



18/2/2018

MASTER DEGREE OF OPHTHALMOLOGY/ FEBERUARY 2018

All questions must be answered

1. Clinical picture, investigations and treatment of Cushing syndrome (7.5 marks)
2. Vasculitis clinical picture, diagnosis and treatment (7.5 marks)
3. What are the clinical presentations of visual field defects and localization of lesions in each defect (7.5 marks)

MCQs (22.5 marks)

1-Upper gastrointestinal tract bleeding is up to:

- A. Pylorus
- B. Ampulla of Vater
- C. Ligament of Treitz
- D. End of jejunum

2-Very low level ascetic fluid proteins is a major risk for:

- A. Refractory ascites
- B. Hepatic Encephalopathy
- C. Spontaneous Bacterial Peritonitis (SBP)
- D. Hepatocellular carcinoma

3-All of the following may cause elevation of serum troponin except:

- A. Congestive heart failure
- B. Myocarditis
- C. Myocardial infarction
- D. Pneumonia

4-Typical presentations of diabetes mellitus include all of following except:

- A. Pruritus vulvae
- B. Nocturia
- C. Weight gain
- D. Limb pains with absent ankle reflexes

5-All of the following are suggestive of iron deficiency anaemia except:

- A. Koilonychia
- B. Decrease serum ferritin
- C. Decrease total iron binding capacity
- D. Low reticulocytic response

6-The clinical features of primary hypothyroidism include all the following except:

- A. Carpal tunnel syndrome
- B. Cold sensitivity
- C. Puffy eyelids
- D. Diarrhea

7-In polyneuropathy, the pattern of sensory loss may be:

- A. Numbness and pain in distal parts of extremities
- B. Numbness and analgesia in half of the body
- C. Analgesia and sensory ataxia in proximal parts of extremities
- D. Pain and sensory ataxia in the half of the body

8-All of the following produce systemic hypertension except:

- A. Polycystic kidney
- B. Pheochromocytoma
- C. Addison's disease
- D. Conn's syndrome

9-Blood level of all rises in acute renal failure except:

- A. Uric acid
- B. K
- C. Na
- D. Creatnine

10-Characteristic features of SLE include all of the following except:

- A. Alopecia
- B. Malar flush
- C. Photophobia
- D. Oropharyngeal ulcers

Tanta University
Faculty of Medicine
Department of Ophthalmology

Examination for
Doctorate Degree in Ophthalmology
Physiology of The Eye
21/2/2018

Discuss shortly the following:

1. Tear film dysfunction & tests for tear film adequacy
2. Blood retinal barriers: types & clinical values
3. Factors affecting corneal hydration and transparency

MCQ

Choose only one answer:

1. The following is present in higher concentration in the tear than in the serum:
 - a. Sodium
 - b. Potassium
 - c. IgG
 - d. Glucose
2. Which of the following is the single most important factor in maintaining corneal transparency?
 - a. Endothelial pump
 - b. Constant refractive index of all layers
 - c. Relative acellularity and matrix organization
 - d. Tear film
3. Glucose metabolism in the lens principally occurs by:
 - a. Anaerobic glycolysis
 - b. Aerobic metabolism
 - c. Hexose monophosphate shunt
 - d. Sorbitol pathway
4. When produced, aqueous humor passes out through the membranes of:
 - a. Trabecular meshwork
 - b. Corneal endothelial cells
 - c. Non-pigmented cells of the ciliary body
 - d. Pigmented cells of the ciliary body

5. The principle of IOP measurement is defined by:
 - a. Schwalbe's equation
 - b. Poiseuille's law
 - c. Imbert-Fick principle
 - d. Holladay's equation

6. The corneal stroma is mainly composed of:
 - a. Keratan sulphate
 - b. Chondroitin phosphate
 - c. It is acellular
 - d. Chondroitin sulphate

7. Which of the following is not a physiological property of the vitreous?
 - a. Transmits 85% of light of wavelength 300-1400 nm
 - b. Prevents the globe from collapsing
 - c. Refractive index of 1.66
 - d. Allows accumulation of waste products such as lactic acid which can be toxic to the retina

8. Which of the following is not a function of RPE?
 - a. Secretion of mucopolysaccharide
 - b. It plays a role in the embryological development of photoreceptors
 - c. Absorption of stray light
 - d. Adherence to other RPE cells via zona adherens to form the blood retinal barrier

9. In phototransduction, activation of rhodopsin occurs via:
 - a. Isomerization of retinol
 - b. Glycosylation of transducin
 - c. Opening of GLUT-1 receptors
 - d. Unfolding of opsin

10. A number of corresponding points on the retina that projects to a definite single point in space is known as:
 - a. The Auberg phenomenon
 - b. A horopter
 - c. Panum's area
 - d. The Pulfrich phenomenon

11. Saccadic type eye movements are initiated by:
 - a. The oculomotor cerebellar center
 - b. Abducent nerve nucleus
 - c. Trochlear nerve nucleus
 - d. The temporal cortex

12. Where is the physiological blind spot relative to the center of the visual field?
- Superior
 - Inferior
 - Nasal
 - Temporal
13. Which of the following statements regarding ERG is not accurate?
- The pattern ERG represents retinal ganglion cells activity
 - The P50 component is always affected in macular disease
 - The N95 component corresponds to ganglion cell activity
 - The pattern ERG is always affected in optic nerve disease
14. Regarding a relative afferent pupillary defect, which of the following statements is accurate?
- It cannot be tested if one pupil is pharmacologically dilated
 - It cannot be tested if both pupils are pharmacologically dilated
 - It is likely to occur with a cataract
 - It is always associated with anisocoria
15. Regarding VEP, which of the following statements is not accurate?
- VEPs are a measure of the response of the occipital cortex to visual stimulation
 - VEPs can be used to assess crossover of visual pathway fibers at the optic chiasm
 - An amblyopic eye will usually have an abnormal pattern and flash VEP
 - VEPs can be used to approximate the visual acuity