Memory Test - Neuroanatomy_Class Test_Foundation_1

Total Mark: 100
Time: 90 Min

1. Neural crest derivatives are
A) Chromaffin cells of adrenal medulla
B) Dorsal root ganglia
C) Ependymal cell
D) Schwann cell
E) Microglia
Answer: T, T, F, T, F
Discussion:
Reference:

2. Pons is supplied by
A) Posterior cerebral artery
B) Basilar artery
C) Vertebral artery
D) Superior cerebellar artery
E) Anterior inferior cerebellar artery
Answer: F, T, F, T, T
Discussion:
Reference:

3. Circle of willi -
A) lies in interpeduncular fossa
B) lies in base of brain.
C) formed by vertebral arteries
D) middle cerebral artery also contributess in it

E) basilar arteries don't contribute in it
Answer: T, T, T, F, F
Discussion:
Reference: [Ref: BD/7th /v-4/P-171-72]

4. Components of Limbic system includes
A) Cingulate gyrus
B) Posterior nucleus of the thalamus
C) Amygdala
D) Septal nuclei
E) Dorsal longitudinal fasciculus
Answer: T, F, T, T, F
Discussion:
Reference:

5. Gray matter contains
A) Myelinated axons
B) Protoplasmic astrocyte
C) Neuronal cell bodies
D) Oligodendrocytes
E) Lymph vessels
Answer: F, T, T, T, F
Discussion: Gray matter contrains: 1. Neuronal cell bodies. 2.Neuropil (dendrites and axon) 3.Glial cells 4.Synapses 5. Capillaries.
Reference:

6. In the cerebral venous drainage the:
A) superior cerebral veins pass to the inferior sagittal sinus.
B) anterior cerebral vein joins the deep middlecerebral vein.
C) choroidal veins from the lateral and 3rd ventricles pass into the cavernous sinuses.
D) great cerebral vein is formed from the internal cerebral vein of each side)
E) great cerebral vein opens into the caveronous sinus.
Answer: F, T, F, T, F
Discussion: 421. a) F-The veins pass to the superior sagittal sinus. They can be easily damaged by anteroposterior deceleration injuries of the head) b) T- They form the basal vein which passes over the midbrain to join the great cerebral vein. c) F- They join the internal cerebral vein which also receives the thalamostriate vein. d) T- It lies in the tela choroidea in the tela choroidea in the transverse fissure) e) F- It opens into the straingt sinus.
Reference:

7. In the cranial nerve nuclei, the:
A) general somatic efferent column innervates the muscles of the larynx.
B) special visceral efferent column innervates muscles derived from pharyngeal arch mesoderm.
C) parasympathetic fibres originate in the trigeminal nerve nucleus.
D) special visceral afferent column carries sensory fibres from the proximal pharynx.
E) general somatic afferent column carries sensory fibres in the cacial nerve)
Answer: T, T, F, F, F
Discussion: T T F(General visceral afferent and efferent fibres are carried in the coulometer, facial, glossopharyngeal and vagus nerves.) F(This column carries taste fibres in the facial, glossopharyngeal and vagus nerves.) F (these fibres derived from face scalp nose nasal sinuses, mouth and teeth are carried in the trigeminal nerve)
Reference:

8. In the floor the fourth ventricle
A) The trigonum vagi is at the inferior angle next to the midline
B) The facial colliculus is next to the midline in its upper half
C) The vestibular area is adjacent to the lateral angle
D) The trigonum hypoglossi is lateral to the trigonum vagi
E) The abducent nucleus lies deep to the facial colliculus
Answer: F, T, T, F, T
Discussion:
Reference: [Ref. Snell's Neuroanatomy /8th/P-197]

9. Nerve fibres that supply skeletal muscle are axons of neurons located in
A) Ventral gray column of the spinal cord
B) intermediolateral gray column of the spinal cord
C) Somatic efferent nuclei of cranial nerves
D) Dorsal nerve root ganglia
E) Branchial efferent nuclei of cranial nerve
Answer: T, F, T, F, F
Discussion: Explanation: a) Alpha neuron, from large multipolar nerve cell bodies in vertebral; gray column b) This give to preganglionic synaptic from T1-L2 segment and preganglionic parasympathetic fibres c) GSE component present in CN III, IV, XII d) Related to sensory e) It belongs to SVE
Reference: [Ref: Snell/P-139,333]

10. Regarding Basal ganglia-
A) It is a collection of mass of gray matter
B) Subthalamic nucleus are inhibitory function
C) Associated with learning of motor skills
D) Lentiform nucleus form by caudate nucleus and putamen
E) Huntington disease is Hypokinetic disorder
Answer: T, F, T, F, F
Discussion: T F(Glutamet) T F (Globus pallidus plus putamen) F (Hyperkinetic)
Reference: [Snell/7th/P-263,264]

11. Regarding cranial nerve
A) Spinal root of accessory nerve is sensory and cranial root is motor
B) Secretomotor component of facial nerve supplies parotid glands
C) Lacrimal gland is supplied by oculomotor nerve

D) Posterior belly of digastric is supplied by facial nerve
E) Both ophthalmic& maxillary division of Trigeminal nerves is sensory
Answer: F, F, F, T, T
Discussion:
Reference:

12. Regarding CSF
A) Produced by the arachnoid villi at a rate of 500 to 700ml/day.
B) CSF crystal clear in color
C) Reach inferior surface of cerebrum through tentorial notch
D) Total protein: >45mg/dl in the lumbar cistern

E) Glucose same as plasma glucose level.
Answer: F, T, T, F, F
Discussion:
Reference: Ref: genesis sheet 51

13. Regarding supporting cells of nervous system-
A) Astrocytes are largest
B) Astrocytes are only white matter
C) All are derived from neural tube
D) Microglia behaves like macrophages
E) Form rd of brain tissue
Answer: T, F, F, T, T
Discussion:
Reference: [Ref. Bd chaurasia 7th V-4 P-6,7]

14. The basilar artery:
A) divides distally into two superior cerebellar arteries.
B) gives branches to the lateral and 3rd ventricles.
C) supplies both the motor and somatosensory cortical areas.
D) supplies the auditory area of cortex.
E) supplies branches to the inner ear.
Answer: F, T, F, F, T
Discussion: 420. a) F- Its terminal branches are the two posfterior cerebral arteries b) T- The posterior choroidal branch of the posterior cerebral artery enters the tela chroidea and supplies these ventricles. c)F- Most of the pre and postcentral gyri and the superior temporal gyrus are supplied by the middle cerebral artery. d) F- The posterior cerebral artery supplies occipital pole with its visual areas. e) T- The labyrinthine artery passes through the internal acoustic meatus.
Reference:

15. The internal capsule of brain
A) Lies lateral to the caudate nucleus
B) Carries somatosensory fibres in the posterior limb
C) Carries fibres from the ventroanterior nucleus in the posterior limb
D) Carries pyramidal tract fibres in the posterior limb
E) Carries the visual radiation
Answer: T, T, F, T, T
Discussion: Explanation c) These fibers from the medial nuclei pass to the frontal lobe in the anterior limb of the internal capsule
Reference: [Ref: lumley/Q-389/P-244] [Ref: lumley/Q-389/P-244]

16. The Spinal cord has
A) Outer covering of gray matter and inner core of white matter
B) Central canal that is situated in the grey Commissure
C) Ant. & Post roots of a single spinal nerve attached to single segment
D) A Prolongation of duramater, filum terminale

E) Conus medullaris at its beginning
Answer: F, T, T, F, F
Discussion:
Reference:

17. .Regarding pineal gland-
A) Consist of cell known pinealocyte
B) Important land mark for Radiologist
C) Function is Stimulatory
D) Influence the activity of pituitary gland
E) Pineal tumor associated with alteration of reproductive function
Answer: T, T, F, T, T
Discussion: (inhibitory) T (Islets langer hense , Parathyroid, Adrenals, gonad)T
Reference: [Ref: BD/ 4th/P-138]

18. Cavernous sinus is pierced by the followings
A) Oculomotor nerve
B) Trigeminal nerve
C) Abducent nerve
D) Internal carotid artery
E) Mandibular nerve
Answer: T, F, T, T, F
Discussion:
Reference:

19. Choroid plexus is seen in
A) Trigone of lateral ventricle
B) Roof of the third ventricle
C) Floor of the fourth ventricle
D) Confluence of the body and temporal horn of lateral ventricle
E) Central canal of spinal cord
Answer: T, T, F, F, F
Discussion:
Reference: [Ref. Snell's Neuroanatomy /8th/Fig-16-8/443]

20. Dorsal root ganglia contain the cell bodies of

A) Dorsal column of spinal cord
B) Reticulospinal tract
C) Pontocerebellar tract
D) Dorsolateral tract
E) Lateral spinothalamic tract
Answer: T, F, F, T, F
Discussion:
Reference: [Ref:Lumley/Q-410/P-258]

21. Superior sagittal sinus
A) Lies between dura mater and arachnoid mater
B) Is formed by union of great cerebral vein and superior cerebral vein
C) Forms the right transverse sinus
D) Has arachnoid villi
E) Occupies the upper border of falx cerebri
Answer: F, F, T, T, T
Discussion: Explanation: a) Lies between the endosteal and meningeal layer of dura mater b) Tributaries are superior cerebral veins, Parietal emissary veins, venous lacunae from meningeal vein and Diploic vein c) Forms the confluence of sinus d) Arachnoid villi and granulation projecting into the lacunae e) Occupies the upper convex attached margin for the falx cerebri
Reference: [Ref BD V-3 Page-195] (Ref BD V-3 Page-195)

22. The caudate nucleus:
A) Lies on the convexity of the lateral ventricle

B) Forms part of the corpus striatum
C) Forms a superior relation of the anterior perforated substance
D) Sends most of its efferent fibres in the stria terminalis
E) Has a narrow tail
Answer: F, T, T, F, T
Discussion: F (It lies within the concavity, the head bulging into the lateral wall and floor of the anterior horn of the ventricle) T T F (The stria terminalis is the main efferent tract of the amygdala. It runs with the thalamostriate vein in the groove between the thalamus and the caudate nucleus. The caudate nucleus projects fibres to the globus pallidus.)T 390. a) F- It lies within the concavity , the head bulging into the lateral wall and floor of the anterior horn of the ventricle) b) T- The name is derived from the grey matter that connects the caudate and lentiform nuclei across the anterior limb of the internal capsule) c) T- The expanded head lies over this area and receives blood vessels through it. d) F- The stria terminalis is the main efferent tract of the amygdala . It runs with the thalamostriate vein in the groove between the thalamus and the caudate nucleus . The caudate nucleus projects fibres to the globus pallidus. e) T- Lying in the roof of the inferior horn of the lateral ventricle)
Reference:

23. The hypothalamus
A) Receives afferent fibres from the amygloid body through the fornix
B) Is connected to the anterior lobe of the pituitary by median stalk
C) Sends efferent fibres to the midbrain reticular nuclei
D) Is related posteroinferiorly to the posterior perforated substance
E) Is linked to the pituitary stalk by the tuberoinfundibular tract
Answer: F, F, F, F, T
Discussion:
Reference: (Lumly-395)

24. The middle meningeal artery:
A) Passes through the foramen ovale
B) Lies in the anterior cranial fossa
C) Lies in intimate relationship with the skull
D) Lies deep to the zygomaticofrontal suture
E) Also supplies the diploe.
Answer: F, F, T, F, T
Discussion:
Reference: [Ref.Lumbley Q-368]

25. The thalamus:
A) is limited anteriorly by the interventricular foramen.
B) overlies the midbrain anteriorly.
C) lies in the floor of the body of the lateral ventricle)
D) forms the medial relation of the anterior limb of the internal capsule
E) is related medially to the third ventricle)
Answer: T, F, T, F, T
Discussion: T F [The expanded posterior (pulvinar) region of the thalamus overlies the brainstem. The hypothalamus underlies the thalamus anteriorly] T F (It lies medial to the posterior limb) T
Reference:

26. The posterior communicating artery of the cerebral arterial circle (of Willis) directly connects the posterior cerebral artery to the:
A) Anterior communicating artery
B) Ophthalmic artery
C) Internal carotid artery
D) Anterior cerebral artery
E) Vertebral artery
Answer: C
Discussion:
Reference:

27. 45 years old man came to the Emergency with weakness of both leg while walking up stairs, numbness over the lower part both legs and feet, 2 days later weakness of the muscle on the right side of face and H/O mild upper RTI 2-3 weeks back. What is possible diagnosis?
A) Multiple sclerosis
B) Alzheimer's Disease
C) Guillain Barre syndrome
D) Brown – sequared syndrome
E) Neuroblastoma
Answer: C
Discussion:
Reference:

28. A patient came to you with deviation of face with nystigmus with impaired sensation in face which artery of the internal capsule is responsible for this lesion.
A) Posterior communicating artery
B) Anterior choroidal artery
C) Anterior ommunicating artery
D) Anterior cerebral artery
E) Lateral striate artery
Answer: E
Discussion:
Reference: Ref: Genesis sheet 20

29. A patient presents to you with history of RTA. In CT scan of brain of this patient, a biconvex hyperdense lesion was seen between skull & brain, constrained by the adherence of the dura to the skull. What is your provisional diagnosis?
A) Meningioma
B) Subdural hematoma
C) Extradural hematoma
D) Subarachnoid hematoma
E) Intraparenchymal hematoma
Answer: C
Discussion:
Reference: [Ref: 26 Bailey & love 315]

30. A patient was presented to you with history of sudden severe headache. During history taking you came to know that he had nose bleeding 4 days back due to RTA. You diagnosed that, this is due to cavernous sinus thrombosis. Which route was responsible for this
A) Superior petrosal sinus
B) Inferior petrosal sinus
C) Pterygoid venous plexus
D) Emissary vein
E) Superior ophthalmic vein
Answer: E
Discussion:
Reference:

31. All the spinal segments contains lateral horn except
A) T10
B) L1
C) L2
D) L3
E) S2
Answer: D
Discussion:
Reference:

32. Facial nerve palsy occurs when internal capsule lesion in the following site occurs
A) Anterior limb
B) Genu
C) Posterior limb
D) Sublentiform
E) Retrolentiform
Answer: B
Discussion:
Reference:

33. Hallmark for cauda equina syndrome
A) Low back pain
B) Gait disturbance
C) Sexual impotence
D) Saddle anesthesia
E) Bladder dysfunction
Answer: D
Discussion:
Reference:

34. Horner's syndrome is characterized by all except
A) Mydriasis
B) Ptosis
C) Anhidrosis
D) Enophthalmos
E) Vasodilation of skin arterioles
Answer: A
Discussion:
Reference:

35. Internal capsule is supplied by all except
A) Anterior cerebral artery
B) Superior cerebral artery
C) Middle cerebral artery
D) Posterior cerebral artery
E) Internal carotid artery
Answer: B
Discussion:
Reference:

36. Pineal body is a Component of
A) Telencephalon
B) Diencephalon
C) Metencephalon
D) Myelencephalon
E) Mesencephalon
Answer: B
Discussion:
Reference:

37. Thalamus is the relay station for nearly all sensory impulse except
A) Auditory Pathway
B) Visual Pathway
C) Olfactory pathway
D) Pain pathway
E) Tract of gall
Answer: C
Discussion:
Reference: [Snell/7th/ P-175]

38. Transverse section at level of superior colliculus, which of the following structure is not found
A) Red nucleus
B) 3rd cranial nerve
C) All four lemniscus
D) Reticular formation
E) Tegmental decussation
Answer: C
Discussion: (lateral lemniscus terminate at the level of inferior colliculus)
Reference:

39. Which of the following is a mixed nucleus
A) Tractus Solitarius
B) Dorsal nucleus
C) Superior salivatory nucleus
D) Inferior salivatory nucleus
E) Mesencephalic nucleus
Answer: B
Discussion:
Reference:

40. Which of the following structure is not pierced by the lumber puncture needle
A) Superficial fascia
B) Deep fascia
C) Supraspinous ligament
D) Infraspinous ligament
E) Ligamentous flavum
Answer: B
Discussion:
Reference:

41. Which one is the largest nucleus of cerebellum

A) Globose
B) Fastigeal
C) Dentate
D) Red nucleus
E) Emboliform
Answer: C
Discussion:
Reference:

42. Which one is the most common site of spontaneous aneurismal SAH?
A) Anterior communicating artery
B) Middle cerebral artery
C) Posterior cerebral artery
D) Basilar artery
E) Superior cerebellar artery
Answer: A
Discussion:
Reference: Ref: 26 Bailey & love 321

43. Which one is the projection fiber
A) Corpus callosum
B) The fornix
C) Uncinate fasciculus
D) Cingulum
E) Internal capsule
Answer: E
Discussion:
Reference:

44. Which one of the following is most likely to cause a bilateral facial nerve palsy?
A) Acoustic neuroma
B) Cholesteatoma
C) Bell's palsy
D) Sarcoidosis
E) Amyloidosis
Answer: D
Discussion:
Reference:

45. A 48-year-old man with a 3-week history of persistent headache and signs of raised intracranial pressure had a computed tomographic scan that showed a tumour in the floor of the fourth ventricle. Which of the following cranial nerve nuclei is most likely to be compressed by this tumour?
A) Abducent
B) Oculomotor
C) Optic
D) Spinal accessory
E) Trigeminal
Answer: A
Discussion:
Reference:

46. A middle aged man came with paraplegia with sensory level deficit at the umbilicus. Upper limb reveals normal finding. Where is the sensory level?
A) T10
B) T12
C) L1
D) C2
E) Lumbosacral region
Answer: A
Discussion: [Explanation: The umbilicus is an important landmark on the abdomen, because its position is relatively consistent among humans. The skin around the waist at the level of the umbilicus is supported by the tenth thoracic spinal nerve (T10 dermatome).]
Reference:

47. A patient admits in the hospital with headache and vomiting. CT scan of brain suggests a blockage between the 3rd and 4thventricles.which of the following structure is most likely to be blocked
A) Cerebral aqueduct
B) Interventricular foramen
C) Foramen of monro
D) Foramen of luschka
E) Foramen of magendie
Answer: A
Discussion:
Reference:

48. False statement on cranial venous sinuses
A) Superior sagittal sinus passes backwards to the internal occipital protuberance
B) Inferior sagittal sinus passes backwards to the free edge of the tentorium crebelli
C) Sigmoid sinus grooves the inner surface of the mastoid process
D) Inferior petrosal sinus grooves the parieto-occipital suture
E) Straight sinus runs posterior within the tentorium cerebelli
Answer: D
Discussion:
Reference:

49. Neurological cells of PNS
A) Microglia
B) Ependymal cell
C) Astrocytes
D) Oligodendrocytes
E) Schwann cells
Answer: E
Discussion:
Reference:

50. Right lower quadrantanopia occurs
A) Right optic nerve
B) Left parietal lobe
C) Left temporal lobe
D) Optic chiasma
E) Visual cortex
Answer: B
Discussion:
Reference: