial
d) Lateral

41. Which extraocular muscle is inserted near the macula –
a) Superior oblique
b) Superior rectus
c) Inferior rectus
d) Inferior oblique
e) Lateral rectus

42. Normal blink rate in humans -
a) 5-10 times/min
b) 10-15 times/min
c) 15-20 times/min
d) 12-15 times/min
e) 12-20 times/min

43. About extraocular muscle –
a) Abundant endoplasmic reticulum present
b) Metabolism depends on potassium
c) Cannot use lactate
d) Abundant mitochondria present
e) Contains very few acetylcholine receptors

44. Which one is correct about electrophysiology of retina –
a) In darkness RMP of rods is -90 mV
b) Rods have CNG channels in their inner segment
c) In darkness there is depolarized state in rods
d) In light there is depolarized state
e) Glutamate release decreases in retina in darkness

45. Which is not an observational study –
a) Case-control
b) Cohort
c) Case series
d) Cross sectional
e) Clinical trial

46. Which retinal layer in not absent in fovea –
a) Inner nuclear layer
b) Ganglion cell layer
c) Inner plexiform layer
d) Nerve fibre layer
e) Pigment epithelium

47.Which is a component of BSV-
a) Fusion
b) Convergence
c) Divergence
d) Visual acuity
e) ARC

48. Which one is not a cause of pupil involving 3rd N. palsy-
a) Trauma
b) Extramural hematoma
c) Tumor
d) HTN

49. Lesion in which structure does not affect pupillary light reflex –
a) 3rd nerve
b) Optic chiasma
c) Optic tract
d) Optic nerve
e) Lateral geniculate body

50. Which one is false for yoke muscle-
a) Right SR is the yoke muscle of left IO
b) Left MR is the yoke muscle right LR
c) Right IO is the yoke muscle of left IR
d) Right IO is the yoke muscle of left SR
e) Left IR is the yoke muscle of right SO

Ophthalmology Mock-II, Paper-II

1. FFTTF [Ref:Anatomy and physiology of eye by Khurana]
2. TTTFF [Ref:Anatomy and physiology of eye by Khurana]
3. FTFTT [Ref:Anatomy and physiology of eye by Khurana]
4. TFTTF [Ref:Anatomy and physiology of eye by Khurana]
5. TFFTT [Ref:Anatomy and physiology of eye by Khurana]
6. FTTTF[Ref:Anatomy and physiology of eye by Khurana]
7. TFTTT [Ref:Anatomy and physiology of eye by Khurana]
8. TFTTF [Ref:Anatomy and physiology of eye by Khurana]
9. FFTTF [Ref:Anatomy and physiology of eye by Khurana]
10. TFTTF[Ref:Anatomy and physiology of eye by Khurana]
11. TFFTF [Ref:Anatomy and physiology of eye by Khurana]
12. TTTFF [Ref:Anatomy and physiology of eye by Khurana]
13. TFTTF [Ref:Anatomy and physiology of eye by Khurana]
14. TTFTF [Ref:Anatomy and physiology of eye by Khurana]
15. TTFTF[Ref:Anatomy and physiology of eye by Khurana]
16. FFTTF [Ref:Anatomy and physiology of eye by Khurana]
17. FFTTF [Ref:Anatomy and physiology of eye by Khurana]
18. FTTTF [Ref:Anatomy and physiology of eye by Khurana]
19. FTTTF[Ref:Anatomy and physiology of eye by Khurana]
20. TTTFF [Ref:Anatomy and physiology of eye by Khurana]
21. FTTFT [Ref:Anatomy and physiology of eye by Khurana]
22. TTTFF [Ref:Anatomy and physiology of eye by Khurana]
23. TTFTF [Ref:Anatomy and physiology of eye by Khurana]
24. FFTTF [Ref:Anatomy and physiology of eye by Khurana]
25. TFTFF [Ref:Anatomy and physiology of eye by Khurana]
26. A [Ref:Anatomy and physiology of eye by Khurana]
27. D
28. D [Ref:Kanski]
29. C [Ref:Anatomy and physiology of eye by Khurana]
30. D (Ref: Kanski)
31.B [Ref:Anatomy and physiology of eye by Khurana]
32. D [Ref:Anatomy and physiology of eye by Khurana]
33.A [Ref:Anatomy and physiology of eye by Khurana]
34. B [Ref:Anatomy and physiology of eye by Khurana]
35. B [Ref:Anatomy and physiology of eye by Khurana]
36. C [Ref:Anatomy and physiology of eye by Khurana]
37. B [Ref:Anatomy and physiology of eye by Khurana]
38. E[Ref:Anatomy and physiology of eye by Khurana]
39. B [Ref:Anatomy and physiology of eye by Khurana]
40. A [Ref:Anatomy and physiology of eye by Khurana]
41. D [Ref:Anatomy and physiology of eye by Khurana]
42. E [Ref:Anatomy and physiology of eye by Khurana]
43. D [Ref:Anatomy and physiology of eye by Khurana]
44. C [Ref:Anatomy and physiology of eye by Khurana]
45. E [Ref:Anatomy and physiology of eye by Khurana]
46. E [Ref:Anatomy and physiology of eye by Khurana]
47.A [Ref:Anatomy and physiology of eye by Khurana]
48. D [Ref:Anatomy and physiology of eye by Khurana]
49. E [Ref:Anatomy and physiology of eye by Khurana]
50. C [Ref:Anatomy and physiology of eye by Khurana]