

PERIPHERAL NERVOUS SYSTEM

FINAL EXAM
WAREED BATCH

إعداد :



1- Which of the last branch of ophthalmic artery arises?

- a- Supraorbital artery
- b- Posterior ethmoidal artery
- c- Central artery of the retina
- d- Supratrochlear artery
- e- Dorsal nasal artery

2- Sweet taste is mediated by -----?

- a- cGMP response only
- b- cAMP response only
- c- IP3 response only
- d- Both cAMP and IP3 responses
- e- Both cAMP and cGMP responses

3- Parasympathetic stimulation to heart causes -----?

- a- Decrease rate of SAN
- b- Increase coronary flow
- c- Decrease ventricular contractility
- d- Increase AVN conduction
- e- Increase Atrial contraction

4- Which of the followings nerves arise from dorsal ramus?

- a- Lesser occipital
- b- Supraclavicular
- c- Nerve to levator scapula
- d- Greater occipital
- e- Great auricular nerve

5- Regarding prions, which one of the following is the MOST ACCURATE?

- a- The genome of prions consists of a negative-polarity RNA that has a defective polymerase gene.
- b- Abnormal prion protein is associated with the cell membrane.
- c- Prion proteins are encoded by cellular genes.
- d- The main host defense against prions consists of an inflammatory response.
- e- Variant Creutzfeldt-Jakob disease is a disease of cattle caused by the ingestion of sheep brain mixed into cattle feed.



6- Alphavirus causes which one of the following viral diseases?

- a- West Nile virus disease
- b- Western equine encephalitis
- c- St. Louis encephalitis
- d- Dengue
- e- Yellow fever

7- All the following are therapeutic uses of Cholinergic antagonists drugs EXCEPT?

- a- Parkinson's disease.
- b- Motion sickness.
- c- Bradycardia following MI.
- d- In bronchial asthma.
- e- Benign prostatic hypertrophy

8- Eustachian tube connects -----?

- a- Pharynx with middle ear
- b- Middle ear with external ear
- c- Middle ear with inner ear
- d- External ear with internal ear
- e- Cochlea with vestibular apparatus

9- One of the following pairs between the neurodegenerative disease and the main location for the CNS injury is **WRONGLY matched?**

- a- Wernicke encephalopathy: mammillary bodies
- b- Huntington Disease: Caudate and putamen.
- c- Amyotrophic Lateral Sclerosis: Anterior horn cells
- d- Parkinson Disease: Striatum.
- e- Alzheimer Disease: Frontal and temporal lobes

10- The Ciliary body provides attachment for -----?

- a- The lens
- b- The corneoscleral junction
- c- The iris
- d- The limbus
- e- The cornea



11- Which one of the following statements is CORRECT?

- a- Macula utriculi is the auditory organ of the inner ear
- b- The tectorial membrane is made of protein and calcium carbonate
- c- The inner and outer hair cells enclose the tunnel of Corti
- d- The bony labyrinth includes the membranous labyrinth and the perilymph
- e- Each inner ear has 3 crista ampullaris to sense linear acceleration movement of head

12- Donepezil: Which of the following is FALSE?

- a- is a carbamate
- b- increases acetylcholine content in brain
- c- is metabolized by liver but is not hepatotoxic
- d- causes muscarinic effect in CNS more than in peripheral tissues
- e- can improve memory and cognition in Alzheimer's disease

13- Pralidoxime: which of the following is FALSE?

- a- reactivates irreversibly inhibited ChE by dephosphorylation
- b- It is effective in restoring activity of ChE at NMJ where atropine does not help
- c- is quaternary and synthetic
- d- It helps with atropine in restoring activity of Ach. at muscarinic sites
- e- it retains its effectiveness up to 20 h after exposure to irreversible ChE inhibitor gas

14- Visual pathway involves the followings EXCEPT?

- a- The optic radiation
- b- The medial geniculate body
- c- The pretectal nucleus
- d- The optic tract
- e- The visual association cortex

15- Which of the following is TRUE regarding the facial nerve?

- a- Pure motor
- b- Doesn't carry parasympathetic fibers
- c- Damage to CN VII is common with fracture of the occipital bone
- d- Related to medial wall of the tympanic cavity
- e- The geniculate ganglion of the nerve is motor ganglion

16- All the following about atropine is correct EXCEPT?

- a- It is alkaloids obtained from atropine belladone
- b- Considered as prototype for parasympatholytic
- c- Causes mydriasis
- d- Increase lacrimation secretion
- e- Produce central stimulant effect

17- The following organs have sympathetic supply, EXCEPT?

- a- Sweat glands.
- b- Blood vessels of skeletal muscles.
- c- Constrictor pupillae muscles.
- d- Ventricular muscle.
- e- Erector pillea muscle

18- Stimulation of beta two adrenoreceptors causes all following EXCEPT?

- a- Bronchodilatation
- b- Vasodilatation
- c- Hypokalemia
- d- Relaxation of uterus
- e- Hypoglycemia

19- Which of the following statements is INCORRECT?

- a- Synaptic vesicles at presynaptic axon terminal release neurotransmitters via endocytosis
- b- The sensory receptors in the nose are considered as neuroepithelial endings
- c- With aging, the lens loses some of its elasticity and is unable accommodate
- d- The ossicles located in the middle ear are malleus, incus and stapes
- e- In the ear, hair cells with Cilia are found in the utricle and saccule

20- All the following are therapeutic uses of PROPRANOLOL EXCEPT?

- a- Angina pectoris.
- b- Cardiac dysrhythmia.
- c- Bradycardia
- d- Hypertension.
- e- Myocardial infarction



21- The inner layer of tympanic membrane is developed from?

- a- The first pharyngeal pouch
- b- The 2nd pharyngeal pouch
- c- The 2nd pharyngeal arch
- d- The 2nd pharyngeal cleft
- e- The 3rd pharyngeal pouch

22- The branches of the posterior division of the mandibular nerve are the following EXCEPT?

- a- Inferior alveolar nerve
- b- The buccal nerve
- c- Auriculotemporal nerve
- d- Mylohyoid nerve
- e- Lingual nerve

23- Which of the following is FALSE regarding the Characteristics of the cranial nerves supplying the extraocular muscles?

- a- Abducent nerve has the longest intracranial course
- b- Abducent nerve is the thinnest
- c- Trochlear nerve originates from the dorsal aspect of the brainstem
- d- Oculomotor nerve supplies the medial rectus muscle
- e- Oculomotor nerve supplies the superior oblique muscle

24- All the following are the preventive measures for Tetanus EXCEPT?

- a- Active immunization of toxoids.
- b- Prophylactic use of antitoxin.
- c- Administration of Bacitracin.
- d- Vaccine Boosters every 10 years.
- e- Caring of unhealed umbilical stump.

25- All the followings are neuroepithelial sensory receptors EXCEPT?

- a- Taste buds
- b- Organ of Corti
- c- Macula utriculi
- d- Christa ampullaris
- e- Muscle spindle



26- Each of the following statements concerning rabies and rabies virus is correct EXCEPT?

- a- The virus has a lipoprotein envelope and single-stranded RNA as its genome.
- b- The virus has a single serotype.
- c- Its transmission could be through non-bite exposure.
- d- The virion contains an RNA polymerase.
- e- Infected neurons contain intra-nuclear inclusion bodies called Negri bodies.

27- All the followings from maiden nasal process EXCEPT?

- a- Anterior part of nasal septum
- b- Primary palate
- c- Bones carries canine
- d- Philtrum
- e- Posterior part of nasal septum

28- An 11-year-old boy is referred to the pediatric surgery department with left psoas muscle mass. The histopathologic result confirmed the diagnosis of a Neurofibroma (Psoas biopsy). The disease started in Childhood with the appearance of multiple hyper pigmented skin macules. Lisch nodules were noticed on the iris of both eyes. This disease represents a major risk factor for development of which of the following tumors?

- a- Meningiomas
- b- Malignant peripheral nerve sheath tumors
- c- Acoustic neuroma
- d- Ependymomas
- e- Schwannomas

29- Color blindness is due to defect in -----?

- a- Rods
- b- Cones
- c- Rods and Cones
- d- Rhodopsin
- e- Aqueous humor

30- In Rods, the cytoplasmic level of cGMP is high in absence of stimulus -----?

- a- Due to dark current
- b- Because the rate of synthesis of CGMP by phosphodiesterase enzyme is high
- c- Due to the influx of Na⁺ ions
- d- Because phosphodiesterase enzyme is switched off
- e- Because guanylyl cyclase is inactive

31- Organ of Corti helps in -----?

- a- Balancing
- b- Maintaining equilibrium
- c- Hearing
- d- Formation of wax
- e- Defensive function

32- One of the followings is INCORRECT regarding the trigeminal neuralgia?

- a- The patient experiences excruciating pain
- b- Relatively common condition
- c- Common in the distribution of the mandibular division
- d- Common in the distribution of the ophthalmic division
- e- Common in the distribution of the maxillary division

33- The innermost layer of human eye is -----?

- a- Sclera
- b- Cornea
- c- Choroid
- d- Retina
- e- Iris

34- The maculae can be found in the -----?

- a- Cochlear duct
- b- Sacculle
- c- Semicircular canal
- d- Semicircular ducts
- e- Middle ear

35- One of the following diseases is associated with early onset in trisomy 21 individuals (Down syndrome)?

- a- Amyotrophic Lateral Sclerosis
- b- Parkinson Disease
- c- Wernicke encephalopathy
- d- Huntington Disease
- e- Alzheimer Disease

36- Aqueous and vitreous humors are divided by -----?

- a- Lens
- b- Iris
- c- Retina
- d- Optic nerve
- e- Cornea

37- Which is WRONG regarding the tympanic membrane?

- a- Has the anterior and posterior malleolar folds
- b- Is extremely sensitive to pain
- c- Is circular and measures about 1 cm in diameter
- d- "Cone of light," radiates posteriorly and inferiorly from the umbo
- e- Is obliquely placed facing downward, forward, and laterally

38- Which of the following is FALSE?

- a- True ChE can be found in blood inside RBCs
- b- Bethanechol is not destroyed by ChE
- c- Botulinum toxin inhibits Ach. release from Cholinergic nerve terminals at NMJ
- d- Hemicholinium blocks Ach. synthesis by inhibiting Choline uptake in Cholinergic terminals
- e- Persistence of Ach. at neuroeffector junction leads to inhibition by persistent depolarization

39- Which of the following IS NOT Characteristic for paralytic squint?

- a- Paralysis of one or more of the extraocular muscles
- b- Can be caused by elevated ICP (intracranial pressure)
- c- Stable angle of eye deviation in all positions of gaze
- d- Paralysis of abducent nerve will result in failure of eye abduction
- e- Paralysis of trochlear will result in vertical diplopia



40- Median harelip is due to -----?

- a- Failure of fusion of lateral with medial nasal processes
- b- Failure of fusion of two medial nasal processes
- c- Failure of fusion of two lateral nasal processes
- d- Failure of fusion of two median nasal processes
- e- Failure of fusion of two mandibular processes

41- Which of the injury of the following nerve leading to diplopia?

- a- Oculomotor
- b- Trochlear
- c- Nasociliary
- d- Abducent
- e- Ophthalmic

42- Muscle spindles -----?

- a- Are found in all skeletal muscles
- b- Are found only in large skeletal muscles
- c- Consist of small numbers of extrafusal muscle fibers
- d- Consist of a large number of extrafusal muscle fibers
- e- Are located in tendons

43- Regarding CARVEDILOL, all the following are true EXCEPT?

- a- it blocks alpha1 receptor.
- b- it blocks beta1 and beta2 receptors.
- c- it produces less bradycardia than other beta blockers.
- d- It has vasodilator effect.
- e- It is contraindicated in hypertension.

44- A person goes to ophthalmologist. He has a problem of reading books because he is not able to contract his -----?

- a- Iris
- b- Suspensory ligament
- c- Pupil
- d- Ciliary muscles
- e- Retina



45- A 2 days old premature baby boy born to 22-year-old woman developed pneumonia, the mother was healthy but after the premature delivery she showed the symptoms of urinary tract infection. The blood specimen was taken from the baby, beta hemolytic growth of bacteria was observed in the culture plate. Which could be the possible pathogen that might have transferred from the mother to the baby and caused infection?

- a- Streptococcus pyogenes.
- b- Streptococcus agalactiae.
- c- Enterococcus faecalis.
- d- Streptococcus bovis.
- e- Streptococcus pneumoniae.

46- Which one of the following is FALSE?

- a- In myasthenia gravis, pyridostigmine acts longer at NMJ than neostigmine
- b- Edrophonium can differentiate myasthenic crisis from cholinergic crisis
- c- Carbachol eyedrops produce miosis and cyclospasm
- d- Nn receptors are present in autonomic and sensory ganglia
- e- Parathion is activated in liver to paraoxon which irreversibly inhibit ChE

47- Stimulation of the crista ampullaris results in -----?

- a- Deafness
- b- Loud sounds
- c- Feeling of rotatory motion
- d- A sense of body position
- e- Linear movement

48- The oval window. Select the INCORRECT one?

- a- Above and behind the promontory
- b- Closed by the base of the stapes
- c- On the medial side of the window is the perilymph of the scala vestibuli
- d- Found on the lateral wall of the inner ear
- e- Closed by the secondary tympanic membrane

49- Regarding the otic ganglion: Select the WRONG statement?

- a- Is a parasympathetic ganglion
- b- Is located medial to the mandibular nerve
- c- The preganglionic fibers reach the ganglion via the lesser petrosal nerve
- d- The preganglionic fibers originate in the glossopharyngeal nerve
- e- The postganglionic secretomotor fibers reach the lacrimal gland

50- Activated after injury for scar and repair, this cell undergoes both hypertrophy and hyperplasia, where the nucleus enlarges and the nucleolus becomes prominent. The cytoplasm expands with bright pink hue extending multiple processes. What is this cell type most likely to be?

- a- Astrocyte
- b- Endothelial cell
- c- Neuron
- d- Microglia
- e- Oligodendroglia

51- The rate limiting step involved in the visual pigment regeneration process is -----?

- a- The reduction of all trans retinal to all trans retinol
- b- The oxidation of 11-cis retinol to 11-cis retinal
- c- The esterification of all trans retinol to all trans retinyl ester
- d- The isomerization of all trans retinyl ester to 11-cis retinol
- e- The cleavage of the schiff base bond

52- The phrenic nerve arises mainly from -----?

- a- C1
- b- C2
- c- C3
- d- C4
- e- C5

53- Facial nerve (CN VII) emerges from the cranium via -----?

- a- Internal acoustic meatus
- b- Jugular foramen
- c- External acoustic meatus
- d- Carotid canal
- e- The stylomastoid foramen



54- All are types of exotoxin associated with botulism EXCEPT?

- a- Type A
- b- Type B
- c- Type E
- d- Type G
- e- Tetanolysin

55- The followings take part in corneal reflex EXCEPT?

- a- The ophthalmic division of the trigeminal nerve
- b- Afferent impulses from the cornea or conjunctiva
- c- Sensory nucleus of the facial nerve
- d- The orbicularis oculi muscle
- e- internuncial neurons

56- The process of adjusting vision from a near to a distant object is called -----?

- a- Adaptation
- b- Accommodation
- c- Amblyopia
- d- Cataracts
- e- Glaucoma

57- Which of the following statements is a characteristic of the cornea?

- a- It represents the anterior portion of tunica vascularis
- b- Its connective tissue stromal layer is the target for LASIK surgeries
- c- It is composed of three layers
- d- It is devoid of nerve endings
- e- It forms the anterior boundary of the posterior chamber of the eye

58- Which is WRONG regarding the hypoglossal nerve?

- a- Is a motor and sensory nerve
- b- Crosses the posterior cranial fossa
- c- Controls the shape and movements of the tongue
- d- Leaves the skull through the hypoglossal canal.
- e- It is joined by C1 fibers from the cervical plexus

59- One of the following pairs about the cellular features of the glia in the CNS is INCORRECTLY matched?

- a- Rosenthal fibers /// Chronic gliosis
- b- Neuronophagia /// A dying neuron
- c- Gemistocytic astrocyte /// Repair and scar formation
- d- Microglial nodules /// Benign microglial tumor.
- e- Rosenthal fibers /// Pilocytic astrocytoma

60- The blind spot is -----?

- a- The macula lutea
- b- The fovea centralis
- c- The optic disc
- d- Sensitive to light
- e- The yellow spot

61- Stimulation of the greater splanchnic nerve results in -----?

- a- Bronchodilation
- b- Relaxation of ciliary muscle during far vision
- c- Urine retention
- d- Catecholamine secretion
- e- Increased heart rate

62- Which of the following nerve supplies the scalp is motor?

- a- Supraorbital
- b- Auriculotemporal
- c- Zygomaticofacial
- d- Supratrochlear
- e- Temporal

63- All the following are variants of Guillain Barre Syndrome EXCEPT?

- a- Acute inflammatory demyelinating neuropath
- b- Acute motor and sensory axonal neuropathy
- c- Miller Fisher Syndrome
- d- Panautonomic neuropathy
- e- Multifocal motor neuropathy

64- Select the FALSE regarding the bony labyrinth?

- a- They are lined by endosteum
- b- It consists of the utricle and saccule
- c- Contain a clear fluid the perilymph
- d- Is situated in the petrous part of the temporal bone
- e- In its lateral wall are the fenestra vestibule and the fenestra cochleae

65- Phenylephrine, all following are true EXCEPT?

- a- Indirect acting, synthetic adrenergic drug
- b- Has alpha 1-agonist effect
- c- Is used as mydriatic agent
- d- Can be used as vasoconstrictor agent with local anesthetics
- e- Increases both systolic and diastolic blood pressure

66- The facial vein is connected to the cavernous sinus mostly by means of -----?

- a- The retromandibular vein
- b- The supratrochlear vein
- c- The inferior labial vein
- d- The posterior auricular vein
- e- The superior ophthalmic vein

67- The preganglionic fibers -----?

- a- Must relay in the lateral ganglia.
- b- Of sympathetic system is usually longer than the postganglionic fibers.
- c- Are of type B-fibers.
- d- Are non-myelinated fibers
- e- Originates from AHC

68- A preschool day care has reported that the majority of the children are complaining of sore throats. A closer examination of the situation indicates that they also have slight fevers and vesicular lesions (some of which have ulcerated) on their pharyngeal mucosa together with vesicular rash on the hands and feet. The most likely cause is -----?

- a- Enterovirus 68.
- b- Enterovirus 70.
- c- Coxsackie A virus.
- d- Coxsackie B virus.
- e- Poliovirus.



69- What is the dangerous layer of the scalp?

- a- Skin
- b- Loose areolar tissue
- c- Connective tissue
- d- Pericranium
- e- Galea aponeurotica

70- A 29 year-old female was biking with her husband. She was experiencing difficulty reading signs and difficulty using her arms while steering her bike, then suddenly she felt severely fatigued. Visual disturbances and weaknesses persisted for a few days, eventually affecting her productivity at work, prompting a visit to her family physician. MRI findings revealed plaques in the corpus callosum and periventricular white matter. Which of the following mechanisms is most likely responsible for her disease?

- a- Aggregation of Amyloid beta (AB) peptide
- b- Aggregation of Huntingtin
- c- Autoimmune response against components of the myelin sheath
- d- Loss of upper motor neurons in the cerebral cortex
- e- Dopaminergic neurons degeneration

71- The point of sharpest retinal vision is called the -----?

- a- Fovea centralis
- b- Macula lutea
- c- Vitreous body
- d- Optic disk
- e- Choroid

72- All the following are manifestation of autonomic neuropathy EXCEPT?

- a- Orthostatic hypotension
- b- Arrhythmias
- c- Impotence
- d- Urine incontinence
- e- Clonus

73- The facial artery -----?

- a- Arises from the external carotid artery
- b- Arises from the subclavian artery
- c- Arises from the vertebral artery
- d- Arises from the internal carotid artery
- e- Arises from the common carotid artery

74- Which one of the following statements is CORRECT?

- a- At the limbus Bowman's membrane becomes continuous with the trabecular meshwork
- b- The lens fibers composed of special protein called Fibrillin
- c- The pigmented epithelium is important for the immune privilege of the retina
- d- The lens capsule is located at the anterior portion of the lens between the lens epithelium and lens fibers
- e- Color blindness primarily results from a defect in the ganglion cells layer

75- All the given are the distinguishing characteristics of Mycobacterium leprae EXCEPT?

- a- It is acid-fast bacilli.
- b- It can be isolated by in-vitro culture method.
- c- It can cause a disfigurement and mutilation to the affected part.
- d- It can be isolated by only in-vivo culture method.
- e- It classified to Paucibacillary and Multibacillary leprosy.

76- All following about epidural anesthesia are true EXCEPT?

- a- used in thoracic and lumbar regions
- b- Drug is injected into epidural space
- c- used in post-operative analgesia
- d- used in Pain management during delivery
- e- Drugs can be delivered once only as single injection

77- Which of the followings arise from the 4th pharyngeal arch?

- a- Stapedius muscles
- b- Styloid process
- c- Cricoid cartilage
- d- Malleolus
- e- Cricothyroid muscle



78- The suspensory ligaments attach to the -----?

- a- Lens
- b- Sclera
- c- Canal of Schlemm
- d- Iris
- e- Optic disc

79- All following are true about spinal anesthesia EXCEPT?

- a- Drug is injected into cerebrospinal fluid
- b- A spinal block is a single injection
- c- Also called intrathecal anesthesia
- d- Needle is inserted between L1 and L2 space
- e- Commonly used in caesarean section

80- The following is NOT TRUE regarding glomeruli?

- a- Spherical structures located in Ethmoid bone
- b- They consist of cluster of axons of olfactory receptor cells
- c- Each glomerulus receives inputs from identical receptor cells containing the receptors for same odorants
- d- Each glomerulus is innervated by single primary neuron either mitral or tufted cells
- e- Glomeruli are located at the basal end of olfactory receptor cells

إنتهى

بالتوفيق للجميع

