

CNS Pathology

Multiple Choice Questions

Vikas Bhardwaj

Pathology

Introduction

Welcome to **CNS Pathology MCQ**, a comprehensive question bank designed to enhance your understanding of microbiology. This ebook contains over 700 multiple-choice questions (MCQs) covering a wide array of topics within the field of Pathology.

Whether you're a medical student preparing for exams, a postgraduate aspirant aiming for success in competitive entrance tests, or a healthcare professional looking to refine your expertise, this book will serve as an invaluable resource in your learning journey. The questions in this ebook are structured to reflect the patterns seen in major medical entrance exams such as NEET PG, USMLE, AIIMS, and others, making it a perfect tool for self-assessment and revision.

Purpose

The primary goal of this ebook is to provide a reliable and extensive resource that students and professionals can use to test their knowledge, improve their diagnostic skills, and solidify key pathology concepts. With the included detailed answers and explanations, this book goes beyond just helping you answer questions — it enables you to understand the reasoning behind each answer, facilitating deeper learning.

How This Ebook Can Help You

- **For Students**: The MCQs in this book are designed to match the rigor and format of real exam questions. By practicing regularly, you'll not only enhance your knowledge but also gain confidence in approaching exam challenges.
- **For Professionals**: This ebook helps professionals stay updated with the latest developments in pathology in medical science and refresh critical concepts required in day-to-day practice.
- **For Educators**: Teachers and educators can use this collection to formulate quizzes, exams, or as supplementary teaching material for their students.

Compilation and Sources

This ebook is a compilation of publicly available online content. Each question has been carefully selected and curated to ensure relevance and accuracy. While this material is sourced from multiple platforms, it has been reorganized and edited to provide a streamlined learning experience.

We hope this book becomes an essential part of your academic and professional toolkit, helping you achieve your goals in Pathology.

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Questions

1-: Most sensitive nerve fiber to hypoxia

1: A

2: B

3: C

4: All are equally sensitive

2-: A 1-year-old boy presents with a delay in motor development. Progressive muscle weakness and blindness ensue, and the patient dies within a year. The brain at autopsy shows swollen neurons that contain numerous lysosomes filled with lipid. Which of the following is the most likely diagnosis?

- 1: AL amyloidosis
- 2: Hurler syndrome
- 3: Phenylketonuria
- 4: Tay-Sachs disease

3-: Best prognosis in nerve injury

- 1: Neuropraxia
- 2: Axonotemesis
- 3: Neurotemesis
- 4: Complete transaction
- 4-: "Inflation of lungs induces fuher inflation" this is explained by
 - 1: Hering-Breuer inflation reflex
 - 2: Hering-Breuer deflation reflex
 - 3: Head's paradoxical reflex
 - 4: J-reflex

5-: A 4-month-old infant has undergone surgical treatment for

meningomyeloencephalocele. At bih, an operation was carried out in the posterior cranial fossa to paially replace brain cerebellar contents to an intracranial position. In investigations for progressive hydrocephalus, it is noted that there is herniation of the cerebellar tonsils through the foramen magnum, and a diagnosis of Arnold-Chiari syndrome is established. This syndrome may also include which of the following?

- 1: Fusion of the frontal lobes
- 2: Fusion of the temporal, parietal, and occipital lobes
- 3: Abnormal elongation of the medulla and lower cranial nerves
- 4: Paial or complete absence of the pituitary gland

6-: Coical representation of body in the cerebrum is

- 1: Horizontal
- 2: Veical
- 3: Tandem
- 4: Oblique

7-: Which of the following agents is likely to cause cerebral calcification and hydrocephalus in a newborn whose mother has history of taking spiramycin but was not compliant with therapy?

- 1: Rubella
- 2: Toxoplasmosis
- 3: CMV
- 4: Herpes

8-: Pyramids are formed by

- 1: Arcuate nucleus
- 2: Vestibular nuclei

- 3: Interstitial cells of cajal
- 4: Lateral coicospinal tract

9-: Which of the following is not a stimulus for normal/resting ventilation?

- 1: Stretch receptors
- 2: J receptors
- 3: PO2
- 4: PCO2

10-: The CNS tumor present with calcification:

- 1: Oligodendroglioma
- 2: Astrocytoma
- 3: Medulloblastoma
- 4: Pheochromocytoma

11-: Afferents to basal ganglia rests in

- 1: Striatum
- 2: Globus pallidus
- 3: Striatum
- 4: Subthalamus nuclei

12-: The fastest type of nerve fibers are

- 1: A
- 2: B
- 3: C
- 4: All

- 13-: Which of the following is true about colour vision
 - 1: Independent of wavelength of light
 - 2: Depends on intensity discrimination
 - 3: Involves opponent colour cells
 - 4: Minimum at fixation point

14-: Lisch nodules (Pigmented Iris hamartomas) are seen in

- 1: Niemann Pick disease
- 2: Neurofibromatosis
- 3: Ochronosis
- 4: Glycogen storage disease

15-: The age at which a child can make a tower of 9 cubes and draw a circle is

- 1:24 months
- 2:30 months
- 3: 36 months
- 4:42 months

16-: Body temperature regulation centre is located at

- 1: Pituitary
- 2: Thalamus
- 3: Hypothalamus
- 4: Basal ganglia
- 17-: True about meningiomas-

- 1: More common in men
- 2: 50% are malignant
- 3: 95% cure rate following treatment
- 4: Arise from arachnoid layer

18-: A 2-year-old unresponsive child came to casualty with history of fall from a height. On examination, he is responsive to verbal stimuli intermittently, respiratory rate is 30 per min, pulse 130 per min, spO2 is 94% and BP is 104/60 mm Hg. What should be the next step of management?

- 1: Observe the child carefully and shift if necessary
- 2: Transfer immediately to a tertiary center for CT brain and further management

3: Start oxygen by face mask, immobilize cervical spine and transfer to a tertiary center accompanied by doctor

4: Start oxygen by face mask and give mannitol

- 19-: Compared with serum, CSF has
 - 1: A higher chloride concentration
 - 2: A higher protein concentration
 - 3: The same glucose concentration
 - 4: More lymphocytes per microliter

20-: The fibers from the contralateral nasal hemiretina project to the following layers of the lateral geniculate nucleus

1: Layers 2,3 & 5.

2: Layers 1,2 & 6.

3: Layers 1,4 & 6.

4: Layers 4,5 &6.

21-: Resting membrane potential of a neuron is

- 1: -9mV
- 2: -50mV
- 3: -70mV
- 4: -100mV

22-: Binswanger&;s disease is a form of

- 1: Hypeensive retinopathy
- 2: Hypeensive nephropathy
- 3: Hypeensive encephalopathy
- 4: Subcoical leukoencephalopathy
- 23-: Subdural empyema is a complication of all the following conditions except?
 - 1: Frontal Sinusitis
 - 2: Skull vault osteomyelitis
 - 3: Middle ear disease
 - 4: Boil over face

24-: Most common site of primary spinal tumor

- 1: Intramedullary; Extradural
- 2: Intramedullary only
- 3: Intradural; Extramedullary
- 4: Intra axially only

25-: Frontal lobe function

1: Personality

- 2: Memory
- 3: Vision
- 4: Calculation

26-: Umami taste is evoked by

- 1: Glucose
- 2: Glutamic acid
- 3: Quinine
- 4: Sodium chloride

27-: Vestibulo ocular reflex is concerned with

- 1: Archicerebellum
- 2: Flocculonodular lobe
- 3: Neocerebellum
- 4: Occipital lobe

28-: Somatosensory area I largest representation is for

- 1: Arm
- 2: Leg
- 3: Back
- 4: Head

29-: Stereotactic radiosurgery is used in which of the following conditions?

- 1: Metastatic brain tumors
- 2: Aeriovenous malformations
- 3: Trigeminal neuralgia

- 4: All of the above
- 30-: Active agent of cannabis resemble which endogenous compound
 - 1: Endorphin
 - 2: Endomorphins
 - 3: Anandamine
 - 4: Enkaphalin

31-: Most common cause of subarachnoid hemorrhage is:-

- 1: Hypeension
- 2: AV malformation
- 3: Berry aneurysm
- 4: Tumors

32-: Hea rate increase with one of the following?

- 1: Stimulation of trigeminal nerve pain receptor
- 2: Increased intracranial tension
- 3: Decreased stimulation of Baroreceptors
- 4: Increased parasympathetic stimulation
- 33-: Node of Ranvier is seen in
 - 1: Cell body
 - 2: Dendrites
 - 3: Axons
 - 4: Terminal butons

34-: Pain and temperature are carried by

- 1: Anterior spinothalamic tract
- 2: Lateral spinothalamic tract
- 3: Dorsal column
- 4: None

35-: Local anesthetics depress transmission first in

- 1: Group A alpha-fibers
- 2: Group A bita-fibers
- 3: Group B fibers
- 4: Group C fibers

36-: True about pilocytic astrocytoma all except -

- 1: Long survival
- 2: Total surgical resection possible
- 3: Can involve posterior fossa
- 4: Median age at presentation is more than 80 years

37-: The parvocellular pathway from lateral geniculate nucleus to visual coex is most sensitive for the stimulus of

- 1: Color contrast
- 2: Luminance contrast
- 3: Temporal frequency
- 4: Saccadic eye movements

38-: In decoicate animal which reflex is lost?

- 1: Hopping and placing reflex
- 2: Tonic neck reflex
- 3: Tonic labyrinthine reflex
- 4: Stretch reflex

39-: The only neuron in retina showing action potentials are

- 1: Rods and cones
- 2: Bipolar cells
- 3: Amacrine cells
- 4: Ganglion cells
- 40-: Postganglionic sympathetic fibres are
 - 1: A alpha
 - 2: C
 - 3: B fibres
 - 4: A gamma
- 41-: Reilly bodies are seen in?
 - 1: Gangliosidosis
 - 2: Bechet's disease
 - 3: Gaucher's disease
 - 4: Hurler disease

42-: Similar features between cerebral abscess and cerebral infarct -

- 1: Coagulative necrosis
- 2: Liquefactive necrosis

- 3: Heal by collagen formation
- 4: lways develop from emboli from other site
- 43-: Generator area in a nerve cell is
 - 1: Cell body
 - 2: Initial segment
 - 3: Axon
 - 4: Dendrites
- 44-: Broca's area is present in
 - 1: Superior temporal gyrus
 - 2: Precentral gyrus
 - 3: Post central gyrus
 - 4: Inferior frontal gyrus
- 45-: Sensations which are appreciated in thalamus
 - 1: Propioception
 - 2: Pain and temperature
 - 3: Tactile sensations
 - 4: All
- 46-: Not included in cerebellar nuclei
 - 1: Dentate nuclei
 - 2: Emboliform nuclei
 - 3: Fastigial nuclei
 - 4: Caudate nuclei

- 47-: Most common site of glioblastoma multiforme is-
 - 1: CP angle
 - 2: Frontal lobe
 - 3: Brainstem
 - 4: Occipital lobe

48-: Patient with a history of fall presents weeks later with headache and progressive neurological deterioration. The diagnosis is:-

- 1: Acute subdural hemorrhage
- 2: Extradural hemorrhage
- 3: Chronic subdural hemorrhage
- 4: Fracture skull

49-: A 70-year-old male patient with intentional tremor, drunken gait, and past pointing is having a lesion in which of the following structures

- 1: Basal ganglia
- 2: Pyramidal tract
- 3: Cerebellum
- 4: Thalamus
- 50-: Patient is able to recognize voice but not face
 - 1: Temporal lobe
 - 2: Occipital
 - 3: Frontal lobe
 - 4: Parietal lobe

- 51-: Semi-circular canals are associated with
 - 1: Linear acceleration
 - 2: Angular acceleration
 - 3: Static equlibirium
 - 4: Hearing

52-: A 71-year-old woman is receiving a drug to lower her serum cholesterol. Over the past week, she has developed muscle pain and weakness unrelated to physical activity. On examination, she has diffuse but mild muscle tenderness. Laboratory studies show her serum creatine kinase is 2049 U/L and creatinine is 2 mg/dL. Urine dipstick analysis is positive for blood, without RBCs on urine microscopy. Which of the following drugs is most likely to produce her findings?

- 1: Cholestyramine
- 2: Clofibrate
- 3: Ezetimibe
- 4: Lovastatin
- 53-: Spongiform degeneration of cerebral coex occurs in -
 - 1: Creutzfeldt-Jakob disease
 - 2: Subacute sclerosing panencephalitis
 - 3: Fatal familial insomnia
 - 4: Cerebral toxoplasmosis
- 54-: Meningomyelocele patient after being operated developed hydrocephalus due to:
 - 1: Arnold Chiari malformation
 - 2: Injury to absorptive surface
 - 3: Central canal injury
 - 4: Arachnoidal block

- 55-: Enzymes found in CSF
 - 1: GGT+ALP
 - 2: ALP+CK-MB
 - 3: CK +LDH
 - 4: Deaminase and peroxidase

56-: Retinal cells which secrete acetylcholine

- 1: Bipolar cells
- 2: Ganglion cells
- 3: Amacrine cells
- 4: H Cells

57-: Massage and application of liniments to painful areas in the body relieves pain due to

- 1: Stimulation of endogenous analgesic system
- 2: Release of endorphins by first order neurons in brainstem
- 3: Release of glutamate and substance P in the spinal cord
- 4: Inhibition by large myelinated fibres

58-: A 30 year old male, who met with a A, regained conscious after 36 hours. It was then discovered that the patient is unable to create new memories. The probable site of lesion for this symptom is

- 1: Amygdala
- 2: Neocoex
- 3: Hippocampus
- 4: Hypothalamus

59-: Which is not a neuronal tumour

- 1: Ependymoma
- 2: Neuroblastoma
- 3: Gangliocytoma
- 4: Ganglioglioma

60-: All of the following are excitatory neurotransmitters except

- 1: Gamma-aminobutyric acid
- 2: Acetylcholine
- 3: Dopamine
- 4: Serotomin

61-: An 86-year-old man has become progressively unable to live independently for the past 10 years, and he now requires assistance with bathing, dressing, toileting, feeding, and transfers in and out of chairs and bed. On physical examination, he has no motor or sensory deficits. He cannot give the current date or state where he is. Six months later, he suddenly becomes comatose and dies. At autopsy, there is a large superficial left parietal lobe hemorrhage. Histologic examination of the brain shows numerous neocortical neuritic plaques and neurofibrillary tangles. The peripheral cerebral arteries and the core of each plaque stain positively with Congo red. Which of the following mechanisms is most likely responsible for his disease?

- 1: Aggregation of Ab peptide
- 2: Conformational change in the prion protein (PrP)
- 3: Dopamine deficiency
- 4: Expansion of polyglutamine repeats

62-: Brown-sequardsyndrome

- 1: Pain loss in the opposite side of lesion
- 2: Fine touch lost in opposite side of lesion

- 3: UMN paralysis in opposite side of lesion
- 4: LMN paralysis in opposite side of lesion

63-: Root value of ankle jerk

- 1: L3 L4
- 2: L4 L5
- 3: S1 S2
- 4: S3 S4

64-: The myocardial contraction is stimulated by

- 1: Influx of Ca++ ions
- 2: Influx of Na ions
- 3: Efflux of K ions
- 4: Efflux of Na ions

65-: Pavlov&;s experiment on dogs shows

- 1: Conditional response
- 2: Unconditional response
- 3: Procedural memory
- 4: Familiarity
- 66-: Retraction ball is seen after injury' to:
 - 1: Liver
 - 2: Spleen
 - 3: Brain
 - 4: Kidney

67-: Nonshivering thermogenesis is due to

- 1: Acetylcholine
- 2: Norepinephrine
- 3: Dopamine
- 4: Serotonin

68-: Sharp pain is transmitted by which type of fibers

- 1: Aa
- 2: Ab
- 3: Ad
- 4: C

69-: Koener's tumor are seen in?

- 1: Tuberous sclerosis
- 2: Neurofibromatosis
- 3: VHL
- 4: NF

70-: Basal ganglia is involved in which types of memory

- 1: Conditioning
- 2: Procedural memory
- 3: Explicit memory
- 4: None

71-: Flocculonodular lobe has direct connections with

- 1: Red nucleus
- 2: Inferior olivary nucleus
- 3: Vestibular nucleus
- 4: Dentate nucleus

72-: A 48-year-old woman has a lower back pain and hypoesthesia in the left S1 dermatomal distribution (left calf and lateral left foot). What is the most likely cause?

1: A lesion at the right L4-L5 interspace

2: Pathology where the nerve exits the spinal canal immediately above the pedicle of S3 veebra

3: A herniated nucleus pulposus

4: Compression by the L5 lamina

73-: A gamma nerve diameter is

- 1:13-20
- 2:13-Apr
- 3: 6-Mar
- 4: 0.2-1.0

74-: Prophylactic craniospinal irradiation is recommended in:

- 1: Astrocytoma
- 2: Posterior fossa ependymoma
- 3: Meningioma
- 4: Medulloblastoma

75-: MRI done in a 28yrs old male suffering from Neurofibromatosis 2 showed ice cream cone appearance. On asking he fuher revealed that it began with ringing sensation in ears

which progressed to balance problems and hearing loss. Which of the following is the most likely diagnosis

- 1: Meningioma
- 2: Ependymoma
- 3: Schwannoma
- 4: Gangioneuroma

76-: Nissl bodies in neurons are

- 1: Golgi apparatus
- 2: Endoplasmic reticulum
- 3: Mitochondria
- 4: Lysosome

77-: Myelin in CNS

- 1: Oligodendrocyte
- 2: Schwann cell
- 3: Astrocyte
- 4: Microglia

78-: Baby with fused eyes and single nasal chamber, undeveloped callosum. What is diagnosis?

- 1: Holoprosencephaly
- 2: Schizencephaly
- 3: Plagiocephaly
- 4: Brachycephaly

79-: How would a drug that competes with Ach for receptors at the motor end plate effect skeletal muscle? It would

- 1: Produce uncontrolled muscle spasma
- 2: Cause the muscles to contract and be unable to relax
- 3: Cause muscles to relax and be unable to contract
- 4: Make the muscles more excitable

80-: Myelin sheath in CNS is produced by

- 1: Oligodendrocyte
- 2: Schwann cell
- 3: Microglia
- 4: Macroglia

81-: Group A nerve fibers are most susceptible to

- 1: Pressure
- 2: Hypoxia
- 3: Local anaesthetics
- 4: Temperature

82-: A 2-year-old boy is brought to the physician by his parents, who complain that their son continually loses his balance. They also report that his speech seems more slurred. Physical examination confirms the truncal ataxia and wide-based gait. The child appears lethargic, and there is bobbing of the head while he is sitting. Muscle tone is normal. A lumbar puncture is performed in the patient, and neoplastic cells are found. A suboccipital craniotomy is performed, and a tumor is resected. Microscopic examination of the surgical specimen would most likely reveal which of the following histologic patterns?

- 1: Malignant epithelial cells with prominent tonofilaments
- 2: Perivascular collections of neoplastic lymphocytes
- 3: Small, hyperchromatic cells and rare neuroblastic rosettes

4: Vacuolated tumor cells and an abundant capillary network

83-: Most common site of berry's aneury sm is-

- 1: Vertebral artery
- 2: Basilar artery
- 3: Junction of anterior cerebral artery and anterior communicating artery
- 4: Posterior cerebral artery

84-: When an inddividual is resting in a room with the air temperature 21degC and the humidity of 80%, the greatest amount of heat lost from body is by

- 1: Elevation of body metabolism
- 2: Vaporisation of sweat
- 3: Respiration
- 4: Radiation
- 85-: Commonest cause of Intra cerebral bleed -
 - 1: Berry aneurysms
 - 2: Hypeension
 - 3: Diabetes
 - 4: Thrombocytopenia

86-: Brain perfusion means

- 1: Mean aerial pressure Intracranial pressure
- 2: Mean aerial pressure + Intracranial pressure
- 3: Mean aerial pressure CVP
- 4: Mean aerial pressure + CVP

87-: All of the following are true about brain metastasis except:

1: Frontal lobe is the most common site

2: Lesions are located at the gray-matter and white-matter junction

3: Most common primary site is breast cancer

4: Chemotherapy can be used in brain metastases due to small cell lung cancer and seminomas

88-: Vestibulo ocular reflex concerned with

- 1: Archicerebellum
- 2: Neocerebellum
- 3: Floculomodular lobe
- 4: Occipital lobe

89-: Ohodromic conduction is

- 1: An axon can conduct impulse in one direction only
- 2: An axon can conduct impulse in both direction
- 3: The jumping of depolarization from node to node
- 4: The print at which a runaway spike potential
- 90-: Postural reflex with integrating center in spine
 - 1: Righting reflex
 - 2: Tonic labyrinthine reflex
 - 3: Righting reflex
 - 4: Crossed extensor reflex

91-: A 14-year-old boy complains of a 4-month history of fatigue, abdominal pain, and yellowing of his eyes and skin. Physical examination shows tremor of both hands, lack of coordination, and mild jaundice. An ophthalmic examination reveals Kayser-Fleischer rings. Degenerative changes are present in which of the following anatomic regions of the CNS in this patient?

- 1: Cerebellum
- 2: Corpus striatum
- 3: Paraventricular white matter
- 4: Pons
- 92-: Pronator drift test is done for lesion of
 - 1: Pyramidal tract
 - 2: Oliva rubral tract
 - 3: Tractus cuneatus
 - 4: Antero lateral tract

93-: A 15-year-old boy is rushed to the emergency room after suffering a tonic-clonic seizure 4 weeks after a spelunking expedition. The boy appears irritable and agitated, and his parents state that he has difficulty swallowing fluids. Lumbar puncture shows numerous lymphocytes. The patient becomes delirious, slips into a coma, and expires. At autopsy, the brain stem shows infiltrates of lymphocytes around small blood vessels and evidence of neuronophagia. Some neurons contain eosinophilic inclusions. What is the proper name for these neuronal inclusions?

- 1: Councilman bodies
- 2: Hirano bodies
- 3: Lewy bodies
- 4: Negri bodies

94-: Which of the following statements regarding glioblastoma multiforme is true?

1: It is a neuronal cell tumor

- 2: It arises from the malignant degeneration of an astrocytoma
- 3: With aggressive treatment, most patients can live up to 10 years with this disease
- 4: It is the most common childhood intracranial neoplasm
- 95-: Which of the following is true about medulloblastoma?
 - 1: Radiosensitive tumor
 - 2: Hematogenous spread is common
 - 3: Low proliferation index
 - 4: Homer Wright rosettes are rarely seen

96-: A new born with meningomyelocele has been posted for surgery. The defect should be immediately covered with:-

- 1: Normal saline guaze
- 2: Povidone iodine guaze
- 3: Tincture benzoin guaze
- 4: Methylene blue guaze
- 97-: Disease of Basal ganglia dysfunction are all except
 - 1: Alzheimer's disease
 - 2: Parkinsonism
 - 3: Chorea
 - 4: Athetosis

98-: The parvocellular pathway, from die lateral geniculate nucleus to the visual coex, carries signals for the detection of

- 1: Movement, depth and flicker
- 2: Color vision, shape and fine details

- 3: Temporal frequency
- 4: Luminance contrast
- 99-: Functions of limbic system
 - 1: Emotion
 - 2: Memory
 - 3: Higher function
 - 4: Planned motor activity

100-: Increased velocity of conduction in a nerve is oured by

- 1: Increased capacitance
- 2: Decreased capacitance
- 3: Increased resistance
- 4: Increased velocity

101-: Glial fibrillary proteins are present in

- 1: Astrocytoma
- 2: Medullobalstoma
- 3: Ependydoma
- 4: All

102-: The site where myosin heads to action in skeletal muscles are covered by

- 1: Tropomyosin
- 2: Troponin o
- 3: Calcium
- 4: None of the above

103-: In a small child diagnosed with H. influenza meningitis. What investigation must to be done before discharging him from the hospital?

1: BERA

2: MRI

3: CT scan

4: X-ray skull

104-: A 70-year-old man who had been treated for small cell carcinoma of the lung develops marked weakness of his legs and arms. He also complained of mouth dryness, double vision, and drooping upper eyelids. On physical examination there is diffuse muscle weakness and wasting. A muscle biopsy is normal. Laboratory studies demonstrate serum IgG autoantibodies that recognize voltage-sensitive calcium channels in motor nerve terminals. Which of the following is the most likely diagnosis?

- 1: Becker muscular dystrophy
- 2: Dermatomyositis
- 3: Lambert-Eaton myasthenic syndrome
- 4: Myasthenia gravis

105-: Not true regarding Dandy-Walker cyst:

- 1: Cerebellar vermis hypoplasia
- 2: Hydrocephalus
- 3: Arachnoid cysts
- 4: Posterior fossa cyst

106-: Which of the following is observed during sleep induction?

- 1: | Norepinephrine and serotonin
- 2: | Acetyl Choline

3: | Histamine

4: | GABA

107-: A 75-year-old male patient who has recent hemiparesis came to the hospital for followup. On physical examination, stroking the plantar surface of foot produced a reflex extension of large toe and fanning of lateral toes. This is due to damage to one of the following structures

- 1: Cerebellum
- 2: Basal ganglia
- 3: Lower motor neuron
- 4: Upper motor neuron

108-: All of the following are true about this brain tumor except:

1: Most common intracranial, extra-axial dural-based neoplasm

2: Associated with spasticity & lower limb weakness, sensory deficit and sphincter dysfunction of bladder

- 3: Calcification is seen in 60-65% cases
- 4: Simpson grading system is used for resection

109-: Which of following channel play a role in CSF formation?

- 1: Cl-and k+exchanger
- 2: Na+symoper
- 3: K+channel
- 4: Cl- channel

110-: A 50-year-old woman develops a sudden, severe headache and is taken to the emergency department. On examination, she has nuchal rigidity. Her blood pressure is 115/83 mm Hg. A lumbar puncture is done; the CSF shows numerous RBCs, no neutrophils, a few mononuclear cells, and a normal glucose level. The Gram stain result is negative. CT

imaging shows subarachnoid hemorrhage at the base of the brain. Which of the following vascular events has most likely occurred in this woman?

- 1: Bleeding from cerebral amyloid angiopathy
- 2: Hematoma formation from arteriolosclerosis
- 3: Middle cerebral artery thromboembolism
- 4: Rupture of an intracranial berry aneurysm

111-: Negri bodies are seen in-

- 1: Oligodendroglia
- 2: Neuron 2012-13
- 3: Microglia
- 4: Astrocytes

112-: Monoamine neurotransmitter in brains is

- 1: Serotonin
- 2: Glycine
- 3: GABA
- 4: Dopamine

113-: All of the following are thermal modalities except

- 1: Cold receptor
- 2: Warm receptor
- 3: Stretch receptor
- 4: Ressure receptor

114-: All of the following statements about Brown Sequard Synndromes are true, except:

- 1: Ipsilateral loss of power
- 2: Contralateral loss of Proprioception
- 3: Ipsilateral loss of Fine touch
- 4: Contralateral loss of pain

115-: A 4-year-old boy is brought to the physician by his parents because he falls a lot, cannot jump, and tires easily Physical examination reveals weakness in the pelvic and shoulder girdles and enlargement of the child's calf muscles. The serum level of creatine kinase is elevated. A biopsy of calf muscle reveals marked variation in size and shape of muscle fibers. There are foci of muscle fiber necrosis, myophagocytosis, regenerating fibers, and fibrosis. Molecular diagnostic assays performed on muscle biopsy from the patient would show alterations in the length of the primary transcript for which of the following muscle-associated proteins?

- 1: Creatine kinase
- 2: Desmin
- 3: Dystrophin
- 4: Glycogen phosphorylase

116-: A case of meningomyelocele was posted for surgery. Till the patient is waiting for surgery, the covering of the sac will be protected by a gauze soaked in:

- 1: Normal saline
- 2: Tincture iodine
- 3: Methylene blue
- 4: Mercurochrome

117-: Thalamus is the sensory relay station for all except

- 1: Pain
- 2: Fine touch
- 3: Taste

4: All

- 118-: The most common site of hypeensive intracranial hemorrhage is -
 - 1: Putamen
 - 2: Medulla
 - 3: Midbrain
 - 4: Cerebrum

119-: The inability to perceive the texture and shape of an object occurs in lesion of

- 1: Spinoreticular tract
- 2: Nucleus cuneatus
- 3: Lateral spinothalamic tract
- 4: Nucleus gracilis
- 120-: Broca's area situated in
 - 1: Superior temporal gyrus
 - 2: Inferior temporal gyrus
 - 3: Superior temporal gyrus
 - 4: Inferior frontal gyrus
- 121-: Sho term memory conversion to long-term memory takes place in
 - 1: Hypothalamus
 - 2: Thalamus
 - 3: Hippocampus
 - 4: Amygdala

122-: Amacrine cells secrete _____

- 1: Acetylcholine
- 2: Serotonin
- 3: Histamine
- 4: Glutamate

123-: Tau proteins are most commonly associated with -

- 1: Alzheimer's disease
- 2: Alcoholism
- 3: Tuberculosis
- 4: Meningitis

124-: Progressive multifocal leukoencephalopathy spares

- 1: White matter of cerebrum
- 2: White matter of parietal lobe
- 3: White matter of periventricular area
- 4: Spinal cord and optic nerve

125-: Which of the following is not seen HIV involvement of CNS -

- 1: Perivascular giant cell
- 2: Vacuolar degeneration of post column
- 3: Microglial nodule formation
- 4: Inclusion bodies

126-: The conduction velocity of C fibers is about: M/second

1:2

- 2:5
- 3: 10
- 4: All

127-: Afferent of Cremasteric reflex includes

- 1: Genitofemoral nerve
- 2: Ilioinguinal
- 3: Ingiuino hypogastric
- 4: Pudendal nerve

128-: In stretch reflex, the stimulus is

- 1: Change in muscle length
- 2: Change in muscle tension
- 3: Pain in muscle
- 4: Cessation of blood supply

129-: Which of the following nucleus controls the circadian rhythm?

- 1: Supraoptic nucleus
- 2: Paraventricular nucleus
- 3: Suprachiasmatic nucleus
- 4: Premamillary nucleus

130-: A 30-year-old woman suffers massive trauma in an automobile accident and expires 4 days later of respiratory insufficiency. A horizontal section of the patient's brain at autopsy reveals numerous petechiae scattered throughout the white matter. Which of the following is the most likely explanation for this pathologic finding?

1: Fat embolism

- 2: Global ischemia
- 3: Occlusion of middle cerebral artery
- 4: Sepsis
- 131-: Pain sensitive intracranial structure is
 - 1: Piamater
 - 2: Pial vessels
 - 3: Duramater
 - 4: Brain matter

132-: A new born presents with swelling in base at the spine in which meninges herniates through bony defect cause is?

- 1: Defect in pedicle
- 2: Defect in body
- 3: Defect in fusion of veebral arches
- 4: Defect in transverse process

133-: Refractive Index of cornea is about

- 1: 1.3
- 2:1.33
- 3: 1.37
- 4: 1.42

134-: Pseudo rosettes are seen in all except

- 1: Neuroblastoma
- 2: Retinoblastoma

- 3: Medulloblastoma
- 4: Thecoma

135-: Most common site of medulloblastoma is

- 1: Medulla
- 2: Cerebellum
- 3: Cerebrum
- 4: Pineal gland

136-: Loss of dorsal column result in loss of

- 1: Knee jerk
- 2: Ankle jerk
- 3: Proprioception
- 4: Abdominal reflex

137-: "Nerve terminals release chemicals"-discovered by

- 1: Dale
- 2: Withering
- 3: Domagk
- 4: Langley

138-: Mark the true and false statement about brain tumors: 1. Most common primary brain tumor is astrocytoma 2. Radiation exposure & genetic abnormalities are the risk factors 3. MEN-2 and NF-1 increases the risk 4. Three cardinal symptoms are seizures, raised ICT & focal neurological deficit 5. Dexamethasone reduces peritumoral edema 6. Primary goals of surgery includes histologic diagnosis & reduction of mass effect 7. Anti-epileptics for tumors close to sensorimotor strip 8. Craniospinal irradiation for tumors associated with CSF spread

1: 1-T, 2-T, 3-T, 4-T, 5-T, 6-T, 7-F, 8-T 2: 1-T, 2-T, 3-F, 4-T, 5-T, 6-T, 7-T, 8-T 3: 1-F, 2-T, 3-F, 4-T, 5-T, 6-T, 7-T, 8-T 4: 1-T, 2-F, 3-T, 4-T, 5-F, 6-T, 7-T, 8-T

139-: Leptin is decreased in all except

- 1: Androgen
- 2: Exercise
- 3: Obesity
- 4: Starvation

140-: Middle meningeal vessel damage results in

- 1: Subdural haemorrhage
- 2: Extra dural hemorrhage
- 3: Subarachnoid hemorrhage
- 4: Intracerebral haemorrhage

141-: Prolactin release is inhibited by

- 1: Dopamine
- 2: Dobutamine
- 3: Sleep
- 4: Stress

142-: Thickening of axon leads to

- 1: Increased speed of conduction
- 2: Decreased speed of conduction

- 3: Increased absolute refractory period
- 4: Unmyelination

143-: What does the following demonstrate in a full term neonate?

- 1: Normal tone
- 2: Hypotonia
- 3: Hypertonia
- 4: Head control

144-: Light entering the eye first passes through _____ retinal layer?

- 1: Inner nuclear layer
- 2: Outer nuclear layer
- 3: Outer plexiform Layer
- 4: Retinal ganglion layer

145-: CT scan of a mentally retarded child with recurrent seizures and hemangioma. Diagnosis is?0

- 1: Epiloias
- 2: Encephalofacial angiomatosis
- 3: Louis Bar syndrome
- 4: Neuronal ceroid lipofuscinoses
- 146-: Homer Wright rosettes are seen in
 - 1: Neuroblastoma
 - 2: Nephroblastoma
 - 3: Ependymoma

4: Rhabdomyosarcoma

147-: A 16-year-old boy has a deep laceration of the left lower thigh. The bleeding is stopped. On physical examination, he has a loss of sensation in the lateral left foot and movement in the left foot. The wound is surgically repaired, including nerve, and he receives physical therapy. How long will it take him to regain the use of his left foot?

- 1: 1 day
- 2: 1 week
- 3:1 month
- 4:6 months

148-: Factors effecting nerve conduction are

- 1: Pressure
- 2: Hypoxia
- 3: Local anaesthetics
- 4: All

149-: Tuberous sclerosis is associated with All except

- 1: Ash leaf macule
- 2: Shagreen patch
- 3: Schwannoma
- 4: Adenoma sebaceum

150-: Most common intracranial malignancy is

- 1: Glioblastoma multiforme
- 2: Ependymoma
- 3: Choroid angioma

4: Pinealoma

151-: Most common site of brain metastasis is -

- 1: Cerebrum
- 2: Cerebellum
- 3: Medulla oblongata
- 4: Pons

152-: The fibre which is the thickest in human nerve is

- 1: Touch
- 2: Pain
- 3: Temperature
- 4: Proprioception

153-: Cerebral infarction is caused by

- 1: Toxoplasma
- 2: Mucor
- 3: Aspergillosis
- 4: All of the above

154-: A 7-year-old boy presents with a right-sided hemangioma and left-sided focal seizures. The most likely diagnosis is:

- 1: Neurofibromatosis
- 2: Incontinentia pigmenti
- 3: Hyper melanosis of Ito
- 4: Sturge-Weber syndrome

155-: Righting reflex is a

- 1: Cochlear reflex
- 2: Spinal reflex
- 3: Vistibular reflex
- 4: None of the above

156-: Panda sign:

- 1: Unilateral & sign of anterior cranial fossa fracture
- 2: Bilateral & sign of anterior cranial fossa fracture
- 3: Unilateral & sign of posterior cranial fossa fracture
- 4: Bilateral & sign of posterior cranial fossa fracture

157-: Which is the best marker for NTD?

1: aFP

2: hCG

- 3: Pseudocholinesterase
- 4: Inhibin-A

158-: Parasympathetic system originates from all of the following cranial nerves except

- 1: Oculomotor (III)
- 2: Facial (VII)
- 3: Trigeminal (V)
- 4: Vagus (X)

159-: Group B fibers are:

- 1: Sympathetic preganglionic
- 2: Sympathetic postganglionic
- 3: Parasympathetic postganglionic
- 4: All
- 160-: Dysmetria is seen in lesions of
 - 1: Basal ganglia
 - 2: Cerebellum
 - 3: Pons
 - 4: Cerebral coex

161-: Structurally, the type of neurons that act as sensory neurons are

- 1: Unipolar
- 2: Pseudonipolar
- 3: Bipolar
- 4: Multipolar

162-: Best predictor in the GCS:-

- 1: Eye opening
- 2: Motor response
- 3: Verbal response
- 4: All

163-: The principle that is the spinal cord dorsal roots are sensory and the ventral roots are motor is known as

1: Laplace's law

- 2: Bell-Magendie's law
- 3: Frank Starling's law
- 4: Weber-Fechner's law

164-: Functional disorder is-

- 1: Fugue
- 2: Conversion
- 3: Hypochondriasis
- 4: All of above

165-: Nuclear bag fibers

- 1: Tinner
- 2: Flower spray ending
- 3: Plate ending
- 4: Trail ending

166-: Shivering is controlled by

- 1: Medulla
- 2: Hypothalamus
- 3: Thalamus
- 4: Basal ganglia

167-: Owl eye inclusion bodies are seen in?

- 1: HSV
- 2: CMV
- 3: EBV

4: Hepatitis B

168-: Slow vibration sensation is mediated by

- 1: Merkel's disc
- 2: Ruffini's endogran
- 3: Pacinian capsule
- 4: Meissner corpuscles

169-: The appearance of cobweb formation in CSF indicates?

- 1: Pyogenic meningitis
- 2: Viral meningitis
- 3: Tuberculous meningitis
- 4: Fungal meningitis

170-: Appreciation of shape and size of an object placed in hand is lost in the lesion of

- 1: Tractus cuneatus
- 2: Tractus gracilis
- 3: Lateral spinothalamic tract
- 4: Spino reticular tract

171-: A 5-year-old male presented to AIIMS pediatrics OPD with a chief complaint of difficulty in climbing stairs and getting up from sitting position. There was history of maternal uncle having the same illness. On examination; there was pseudohypertrophy of calf muscle. Biopsy of the muscle was performed as shown below. What is your diagnosis?

- 1: Duchenne muscular dystrophy
- 2: Myotonic dystrophy
- 3: Facioscapulohumeral muscular dystrophy

- 4: Nemaline myopathy
- 172-: True about giant aneurysm
 - 1: Rarely rupture
 - 2: Most common in middle cerebral aery
 - 3: Pressure effect is often the presenting symptom
 - 4: Thromboembolic phase is present
- 173-: Neurological complications of meningitis include all of the following except:
 - 1: Cerebral hamartoma
 - 2: Subdural effusions
 - 3: Brain abscess
 - 4: Increased intracranial pressure

174-: Transaction at mid pons level results in

- 1: Asphyxia
- 2: Hyperventilation
- 3: Rapid and shallow breathing
- 4: Apneusis
- 175-: All of the following are the components of Cushing triad except:-
 - 1: Bradycardia
 - 2: Hypeension
 - 3: Pupillary dilatation
 - 4: Respiratory irregularity

- 176-: New born baby with lumbar mass. Diagnosis.
 - 1: Myelocele
 - 2: Lumbar meningomyelocele
 - 3: Spina bifida
 - 4: None

177-: Which of the following does not carry proprioceptive impulses?

- 1: Olivo cerebellar tract
- 2: Tecto cerebellar tract
- 3: Spino cerebellar tract
- 4: Cuneo cerebellar tract

178-: Nucleus involved in Alzheimer's disease is:

- 1: Nucleus Basalis of Meyne
- 2: Superior salivary nucleus
- 3: Ventromedial nucleus of thalamus
- 4: All of the above

179-: Dense middle cerebral aery (MCA) Sign in brain is seen in

- 1: Acute infarct
- 2: Subacute infarct
- 3: Subacute haemorrhage
- 4: Chronic infarct

180-: The most common nerve in the neck from which schwannoma arises -

1: Trigeminal

- 2: Accessory
- 3: Hypoglossal
- 4: Vestibular poion of the acoustic nerve

181-: The mechanism of hearing and memory, include all except

- 1: Changes in level of neurotransmitter at synapse
- 2: Increasing protein synthesis
- 3: Recruitment by multiplication of neurons
- 4: Spatial Reorganization of synapse

182-: According to Sherrington, the decerebrate rigidity is characterized by all except

- 1: Rigidity occurs in all muscles of body
- 2: Increase in rate of g motor neuron discharge
- 3: Decerebration produces no phenomenon akin to spinal shock
- 4: Increased excitability of motor neuron pool

183-: Hirano bodies seen in?

- 1: Rabbies
- 2: Alzheimer's disease
- 3: Pick's disease
- 4: Viral encephalitis
- 184-: Fine touch is lost in lesion of
 - 1: Anterior spinothalamic tract
 - 2: Lateral spinothalamic tract
 - 3: Dorsal column pathway

4: Pyramidal tract

185-: True about Migraine in children are all except

- 1: Preceding aura
- 2: Recurrent head ache lasting 2-72 hours per episode
- 3: Bilateral head ache

4: Daily head ache with vomiting upon walking in the morning, improves when the child is out of the bed

186-: The cell bodies of orexinergic neurons are present in

- 1: Locus ceruleus
- 2: Dorsal raphe
- 3: Lateral hypothalamic area
- 4: Hippocampus

187-: If blood supply to hypothalamus is interrupted through median eminence which hormone will have normal secretion?

- 1: GH
- 2: Prolactin
- 3: Vasopressin
- 4: TSH

188-: Effectiveness of blood brain barrier is by

- 1: Thick basement membrane
- 2: Tight arrangement of astrocytes
- 3: Tight endothelial function
- 4: Microglial cell

189-: Features of Alzheimer's disease are all except?

- 1: Narrowing of ventricles
- 2: Hirano bodies
- 3: amyloid
- 4: neuritic plaques

190-: Parvocellular pathway carries signal for detection of

- 1: Color contrast
- 2: Luminous contrast
- 3: Temporal frequency
- 4: Saccadic eye movements

191-: About Dandy-Walker syndrome, true is:

- 1: Mostly have hydrocephalus
- 2: Cystic expansion of 4th ventricle
- 3: Mid cerebellar hypoplasia
- 4: All are true

192-: The efferent fiber bundle of substantia nigra transmits dopamine to which area

- 1: Thalamus
- 2: Corpus striatum
- 3: Tegmentum of pons
- 4: Tectum of midbrain

193-: Which of the following nerve fibre is unmylenated?

- 1: A-aplha
- 2: A-beta
- 3: A-delta
- 4: C fiber

194-: Daily rhythm regulation

- 1: Dorsomedial
- 2: Ventromedial
- 3: Supraoptic
- 4: Suprachiasmatic

195-: What are the EEG waves record for parietooccipital region with subject awake & eye closed?

- 1: Alpha waves
- 2: Beta waves
- 3: Delta waves
- 4: Theta waves

196-: 5 year old child with posterior fossa mass. Biopsy from the mass shows the following rosettes.

- 1: Homer Wright rosette
- 2: Perivascular pseudorosette
- 3: Flexner Wintersteiner rosette
- 4: None

197-: All of the following are true about hemangioblastoma except?

1: Most common primary intra-axial tumor in the adult posterior fossa

- 2: Solid or cystic with a mural nodule
- 3: Polycythemia due to increased erythropoietin production
- 4: Premalignant condition

198-: The sensory system that has the most direct connection to brain is?

- 1: Taste
- 2: Smell
- 3: Vision
- 4: Hearing

199-: Phantom limb phenomenon is explained by

- 1: Law of projection
- 2: Webers law
- 3: Fechner's law of degeneration
- 4: Pascals law

200-: A 68-year-old obese woman (BMI =34 kg/m2) suffers a stroke and expires. Histologic examination of the brainat autopsy reveals extensive arteriolar lipohyalinosis and numerous Charcot-Bouchard aneurysms. Which of the following best accounts for the pathogenesis of these autopsy findings?

- 1: Atherosclerosis
- 2: Autoimmunity
- 3: Diabetes
- 4: Hypertension

201-: Na+ channel concentration is highest at

1: Dendrites

- 2: Soma
- 3: Axon hillock
- 4: Axon

202-: Basal ganglia is involved in which type of memory

- 1: Conditioning
- 2: Procedural
- 3: Explicit memory
- 4: None

203-: All are true about olfaction except

- 1: Key-lock system
- 2: Chemical mediated
- 3: Females have stronger sense of olfaction
- 4: Males have stronger sense of olfaction

204-: In the following histopathology of schwannoma, the arrow marked lesion shows?

- 1: Antony A with verocay body
- 2: Rosettes
- 3: Antony B with verocay body
- 4: Pallisading

205-: A 16-year-old boy with no prior medical problems has complained of headaches for the past 9 months. There are no abnormal findings on physical examination. CT scan of the head shows an enlargement of the lateral cerebral ventricles and third ventricle. A lumbar puncture is performed with normal opening pressure, and clear CSF is obtained, which has a slightly elevated protein, normal glucose, and no leukocytes. Which of the following intracranial lesions is most likely to cause these findings?

- 1: Aqueductal stenosis
- 2: Cerebral abscess
- 3: Cryptococcal meningitis
- 4: Ependymoma

206-: Onion bulb appearance on nerve biopsy is seen in -

- 1: Amyloid neuropathy
- 2: Diabetic neuropathy
- 3: CIDP
- 4: Leprous neuritis

207-: Roots valves of deep tendon reflexes

- 1: Biceps jerk C5, C6
- 2: Supinator jerk C7
- 3: Triceps Jerk C8
- 4: Ankle jerk L4, L5

208-: Flowing Candle Wax appearance seen in

- 1: Myositis ossificans
- 2: Leri Ossificans
- 3: Caffey's Disease
- 4: Parosteal Osteosarcoma

209-: A right-hand dominant person presents with Broca&;s Aphasia. This is likely to result from damage to

1: Left inferior frontal gyrus

- 2: Right inferior frontal gyrus
- 3: Left superior temporal gyrus
- 4: Right superior temporal gyrus
- 210-: Acetylcholine acting on nicotinic receptors produces
 - 1: Contraction of skeletal muscle
 - 2: Secretion saliva
 - 3: Bradycardia
 - 4: Pupillary constriction
- 211-: Kluver Bucy syndrome is due to the lesion in which of the following structure
 - 1: Amygdala
 - 2: Hippocampual area
 - 3: Hypothalamus
 - 4: Temporal lobe
- 212-: Hutchinson triad includes all except?
 - 1: Sabre skin
 - 2: Eight nerve deafness
 - 3: Upper incisor notch
 - 4: Interstial keratitis
- 213-: Key regulators of sleep are located in
 - 1: Hypothalamus
 - 2: Thalamus
 - 3: Putamen

4: Limbic coex

214-: All of the following are true about Broca's aphasia except

- 1: Lesion lies in frontal lobe
- 2: Fluency is impaired
- 3: Neologisms are absent
- 4: Repetitions is preserved

215-: A 49-year-old woman has had a severe headache for 2 days. On physical examination, she is afebrile and normotensive. Funduscopic examination shows papilledema on the right. One day later, she has the right pupillary dilation and impaired ocular movement. She then becomes obtunded. Which of the following lesions best explains these findings?

- 1: Chronic subdural hematoma
- 2: Frontal lobe abscess
- 3: Glioblastoma with edema
- 4: Hydrocephalus ex vacuo

216-: The clinical features of eye opening, best verbal response and best motor response in Glasgow coma scale of 7 will best fit as:

1: Eye opening to pain, making incomprehensive sounds and has flexion as best motor response

- 2: Spontaneous eye opening, confused and localizes pain
- 3: Eye opening to pain, confused and localizes pain
- 4: No response, incomprehensive sounds and extension as best motor response

217-: A 21-year-old woman incurs a blow to her head from a fall while mountain biking. She then has loss of consciousness for 5 minutes. On examination her deep tendon reflexes are diminished. A head CT scan 6 hours later shows no abnormalities. She recovers over the next week, with no neurologic deficits, but cannot remember this event. During the next

year she has irritability, headache, difficulty sleeping, trouble concentrating, and fatigue. Which of the following is the most likely consequence from her injury?

- 1: Arteriolosclerosis
- 2: Concussion
- 3: Hydrocephalus
- 4: Leukoencephalopathy

218-: While walking or standing posture is maintained by

- 1: Basal ganglia
- 2: Hypothalamus
- 3: Cerebellum
- 4: Amygdala

219-: A 47yrs old female c/o headache, changes in vision, seizures from past 2yrs. Now she has developed weakness . side of body. A CT scan was being ordered by the physician which showed well circumscribed mass abutting the skull in left hemisphere. On contrast enhanced MRI shows - What is the next step in management of this patient?

- 1: Surgical excision
- 2: Chemotherapy with Adriamycin
- 3: Cerebral angiography with tumor embolization
- 4: Preoperative radiation therapy followed by surgical excision

220-: A 60-year-old otherwise healthy woman Presents to her physician with a 3-week history of severe headaches. A contrast CT scan reveals a small, circular, hypodense lesion with ring like contrast enhancement. Which of the following is the most likely diagnosis?

- 1: High-grade astrocytoma
- 2: Metastatic lesion
- 3: Parenchymal Haemorrhage

4: Brain abscess

221-: The rod receptor potential differs from other sensory receptors in that it shows

- 1: Depolarization
- 2: Increased conductance of calcium
- 3: Increased conductance of sodium
- 4: Hyperpolarization

222-: Common primary sites of metastasis to the brain are-

- 1: Thyroid Ca
- 2: Tongue Ca
- 3: Lung Ca
- 4: Breast Ca

223-: An 8-month-old boy exhibits severe motor, sensory, and cognitive impairments. Brain biopsy shows a disease of white matter characterized by the accumulation of "globoid cells." Biochemical studies reveal an absence of galactocerebroside b-galactosidase activity. What is the appropriate diagnosis?

- 1: Alexander disease
- 2: Hurler disease
- 3: Krabbe disease
- 4: Metachromatic leukodystrophy

224-: Planning and programming of movements is done by which pa of brain

- 1: Vestibulocerebellum
- 2: Pre motor coex
- 3: Spinocerebellum

4: Basal ganglia

225-: After recovering from a viral respiratory tract infection, a 23-year-old female presents with weakness in her distal extremities that rapidly ascends to involve proximal muscles. Physical examination reveals absent deep tendon reflexes, and a lumbar puncture reveals the CSF protein to be increased, but very few cells are present. A biopsy of a peripheral nerve reveals inflammation and demyelination (radiculoneuropathy). What is the best diagnosis?

- 1: Brown-Sequard's syndrome
- 2: Charcot-Marie-Tooth disease
- 3: Guillain-Barre syndrome
- 4: Syringomyelia
- 226-: Difference between neuropraxia and neuroanatomy is
 - 1: EMG finding
 - 2: Axon integrity
 - 3: Nerve conduction studies in distal fragment
 - 4: All of the above

227-: True about A- delta fibers

- 1: Associated with slow pain
- 2: Associated with fast pain
- 3: Both
- 4: None

228-: Binswanger disease is a form of?

- 1: Hypertensive retinopathy
- 2: Hypertensive nephropathy

- 3: Hypertensive encephalopathy
- 4: subcortical leukoencephalopathy
- 229-: Diplegia means:
 - 1: Weakness of upper limbs
 - 2: Weakness of lower limbs
 - 3: Weakness of unilateral upper and lower limbs
 - 4: Weakness of the all four limbs
- 230-: Which of the following is the most common cause of congenital hydrocephalus?
 - 1: Craniosynostosis
 - 2: Intra uterine meningitis
 - 3: Congenital aqueductal stenosis
 - 4: Vein of Galen malformation

231-: A 40 year old lady is diagnosed to have brain tumor in frontal lobe. The lesion is characterized by focal necrosis surrounded by ring like enhancement

- 1: Glioblastoma multiforme
- 2: Oligodendroglioma
- 3: Ependymoma
- 4: Astrocytoma
- 232-: Which neural tube defect is shown here?
 - 1: Anencephaly
 - 2: Schizencephaly
 - 3: Lissencephaly

4: Cranioschisis

233-: A 35-year-old man with Down syndrome dies of acute lymphoblastic leukemia. Gross examination of the patient's brain at autopsy shows mild microcephaly and underdevelopment of the superior temporal gyri. Histologic examination would most likely show which of the following neuropathologic changes?

- 1: AA amyloidosis
- 2: Lewy bodies
- 3: Negri bodies
- 4: Neurofibrillary tangles

234-: Vasomotor centre of medulla is associated with

- 1: Acts with the cardiovagal centre to maintain B.P.
- 2: Independent of coicohypothalamic inputs
- 3: Influenced by baroreceptOrs hbt chemoreceptors
- 4: Essetially silent in sleep

235-: Amacrine cells secrete all except

- 1: Acetylcholine
- 2: GABA
- 3: Adrenaline
- 4: Glycine

236-: A 15-year-old boy presented with day dreaming and decline in school performance. The likely possibility is?

- 1: Atonic seizure
- 2: Myoclonic seizure
- 3: Typical absence seizure

- 4: Atypical absence seizure
- 237-: Function of basal ganglia include
 - 1: Emotions
 - 2: Skilled movements
 - 3: Coordination of movements
 - 4: Maintenance of equilibrium

238-: The defect in berry aneurysm is

- 1: Degeneration of internal elastic lamina
- 2: Degeneration of media
- 3: Deposition of mucoid material in media
- 4: Low grade inflammation of vessel wall

239-: A 72-year-old man has had poorly controlled hypertension for the past 20 years. Over the past day he has had a severe headache with nausea, followed by confusion, then convulsions. On examination he is afebrile, but his blood pressure is now 260/150 mm Hg. There is bilateral papilledema. Which of the following pathologic lesions is most likely to have developed in his brain during the past day?

- 1: Arteriolar fibrinoid necrosis
- 2: Cortical telangiectasia
- 3: Lacunar infarction
- 4: Putaminal hematoma

240-: Which one of the following is the description used for the term allodynia?

- 1: Absence of pain perception
- 2: Complete lack of pain sensation
- 3: Unpleasant sensation with or without a stimulus

4: Perception of an ordinarily non noxious stimulus as severe pain

241-: Middle meningel vessel damage results -

- 1: Subdural hemorrhage
- 2: Subarachnoid hemorrhage
- 3: Intracerebral hemorrhage
- 4: Epidural hemorrhage

242-: Cause of myasthenia gravis

- 1: Decreased release of Ach at NM junction
- 2: Loss of muscles fibers
- 3: Destruction of receptors by antibody
- 4: Destruction of receptors by autolysis

243-: Which enzyme protects the brain from free radical injury?

- 1: Myeloperoxidase
- 2: Superoxide dismutase
- 3: MAO
- 4: Hydroxylase

244-: In hippocampus EEG waves are

- 1: Alpha
- 2: Beta
- 3: Delta
- 4: Theta

245-: The first physiological response to high environmental temperature is

- 1: Sweating
- 2: Vasodilatation
- 3: Decreased heat production
- 4: Non-shivering thermogenesis

246-: All of the following are seen in Thymoma expect

- 1: Hyppogamma globinemia
- 2: Hyper albunemia
- 3: Red cell aplsia
- 4: Myasthenia gravis

247-: Which of the following types of nerve fibers carry pain?

- 1: A a
- 2: A b
- 3: A g
- 4: A d

248-: Worst prognosis memingioma is

- 1: Syncitial
- 2: Fibroblastic
- 3: Anplastic
- 4: Atypical

249-: Neurofibromatosis true all, except-

1: Autosomal recessive

- 2: Associated with cataract
- 3: Scoliosis
- 4: Multiple fibroma

250-: Which of the following statements about vasomotor centre (VMC) is true?

- 1: Independent of coiCohypothalamic inputs
- 2: Influenced by baroceptor signals but not by chemoreceptors
- 3: Acts along with the cardiovagal centre (CVC) to maintain blood pressure
- 4: Essentially silent in sleep

251-: Cushing phenomenon is

- 1: Low BP and high hea rate
- 2: High BP and hea rate
- 3: Low BP and low hea rate
- 4: High BP and low hea rate
- 252-: Most common site of glioblastoma multiforme is -
 - 1: CP angle
 - 2: Frontal lobe
 - 3: Brain stem
 - 4: Occipital lobe

253-: Which of the following is not useful in the management of status epilepticus?

- 1: Lorazepam
- 2: Phenytoin
- 3: Phenobarbitone

4: Carbamazepine

254-: A 55-year-old man has had a foot ulcer for 2 months that has not healed. Physical examination shows a 2-cm shallow, nonhealing ulceration of the left medial malleolus. There is a symmetric decreased sensation in the distal regions of the lower extremities. He has a history of multiple urinary tract infections resulting from difficulty in completely emptying the bladder. He is impotent. Which of the following pathologic findings is most likely to be present in the peripheral nerves?

- 1: Acute inflammation
- 2: Axonal neuropathy
- 3: Onion bulb formation
- 4: Segmental demyelination

255-: Kluver Bucy syndrome is due to the lesion in

- 1: Amygdala
- 2: Hippocampus
- 3: Hypothalamus
- 4: Temporal lobe

256-: pseudolaminar necrosis is a feature of

- 1: Cerebral infarct
- 2: Renal infarct
- 3: Hepatic infarct
- 4: Cardiac infarct

257-: Decrease reflex response after repetitive stimulation

- 1: Summation
- 2: Fatigue

- 3: Irradiation
- 4: Occlusion

258-: Cause (s) of secondary brain injury is/are-

- 1: Pyrexia and hypotension
- 2: Seizures and metabolic disturbance
- 3: Low cerebral perfusion pressure
- 4: All of the above

259-: Wallarian degeneration is seen in

- 1: Distal to injury
- 2: Proximal to injury
- 3: At both ends
- 4: In cell body (soma)

260-: Lisch's nodule's are seen in?

- 1: SLE
- 2: Systemic sclerosis
- 3: NF-1
- 4: Mixed connective tissue disorder

261-: A 30 years old patient of head injury was brought to the emergency. NCCT was performed and the findings are given below. All of the following are true about this condition except:

- 1: Aerial bleeding
- 2: Lucid interval is positive
- 3: Full recovery is rare even after the treatment

4: Immediate surgical evacuation should be done

262-: A 1.5 year old female is brought to the clinic with complaints of excessive enlargement of head, intolerance to feeds and severe malnourishment. MRI imaging was suggestive of a medulloblastoma causing obstructive hydrocephalus. Which of the following is an example of irrational management of the patient?

1: Craniotomy and sub-total excision of the tumour. Surgeon leaves the layer of the tumour adherent with colliculus

- 2: First ventriculoperitoneal shunt was done
- 3: CCNU and vincristine were given as chemotherapy
- 4: Radiotherapy 35-40 Gy was given to the whole craniospinal axis

263-: Hot water bottle relieves pain of abdominal spasm by

- 1: Stimulation of touch receptors
- 2: Stimulation of cholinergic fibers
- 3: Inhibition of cold receptors
- 4: Inhibition of heat receptors

264-: A 10-year-old girl develops ataxia and hydrocephalus. CT scan shows a midline cerebellar mass. Which of the following is the most likely diagnosis

- 1: Meningioma
- 2: Medulloblastoma
- 3: Neurofibroma
- 4: Astrocytoma

265-: Which is not an extrapyramidal tract?

- 1: Reticulospinal tract
- 2: Rubrospinal tract

- 3: Coicospinal tract
- 4: Tectospinal tract

266-: Glucose in CSF

- 1: 1/3 of blood glucose
- 2: 1/2 of blood glucose
- 3: 2/3 of blood glucose
- 4: None

267-: True about status marmoratus is:

- 1: Present in basal ganglia
- 2: Associated with asphyxia
- 3: Have a marbled appearance
- 4: All of the above

268-: A 10-year-old girl complains of persistent redness of the skin over her knuckles and around the nail beds. She describes easy fatigability and can rise only with difficulty from a squatting position. Physical examination reveals erythema over the knuckles and a heliotropic rash. A muscle biopsy shows infiltrates of B and T lymphocytes around blood vessels and in connective tissue of the perimysium. Elevated serum levels of which of the following would be expected in this patient?

- 1: Alkaline phosphatase
- 2: Alpha-fetoprotein
- 3: Carcinoembryonic antigen
- 4: Creatine kinase

269-: All of the following are predominant motor neuropathy except:

1: Acute inflammatory demyelinating polyradiculoneuropathy

- 2: Porphyric neuropathy
- 3: Lead intoxication
- 4: Arsenic intoxication

270-: Avoiding response is due to_____ lesion in the brain

- 1: Ipsilateral frontal lobe lesions
- 2: Contralateral frontal lobe lesions
- 3: Ipsilateral parietal lobe lesions
- 4: Contralateralparietal lobe lesions

271-: Which is not a peptide neurotransmitter?

- 1: Enkephalin
- 2: Substance P
- 3: Endorphin
- 4: Serotonin

272-: Dissoscited sensory loss is seen in

- 1: Synringomyelia
- 2: Viatmain B12 deficiency
- 3: Transverse myelitis
- 4: Pellagra

273-: Histopathological feature of HIV encephalitis is/are-

- 1: Negri body
- 2: Lewy body
- 3: Fibrillary plaque

4: Microglial nodules

274-: Which of the following is True regarding absence seizures?

- 1: Attack lasts for 60 to 90 seconds
- 2: Hyperventilation often precipitates an attack
- 3: Onset of disease in the first year of life
- 4: Attack followed by postictal confusion

275-: A 30-year-old woman has had gradually increased muscle weakness with myalgia for the past year. She now has difficulty getting up from a chair and climbing stairs. She does not have weakness in her hand muscles. Physical examination reveals a fine violaceous rash on her face, predominantly palpebral. Dusky, flat, red patches are present on her elbows, knees, and knuckles. Laboratory studies show serum creatine kinase of 620 U/L. A deltoid biopsy specimen is obtained, and on microscopic examination shows a mononuclear inflammatory cell infiltrate around small blood vessels and groups of atrophic myofibers at the periphery of fascicles. What mechanism is most likely responsible for her disease?

- 1: Antibody- and complement-mediated injury to the microvasculature
- 2: Expansion of CTG repeat sequences on chromosome 19q13.2
- 3: Mutation in a gene encoding for voltage-gated calcium channels
- 4: Myofiber injury by CD8+ cells directed against muscle antigens

276-: "Theta waves" are seen in

- 1: Stage 1 sleep
- 2: Stage 2 sleep
- 3: Stage 3 sleep
- 4: Stage 4 sleep

277-: Which of the following brain tumor arises from arachnoid villi

1: Medulloblastoma

- 2: Ependymoma
- 3: Meningioma
- 4: Glioma

278-: A six year old child managed by complete surgical removal of Craniopharyngioma developed multiple endocrinopathies. Which of following hormones should be replaced first?

- 1: Hydrocoisone
- 2: Growth hormone
- 3: Thyroxine
- 4: Prolactin

279-: A 55-year-old female presents with 3-years history of severe lancinating pain extending from left ear to her maxillary area. Pain is triggered by chewing and brushing teeth. She was treated by otolaryngologist for sinus infection a year ago and undergone multiple dental work and teeth extraction with transient or no improvement. The most likely diagnosis is:

- 1: Maxillary sinusitis
- 2: Trigeminal neuralgia
- 3: Maxillary osteomyelitis
- 4: Gradenigo's syndrome

280-: A 22-year-old primigravida had a fetal screening ultrasound study at 18 weeks showing a single large cerebral ventricle and fused thalami. On physical examination at birth at 36 weeks' gestation, the infant is small for gestational age and has multiple anomalies, including postaxial polydactyly of hands and feet, cyclopia, microcephaly, cleft lip and palate, and rocker-bottom feet. The infant dies 1 hour after birth. Which of the following CNS abnormalities best explains these findings?

- 1: Anencephaly
- 2: Arnold-Chiari II malformation
- 3: Dandy-Walker malformation

4: Holoprosencephaly

281-: A 75-year-old man has a history of transient attacks of loss of vision. The only abnormalities on physical examination are bruits over the carotids in the neck. Two days later he suddenly becomes hemiplegic and loses consciousness. He is rushed to the emergency room and a CT scan shows evidence of cerebral infarction. He is put on life support but dies 5 days later. At autopsy, there is an area of necrosis and microscopically these lesions are noted to have increased numbers of cells distributed around the central zone of necrosis. Which of the following cell types is most likely to have a phagocytic function in these lesions?

- 1: Arachnoidal cells
- 2: Astrocytes
- 3: Ependymal cells
- 4: Microglia

282-: Velocity of conduction for A- alfa nerve fibers is m/second

1: 80 2: 70 3: 90 4: 120

283-: Intranuclear inclusions of oligodendrocytes are seen in -

- 1: Creutzfelt Jakob disease
- 2: Polio
- 3: Japanese encephalitis
- 4: Progressive multiple encephalopathy

284-: All of the following are true about Arnold-Chiari malformation except:

1: Type I Chiari malformation is displacement of cerebellar tonsil into cervical canal

2: Type II Chiari malformation is associated with syringomyelia of cervical canal

3: Type II Chiari malformation is characterized by elongation of the 4th ventricle and kinking of the brainstem, with displacement of the inferior vermis, pons, and medulla into the cervical canal

4: Type I Chiari malformation is not associated with hydrocephalus

285-: Broca's area is concerned with

- 1: Word formation
- 2: Comprehension
- 3: Repetition
- 4: Reading

286-: Person wakes up with pain, paresthesia, tingling of the arms. He had slept with arm below the head. Which fibres are involved?

- 1: Type A fibres
- 2: Type B
- 3: Type C (pain)
- 4: Type C (postganglionic)

287-: Striate coex of brain controls

- 1: Speech
- 2: Vision
- 3: Balance
- 4: Audiotory

288-: Proprioceptions are carried by

1: A alpha fibers

- 2: A bita fibers
- 3: B fibers
- 4: C fibers

289-: Which of the following neural mechanisms is not involved in synaptic plasticity and learning?

- 1: Post-tetanic potentiation
- 2: Habituation
- 3: Desensitization
- 4: Long-term depression

290-: Lisch nodule is seen in?

- 1: Tuberous sclerosis
- 2: Sturge-Weber syndrome
- 3: Neurofibromatosis
- 4: Wilson disease

291-: A patient came with a hearing defect. His tuning fork tests results were - Weber test - sound from a vibrating tuning fork was louder than normal; Schwabach test - bone conduction was better than normal, and Rinne test - air conduction did not outlast bone conduction. Diagnosis is

- 1: Sensorial deafness in both ears
- 2: Conduction deafness in both ears
- 3: Normal hearing
- 4: Both sensorial and conduction deafness

292-: EEG in a male fully awake with eyes closed, electrodes placed at occipital position will record

1: a waves

2: ss waves

3: g waves

4: d waves

293-: In a myelinated nerve fiber, refractive period is 1/2500 seconds. What is the impulse rate?

- 1: 40 per sec
- 2: 250 per sec
- 3: 400 per sec
- 4: 2500 per sec

294-: Which receptor get stimulated in moderate cold?

- 1: CMR-1
- 2: VR1
- 3: VRL-1
- 4: VR2

295-: Wernicke's area is located in

- 1: Inferior frontal gyrus
- 2: Superior temporal gyrus
- 3: Inferior temporal gyrus
- 4: Cingulate gyrus

296-: Structure A is formed by which of the following tract?

1: Pontocerebellar

- 2: Olivocerebellar
- 3: Vestibulo cerebellar
- 4: Anterior spinocerebellar

297-: Joint position and viberation is carried by:

- 1: A-alfa
- 2: A-beta
- 3: Both
- 4: None

298-: A neonate with left to Right shunt & high cardiac output heart failure. CT Angiography of the neonate is shown. What is the diagnosis?

- 1: Sagittal venous thrombosis
- 2: Vein of Galen malformation
- 3: Intracranial hemorrhage
- 4: Arnold-Chiari malformation

299-: A 50-year-old man came to the ophthalmologist with the complaint of inability to read newspaper. His vision problem is likely due to inadequate contraction of which of the following structures?

- 1: Ciliary body
- 2: Dilator pupillae
- 3: Extraocular muscles
- 4: Suspensory ligaments of lens

300-: Which of the following has small representation in somatosensory area of cerebral coex?

1: Lips

- 2: Thumb
- 3: Tounge
- 4: Trunk

301-: In hypoxic damage to brain, which of the following is damaged most

- 1: Claustrum
- 2: Mamillary body
- 3: Layer of corpus callosum
- 4: Purkinje layer of cerebellum

302-: Melatonin is secreted by

- 1: Hypothalamus
- 2: Adrenal coex
- 3: Pineal gland
- 4: Melanocytes

303-: Neurofibrillary tangles are seen in?

- 1: Alzheimer's disease
- 2: Lewy body disease
- 3: Neurosyphilis
- 4: Shy dragger syndrome

304-: Adult human who are awake with mind wandering and the eyes closed. Most likely EEG pattern is

- 1: Alpha-rhythm
- 2: Beta rhythm

- 3: Theta rhythm
- 4: Delta waves

305-: Stimulation of proximal cut end of vagus causes

- 1: Apnea
- 2: | HR
- 3: |BP
- 4: #NAME?

306-: Inability to perform rapid alternating repeated movements is

- 1: Past pointing
- 2: Dysdiadochokinesia
- 3: Dysmetria
- 4: Dykinesia

307-: What is your diagnosis in this infant who was found to have hydrocephalus?

- 1: Dandy walker malformation
- 2: Chiari malformation
- 3: Vein of Galen malformation
- 4: Holoprosencephaly

308-: Ultrastructural finding in case of paraganglioma?

- 1: Deposition of glycogen
- 2: Enlarged mitochondria
- 3: Shrunken mitochondria
- 4: Dense core granules

- 309-: Unable to consolidate long-term memory
 - 1: Frontal
 - 2: Parietal
 - 3: Temporal
 - 4: Hippocampus

310-: The only neurons showing action potential are

- 1: Amacrine cells
- 2: Ganglionic cells
- 3: Cells of lateral geniculate body
- 4: Rods and cones

311-: Meissner&;s corpuscle are for

- 1: Touch
- 2: Temperature
- 3: Pressure
- 4: Proprioception

312-: Inheritance of Huntington's chorea-

- 1: AD
- 2: AR
- 3: XR
- 4: XD

313-: Rods and cones differ in all except

- 1: Signal transduction
- 2: Light sensitivity
- 3: Wavelength
- 4: Acuity

314-: Beta waveforms in electroencephalogram designate which of the following states of the patient

- 1: Deep Anaesthesia
- 2: Surgical Anaesthesia
- 3: Light Anaesthesia, eyes closed, relaxed
- 4: Awake/ale state

315-: The fibers from contralateral nasal hemiretina project to the following layers of the lateral geniculate nucleus

1: Layers 2,3,5 2: Layers 1,2,6 3: Layers 1,4,6 4: Layers 4,5,6

316-: A 47yrs old female c/o headache, changes in vision, seizures from past 2yrs. Now she has developed weakness . side of body. A CT scan was being ordered by the physician which showed well circumscribed mass abutting the skull in left hemisphere. On contrast enhanced MRI shows -. What is the next step in management of this patient?

- 1: Surgical excision
- 2: Chemotherapy with Adriamycin
- 3: Cerebral angiography with tumor embolization
- 4: Preoperative radiation therapy followed by surgical excision

317-: Satiety centre is located at

- 1: Ventromedial nucleus of hypothalamus
- 2: Dorsomedial nucleus of hypothalamus
- 3: Peritrigonal area
- 4: Lateral nucleus

318-: A 24-year-old woman has had episodes of numbness and tingling in both hands for 5 months. The problem is worse near the end of the day and makes it difficult for her to use the computer keyboard. The thumb and first two fingers are most affected. There is no pain or swelling, and she does not recall any trauma to the upper extremities. On physical examination, she has a positive Tinel sign and decreased sensation to light touch and pinprick over the palmar surface of both hands in the distribution of the first three digits. Thenar muscle atrophy is present. This neuropathy is most likely due to which of the following underlying causes?

- 1: Acute intermittent porphyria
- 2: Diabetes mellitus, type 2
- 3: Entrapment with compression
- 4: Systemic lupus erythematosus
- 319-: Pacemaker regulating the rate of respiration is
 - 1: Pneumotaxic centre
 - 2: Nucleus tractus solitarius
 - 3: Apneustic centre
 - 4: Pre-Botzinger complex

320-: Increase in threshold level on applying subthreshold, slowly rising stimulus is k/a

- 1: Adaptation
- 2: Accomodation
- 3: Refractoriness

4: Electrotonus

321-: Postganglionic fibers are:

- 1: Type c fibers
- 2: Type B fibers
- 3: Both
- 4: None

322-: A patient is able to recognise a person by name but not face. The lesion, in this case, is in

- 1: Frontal lobe
- 2: Occipital lobe
- 3: Post parietal region
- 4: Temporal lobe

323-: A metastatic carcinoma in the brain of an adult, most often comes from a primary in the:

- 1: Stomach
- 2: Ovary
- 3: Oral cavity
- 4: Lung

324-: Picket fence temperature seen in

- 1: Otic hydrocephalus
- 2: Lateral sinus thrombosis
- 3: Extradural abscess
- 4: Meningitis

- 325-: Ganglion of hay fever is
 - 1: Otic ganglion
 - 2: Ptery gopalatine ganglion
 - 3: Submandibular ganglion
 - 4: Geniculate ganglion

326-: All of the following hereditary conditions predispose to CNS tumors, except:

- 1: Neurofibromatosis 1 and 2
- 2: Tuberous sclerosis
- 3: Von Hippel landau syndrome
- 4: Xeroderma pigmentosum

327-: The following is an example of a primarily inhibitors amino acid

- 1: Glutamate
- 2: Aspaate
- 3: Glycine
- 4: Somatostatin

328-: Most common intracranial tumour is

- 1: Metastatic tumours
- 2: Neuroblastoma
- 3: Schannoma
- 4: Ependymoma
- 329-: Which is a cerebellar nucleus?

- 1: Caudate
- 2: Subthalamic
- 3: Globus pallidus
- 4: Dentate
- 330-: Rosenthal fibres are:
 - 1: Intranclear inclusions
 - 2: Intracytoplasmic inclusions
 - 3: Present extracellularly
 - 4: Part of cell membrane
- 331-: Perscualr lymphocytes and microglial nodules are seen in
 - 1: Multiple sclerosis
 - 2: CMV meningitis
 - 3: Bacterial meningitis
 - 4: HIV encephalitis

332-: In CSF examination, albuminocytologic dissociation occurs in cases of:

- 1: TB meningitis
- 2: Motor neuron disease
- 3: Guillain-Barre syndrome
- 4: Demyelinating disorder

333-: The raphe nuclei located in lower pons and medulla secrete the following neurotransmitter

1: Norepinphrine

- 2: Dopamine
- 3: Serotonin
- 4: Acetycholine

334-: Which is the first order neuron in optic pathway?

- 1: Bipolar cells
- 2: Ganglionic cells
- 3: Cells of lateral geniculate body
- 4: Astrocytes

335-: Multiple schwannomas are seen with

- 1: NF1
- 2: NF2
- 3: Noonan's syndrome
- 4: Tuberous sclerosis

336-: Injury to corpus striatum leads to

- 1: Chorea
- 2: Parkinsonism
- 3: Hemiballisimus
- 4: Athetosis

337-: Schwannoma, the marked area represents

- 1: Myxoid tissue
- 2: Antony A pattern Verocay bodies
- 3: Antony B pattern -Verucoy bodies

4: Antony C pattern

338-: Investigation of choice for hydrocephalus in infants:

- 1: Cranial USG
- 2: CT Scan
- 3: MRI
- 4: X-ray skull

339-: Transtentorial uncal heriniation causes all except:

- 1: Ipsilateral dilated pupils
- 2: Ipsilateral hemiplegia
- 3: Cheyne stokes respiration
- 4: Decoicate rigidity

340-: The receptors/buds responsible for carrying bitter taste sensation are situated

- 1: At the tip of the tongue
- 2: Just behing the tip
- 3: All the sides
- 4: At the posterior aspect

341-: The neurotransmitter in the autonomic ganglia is

- 1: Adrenaline
- 2: Noradrenaline
- 3: Acetylcholine
- 4: Nicotine

342-: Rods and cones differ in all, except

- 1: Signal transduction
- 2: Light sensitivity
- 3: Wavelength
- 4: Acuity

343-: Transducin is a protein found in

- 1: Glomerulus
- 2: Retina
- 3: Skeletal muscle
- 4: Adrenal medulla

344-: What is the histological appearance of brain in Creutzefeldt Jakob disease

- 1: Neuronophagia
- 2: Spongiform change in brain
- 3: Microabscess
- 4: Demylination

345-: A 33-year-old woman, G3, P2, had two previous pregnancies that resulted in normal term infants, but now she gives birth at 34 weeks' gestation to a stillborn fetus. On examination, the fetus is observed to be hydropic. Autopsy of the fetus shows marked organomegaly, and the brain has extensive necrosis in a periventricular pattern, with focal calcifications. What congenital infection is most likely to produce these findings?

- 1: Cytomegalovirus
- 2: Group B Streptococcus
- 3: Herpes simplex virus
- 4: HIV

346-: The total volume of CSF is

- 1: 50 ml
- 2: 100 ml
- 3: 150 ml
- 4: 275 ml

347-: Pathological features of brain in AIDS are all except

- 1: Perivascular giant cell invasion
- 2: Microglial nodules
- 3: Vasculitis
- 4: Temporal lobe infarction

348-: A 10-year-old boy has had persistent headaches for the past 3 months. On physical examination, he is afebrile. He has an ataxic gait and dysdiadochokinesia. CT scan of the head shows a 4-cm cystic mass in the right cerebellar hemisphere. Cerebral lateral ventricles are enlarged. A lumbar puncture is done. The CSF protein concentration is elevated, but the glucose level is normal. Neurosurgery is performed, and the mass is removed and sectioned. On gross examination, the mass is a cyst filled with gelatinous material. The cyst has a thin wall and a 1-cm mural nodule. Microscopically, the mass is composed of cells that stain positive for glial fibrillary acidic protein (GFAP) and have long, hair-like processes. What is the most likely diagnosis?

- 1: Astrocytoma
- 2: Ependymoma
- 3: Hemangioblastoma
- 4: Medulloblastoma

349-: After how many days does Delayed ischemic neurological deficit occurs in SAH?

- 1:1
- 2: 7

3: 15

4: 30

350-: A 42-year-old woman presents to the emergency depament at 8 PM, mildly somnolent and complaining of the "worst headache of her life," which began at 6 AM on the same day, awakening her. She took acetaminophen (Tylenol) twice during the day, with some relief. At noon she staed to have nausea with vomiting, and by 3 PM she had developed right arm and leg weakness. She denies any head trauma. Which of the following is the most likely diagnosis

- 1: Epilepsy
- 2: Hypoglycemia
- 3: Transient ischemic attack
- 4: Subarachnoid hemorrhage

351-: Vomiting centre is situated in the

- 1: Hypothalamus
- 2: Amygdala
- 3: Rons
- 4: Medulla

352-: Which of the following receptors are missing from the surface of the intestine?

- 1: Temperature
- 2: Pressure
- 3: Distension
- 4: Touch

353-: Tau protein seen in -

1: Alzhiemer's disease

- 2: Lewy body dementia
- 3: Picks disease
- 4: Amylodosis

354-: The principal polypeptide that increases food intake are all except

- 1: Neuropeptide Y
- 2: Leptin
- 3: Orexin A
- 4: Ghrelin

355-: Na &/or K+ is/are involved in mechanism of action of which of the following receptor(s)?

- 1: Dopamine
- 2: Nm receptor
- 3: Nn receptor
- 4: All of the above

356-: Which of the following responses in an infant is corresponding to verbal response of "speaking inappropriate words" in adults?

- 1: Moans to pain
- 2: Cries, irritable
- 3: Cries to pain
- 4: None of the above

357-: Neurotransmitter implicated in pleasure-seeking behavior

- 1: Dopamine
- 2: Serotonin

3: Nor epinephrine

4: GABA

358-: All of the following are true about Primary CNS Lymphoma except:

- 1: Most common type in immunocompetent patients is DLBCL
- 2: Glucocoicoids should be given before biopsy to reduce the risk of edema
- 3: Stereotactic biopsy is necessary for histologic diagnosis
- 4: High-dose methotrexate is used for the treatment

359-: The most common site of hypeensive intracranial hemorrhage is:

- 1: Putamen
- 2: Midbrain
- 3: Medulla
- 4: Cerebrum

360-: Function of basal ganglia

- 1: Temperature regulation
- 2: Planning & programming of movement
- 3: Gross motor activity
- 4: Equilibrium

361-: What will be the effect on respiration if a transaction is made between pons and medulla?

- 1: Apnoea
- 2: Irregular and gasping
- 3: No effect

4: Slow and deep

362-: A 65-year-old woman with a history of breast cancer and a recent melanoma presents to the emergency room following a tonic-clonic seizure. Blood chemistry values are within normal limits. There is no history of drug or alcohol use. MRI of the brain shows bilateral cerebral edema and a cystic, frontal lobe lesion. Frozen section obtained from a CT-guided biopsy reveals a hemorrhagic nodule of neoplastic cells. Immunohistochemical stains for which of the following antigens would be most helpful in making your diagnosis definitive for melanoma?

- 1: Alpha-fetoprotein
- 2: HMB-45
- 3: Human chorionic gonadotropin
- 4: Neuron-specific enolase

363-: Weber's syndrome occurs due to lesions in the

- 1: Pons
- 2: Midbrain
- 3: Medulla oblongata
- 4: Cerebellum

364-: Musculocutaneous nerve pierces which one of the following muscle?

- 1: Brachialis
- 2: Corachobrachialis
- 3: Biceps muscle
- 4: Brachioradialis

365-: Features of Alzheimer&;s disease are all Except

1: Narrowing of ventricles

- 2: Hirano bodies
- 3: Amyloid
- 4: Neuritic plaques

366-: Signs of increased intracranial tension are all except:

- 1: Tachycardia
- 2: Papilledema
- 3: Headache
- 4: Seizures

367-: The intracranial tumor most likely to be encountered in a middle-aged man with the acquired immunodeficiency syndrome (AIDS) is:

- 1: Glioblastoma multiforme
- 2: Ependymoma
- 3: Meningioma
- 4: Lymphoma

368-: A patient present with unilateral painful ophthalmoplegia. Imaging revealed an enlargement of cavernous sinus on the affected side. The likely diagnosis is:

- 1: Gradenigo syndrome
- 2: Cavernous sinus thrombosis
- 3: Tolosa-Hunt syndrome
- 4: Orbital Pseudotumor

369-: A child is suffering from dry skin and is mentally retarded-diagnosis -

- 1: Vit A deficiency
- 2: Crebral palsy

- 3: Hypothyroidism
- 4: All above

370-: The blobs of the visual coex are associated with

- 1: Ocular dominance
- 2: Orientation
- 3: Color processing
- 4: Saccadic eye movements

371-: Disassociative sensory loss is seen with :

- 1: Syringomyelia
- 2: Spinal Metastasis
- 3: Spinal neurofibroma
- 4: Tabes dorsalis

372-: Neurotensinoma causes-

- 1: Cyanosis
- 2: Hypeension
- 3: Hyperkalemia
- 4: None
- 373-: Section of the vagus nerve results in
 - 1: Increased rate of respiration
 - 2: Decreased depth of respiration
 - 3: Irregular breathing patterns
 - 4: Increases in breath holding time

374-: J receptors are found in which of the following?

- 1: Pulmonary Interstitium
- 2: Alveolar capillaries
- 3: Terminal bronchiole
- 4: Respiratory muscles

375-: All of the following are true about meningocele except:

- 1: Spinal cord is usually normal and assumes a normal position in the spinal canal
- 2: Most meningoceles are well-covered with skin and pose no threat to the patient
- 3: Brilliantly transilluminant
- 4: Immediate surgical treatment is required to prevent meningitis in all patients
- 376-: True about decoicate rigidity?
 - 1: Removal of cerebral coex and basal ganglia
 - 2: Flexion of lower limbs & extension of upperlimbs
 - 3: Rigidity is less pronounced than decerebrate rigidity
 - 4: None of the above
- 377-: Berry aneurysm Defect lies in
 - 1: Degeneration of internal elastic lamina
 - 2: Degeneration of media / muscle cell layer
 - 3: Deposition of mucoid material in media
 - 4: Low grade inflammation of vessel wall

378-: MacEwen sign is seen in:

- 1: Hydrocephalus
- 2: Encephalitis
- 3: Meningitis
- 4: Microcephaly

379-: Febrile seizure prophylaxis is recommended in all of the following except:

- 1: 3 or more febrile seizures in 6 months
- 2: 6 or more febrile seizures in 1 year
- 3: Febrile seizures lasting more than 30 minutes
- 4: Febrile seizures requiring pharmacotherapy to control seizures.

380-: Osmoreceptors are located in

- 1: Supraoptic nuclei
- 2: Paraventricular nuclei
- 3: Anterior hypothalamus
- 4: Lateral hypothalamus

381-: Most common CNS tumor associated with NF-1 is?

- 1: Optic nerve glioma
- 2: Meningioma
- 3: Medulloblastoma
- 4: Ependymoma

382-: A 76-year-old man is admitted to the hospital for evaluation of progressive memory loss and disorientation. The pupils are small but react normally to light. Muscle tone is normal. A lumbar puncture returns clear, colorless CSF under normal pressure. An electroencephalogram shows diffuse slowing. A CT scan of the brain reveals moderate atrophy. Which of the following is the most likely diagnosis?

- 1: Alzheimer disease
- 2: Creutzfeldt-Jakob disease
- 3: Glioblastoma multiforme
- 4: Huntington disease

383-: . Red cones in fovea are sensitive to which wavelength

- 1: 460nm
- 2: 480nm
- 3: 520nm
- 4: 560nm

384-: In transection at pontomedullary junction, respiration is maintained with slight irregularity. It is due to

- 1: Pre- Botzinger complex
- 2: Pneumotaxic centre
- 3: Apneustic Centre
- 4: Dorsal respiratory group

385-: What will happen if one side of auditory coex is removed?

- 1: Total hearing loss
- 2: Mild decrease in hearing
- 3: Decreased sound localization
- 4: Decreased sound interpretation

386-: Which is the pathognomic feature of Alzheimer's disease?

1: Lewy bodies

- 2: Pick bodies
- 3: Ballooned neurons
- 4: Plaque and tangles

387-: False regarding papillae of the tongue

- 1: Fungiform papillae at tip
- 2: Circumvallate papillae at base
- 3: Foliate papillae at back edge
- 4: Filiform papillae have taste buds at tip

388-: In a premature baby with convulsion after 2 days of birth, first investigation to be done is:

- 1: Transcranial USG
- 2: MRI
- 3: Skull radiography
- 4: CT skull
- 389-: Not a direct effect of Ach
 - 1: Decrease BP
 - 2: Increase contraction of hea
 - 3: Decrease hea rate
 - 4: Decrease conduction

390-: All of the following statements about neural cells are true except

- 1: The human CNS contains about (10)11 neurons
- 2: Ependymal cells are involved in phagocytic functions

3: Both

4: None

391-: Ventero lateral cordotomy for relief of pain in right lower limb due to cutting

- 1: Left ventral spinothalamic tract
- 2: Left lateral spinothalamic tract
- 3: Right ventral spinothalamic tract
- 4: Right lateral spinothalamic tract

392-: In which of the following is blood flow not increased in REM sleep?

- 1: Primary visual coex
- 2: Anterior cingulate coex
- 3: Pons
- 4: Amygdala

393-: A right-sided disc herniation at the L5-S1 level typically may cause:

- 1: Low back pain and right sciatica
- 2: Weakness of dorsiflexion of the right foot
- 3: A preserved right ankle jerk

4: Diminution of sensation over the medial aspect of the right foot, including the great toe

394-: Tuft of hair over the lumbosacral region in a newborn is suggestive of:

- 1: Spina bifida occulta
- 2: Sinus tract
- 3: Tumor

4: Any of the above

395-: Histologic sections from a mass originating from the meninges would most likely reveal

- 1: Antoni A areas and rare Verocay bodies
- 2: A whorled pattern and rare psammoma bodies
- 3: Endothelial proliferation and serpentine areas of necrosis
- 4: "Fried-egg" appearance of tumor cells

396-: The rod receptor potential differs from other surface receptors in that it shows _____?

- 1: Depolarization
- 2: Decreased negativity
- 3: Increased conductance of Sodium
- 4: Hyperpolarization

397-: In humans the Auditory receptors act by i jH the phenomenon of 'Masking&;

- 1: All or none Low
- 2: Relative or absolute refractoriness
- 3: Beneficial effect
- 4: Post-tetanic potentiation

398-: Most common CNS neoplasm in HIV patient -

- 1: Meduloblastoma
- 2: Astrocytoma
- 3: Primary CNS lymphoma
- 4: Ependymoma

399-: Management of raised ICP are all except:-

- 1: Hypothermia
- 2: Hypercapnia
- 3: Decompressive craniectomy
- 4: Barbiturate

400-: Postganglionic fibers are example of:

- 1: Type C fibers
- 2: Type A
- 3: Type B
- 4: All

401-: Which is the prognostic scoring system for head injury in children?

- 1: CCS
- 2: AUDIT
- 3: Injury severity score
- 4: Pediatric Trauma Score

402-: An 18-year-old man suffers massive trauma in a motorcycle accident. A CT scan shows multiple intracerebral hemorrhages. The patient expires after 6 months in a coma. At autopsy, there are cystic cavities within the frontal and temporal lobes, corresponding to the areas of prior hemorrhage. These cavities were formed in large measure due to the phagocytic activity of which of the following cell types?

- 1: Astrocytes
- 2: Endothelial cells
- 3: Microglial cells
- 4: Neutrophils

403-: Alzheimer's disease - associated chromosome is -

1:2

- 2:6
- 3:12
- 4: 19

404-: All of the following are true about diffuse axonal injuries except:

- 1: Injuries to axons by shearing force
- 2: Most common location is lobar white matter at the junction of grey and white matter
- 3: Associated with raised ICT in all the cases
- 4: MRI is investigation of choice

405-: The nucleus involved in Alzheimer's disease is:

- 1: Basal nucleus of Meyernet
- 2: Raphe nucleus
- 3: Superior salivary nucleus
- 4: Basal lobe of cerebellum

406-: Which of the following statements is true about presynaptic inhibition?

- 1: It results due to failure of the action potential to reach the synapse
- 2: It occurs due to hyperpolarisation of presynaptic membrane
- 3: It occurs due to inhibition of release of neurotransmitter from presynaptic terminal
- 4: It occurs due to blockade of neurotransmitter receptors

407-: True about primary CNS lymphoma -

- 1: Reticulin staining is done
- 2: Essentially B cell type
- 3: Have an association with EBV
- 4: Indolent disease with good prognosis

408-: Medulloblastoma exclusively occurs in the:-

- 1: Medulla
- 2: Cerebellum
- 3: Cerebral hemisphere
- 4: Spinal cord

409-: Salivary centers are located in

- 1: Spinal cord
- 2: Medulla
- 3: Hypothalamus
- 4: Cerebellum

410-: Lesions of the lateral cerebellum cause all of the following, except

- 1: Incoordination
- 2: Intention tremors
- 3: Resting tremors
- 4: Ataxia

411-: Which are the purely depolarizing cells in the optic pathway

- 1: Amacrine cells
- 2: Rods and cones

- 3: Bipolar cells
- 4: Horizontal cells

412-: Alpha waves are typically seen in which of the following states (2018)

- 1: Deep sleep
- 2: Relaxed awake
- 3: Awake ale
- 4: Highly focused

413-: Locomtor ataxia a late manifestation of syphilis due to parenchymatous involvement of the spinal cord is called

- 1: General paralysis of insane
- 2: Tabes dorsalis
- 3: Meningo vascular syphilis
- 4: Syphilitic amyotraphy

414-: Planning and programming of movements is the function of which pa of cerebellum

- 1: Vestibulocerebellum
- 2: Flocculonodular lobe
- 3: Spinocerebellum
- 4: Neocerebellum

415-: All of the following are true about medulloblastoma except:

- 1: Occur predominantly in children
- 2: Most common site is Vermis

3: Carmustine and vincristine are used for recurrences and in children <3 years to avoid radiation therapy

- 4: Radiotherapy is the main treatment modality
- 416-: CSF is formed by
 - 1: Arachnoid villi
 - 2: Venous plexus
 - 3: Choroidal plexus
 - 4: Subformical nucleus

417-: Evacuation of the urinary bladder and stool with profuse sweating is a feature of

- 1: Mass reflex
- 2: Positive suppoive reaction
- 3: labyrinthine righting reflex
- 4: Stretch reflex
- 418-: Destruction of anterior cerebellum in a decerebrate animal leads to
 - 1: No effect on rigidity
 - 2: Increased flexor muscle tone
 - 3: Increased rigidity alpha motor neurons
 - 4: Decrease in rigidity

419-: A baby is born with fused eyes, single nasal chamber and undeveloped callosum. What is diagnosis?

- 1: Holoprosencephaly
- 2: Schizencephaly
- 3: Plagiocephaly
- 4: Brachycephaly

420-: A 45-year-old man with AIDS is admitted to the hospital with a productive cough, fever, and night sweats. An X-ray film of the chest shows an ill-defined area of consolidation at the periphery of the right middle lobe and mediastinal lymphadenopathy. A sputum culture grows acid-fast bacilli. The patient develops severe headache and neck rigidity. Which of the following brain areas is most likely affected by this patient's infection?

- 1: Base of the brain
- 2: Cerebellum
- 3: Hippocampus
- 4: Periventricular white matter

421-: Multiple schwannomas are seen with?

- 1: NF1
- 2: NF2
- 3: Noonan's syndrome
- 4: Tuberous sclerosis

422-: Most common cause of brain metastasis is?

- 1: Carcinoma lung
- 2: Prostate cancer
- 3: HCC
- 4: Seminoma
- 423-: Agnosia is caused by lesion of
 - 1: Representative hemisphere, left
 - 2: Categorial hemisphere, left
 - 3: Representative hemisphere, right
 - 4: Categorial hemisphere, right

424-: Salutatory conduction refers to all of the following except

- 1: It is a rapid process
- 2: Jumping of depolarization from node to node
- 3: Current flow through myelin in negligible
- 4: The depolarization travels in opposite directions

425-: A 60 years old patient was brought to the emergency after A. NCCT head was performed and the findings are given below. All of the following are true about this condition except:

- 1: Blood collects between dura and arachnoid
- 2: Caused by disruption of coical veins
- 3: Evacuation should be done in all the cases
- 4: Associated with a significant primary brain injury

426-: Fine touch is detected by

- 1: Ruffini's nerve ending
- 2: Krausse's bulb
- 3: Pacinian corpuscle
- 4: Merkels disc
- 427-: Sympathetic stimulation causes
 - 1: Pupillary constriction
 - 2: Contraction of bladder detrusor
 - 3: Bronchial smooth muscle contraction
 - 4: Vasoconstriction of skin and mucus membranes

428-: In a 7 months old child diagnosed with H influenza meningitis, which of the following investigation should be done on follow up:

1: BERA

- 2: CECT Scan
- 3: MRI
- 4: X ray skull

429-: Craniopharyngioma arises from -

- 1: Pituitary stalk
- 2: Posterior pituitary
- 3: Pineal gland
- 4: Cerebellum

430-: Which of the following statements about myocardial oxygen demand is true?

- 1: Correlates with hea rate
- 2: Is directly propoional to external cardiac work
- 3: Is negligible when hea is at rest
- 4: Depends upon duration of systole

431-: A 58-year-old man has experienced worsening double vision and eyelid drooping, particularly toward the end of the day, for 1 month. He also has had difficulty chewing his food at dinner. He was diagnosed with Sjogren syndrome more than a decade ago. On physical examination, he has 5/5 motor strength in his extremities that decreases to 4/5 strength with repetitive movement. Administration of edrophonium restores muscle strength. There is no pain on palpation and no decrease in joint mobility. Which of the following laboratory findings is most likely to be reported for this patient?

- 1: Acetylcholine receptor antibody positivity
- 2: Anti-histidyl tRNA synthetase (anti-Jo-l) titer 1:512
- 3: Elevated serum creatine kinase level

4: Increased serum cortisol level

432-: Superior cerebellar peduncle carries the following fibres

- 1: Reticulocerebellar
- 2: Olivocerebellar
- 3: Cuneocerebellar
- 4: Dentate rubro thalamic tract

433-: Which of the following does not involve in repair after brain infarction

- 1: Microglia
- 2: Astrocyte
- 3: Fibroblast
- 4: Endothelium
- 434-: Postganglionic fibers are longer in
 - 1: Para sympathetic system
 - 2: Sympathetic system
 - 3: Bothe have same length
 - 4: It is variable
- 435-: Albumino cytologic dissoscition occurs in cases of
 - 1: Gullian Barre syndrome
 - 2: TB meningitis
 - 3: Motor Neuron disease
 - 4: Demyelinating disorder

436-: Main organ for biological clock is

- 1: Thalamus and pons
- 2: Thyroid and eyes
- 3: Cerebellum and medulla
- 4: Hypothalamus

437-: True about prions are all except -

- 1: Cannot be inherited
- 2: Can occur sporadically
- 3: Can be transmitted corneal transplant
- 4: Can be transmitted human growth hormone preparation

438-: A 10-year-old girl has exhibited muscular weakness since early childhood that has not worsened. She can ambulate unassisted but does not participate in strenuous physical activities. On examination, she has 4/5 motor strength in proximal muscles and 5/5 in distal muscles. There is no muscle pain on palpation. A biopsy of the deltoid muscle is obtained, and with Gomori trichrome stain, microscopic analysis shows subsarcolemmal aggregates of rod-shaped intracytoplasmic inclusions. Laboratory studies show a normal serum creatine kinase. Which of the following is the most likely form of muscle disease she has?

- 1: Channelopathy
- 2: Congenital myopathy
- 3: Glycogen storage disease
- 4: Inflammatory myopathy

439-: A 4-year-old girl developed clumsiness and difficulty ambulating over 6 months. On physical examination, she showed difficulty with balance while walking, dysarthria, poor hand coordination, absent deep tendon reflexes, and a bilateral Babinski sign. Light touch and vibratory sensation were greatly diminished. There was no muscular weakness. Over the next 5 years, she developed congestive heart failure from hypertrophic cardiomyopathy. She also had hyperglycemia. At autopsy, there was increased perinuclear iron deposition within cardiac myocytes. Which of the following genetic abnormalities with trinucleotide repeat expansions was most likely present in this patient?

- 1: CAG repeats in the huntingtin gene
- 2: CGG repeats in the FMR1 gene
- 3: CTG repeats in the dystrophila myotonia-protein kinase gene
- 4: GAA repeats in the frataxin gene

440-: Brodmann&;s area number for somatosensory area

- 1:4&6
- 2:3,1,2
- 3:5&7
- 4:16 & 18

441-: Herring body is seen in

- 1: Pars intermedia
- 2: Pineal gland
- 3: Pars nervosa
- 4: Adenohypophysis

442-: Which of the following condition is shown below?

- 1: Plexiform neurofibroma
- 2: Von Hippel Lindau syndrome
- 3: Marfan syndrome
- 4: Tuberous sclerosis

443-: Neonatal meningitis is caused by all except?

- 1: N. meningitis
- 2: E. coli
- 3: Listeria
- 4: Group B streptococci

444-: Neocerebellum is concerned with

- 1: Eye movements
- 2: Motor planning
- 3: Equilibrium
- 4: Motor execution

445-: Which chromosome mutation is associated with medulloblastoma?

- 1: Chromosome 16
- 2: Chromosome 17
- 3: Chromosome 18
- 4: Chromosome 19

446-: Number of neurons in enteric nervous system

- 1:100 million
- 2:10 million
- 3: I million
- 4: l lakh

447-: Uni directional flow of a nerve impulse is at

- 1: Synapse
- 2: Axon

3: Dendrites

4: Node of Ranvier

448-: Endolymph in ear equivalent to

1: ICF

2: Lymph

3: CSF

4: Blood

449-: Mean cerebral blood flow is

- 1: 1500 ml/min
- 2: 2000 ml/min
- 3: 756 ml/min
- 4: 250 ml/min

450-: Broca's area is presents in

- 1: Superior temporal gyrus
- 2: Precentral gyrus
- 3: Post central gyrus
- 4: Inferior frontal gyrus

451-: Typical feature of olfactory sensation is?

- 1: High quantitative detection
- 2: Stimulus required is very small
- 3: Non volatile substance can stimulate
- 4: Different areas sense different smells

452-: Which of the following is the most common cause of the neurological deterioration in case of cerebrovascular accident?

- 1: Rebleeding
- 2: Vasospasm
- 3: Embolism
- 4: Hydrocephalus

453-: Commonest cause of convulsions in a child with fever is:

- 1: Febrile convulsions
- 2: Meningitis
- 3: Epilepsy
- 4: Hypothyroidism

454-: The primary visual area is located in the walls of

- 1: Parieto-occipital sulcus
- 2: Superior temporal sulcus
- 3: Posterior pa of calcarine sulcus
- 4: Central sulcus

455-: A 30 years old male complains of loss of erection; he has low testosterone and high prolactin level in blood; what is the likely diagnosis:-

- 1: Pituitary adenoma
- 2: Testicular failure
- 3: Craniopharyngioma
- 4: Cushing's syndrome

456-: Reward centre is located in

- 1: Cerebellum
- 2: Amygdala
- 3: Hippocampus
- 4: Hypothalamus

457-: Which one is excitatory neurotransmitter?

- 1: Acetylcholine
- 2: Histamine
- 3: Melatonin
- 4: GABA

458-: Identigy the Rosette and Diagnosis.

- 1: Perivascular pseudorosette
- 2: Homer Wright rosette
- 3: True rosette
- 4: Flexner Wintersteiner rosette

459-: Which of the following is not permeable through the Blood Brain Barrier?

- 1: Water
- 2: Lipophilic drugs
- 3: Gas
- 4: Proteins

460-: Commonest cause of cerebral infarction is

1: Aerial thrombosis

2: Aeritis

- 3: Venous thrombosis
- 4: Embolism

461-: Rosenthal fibres are seen in-

- 1: Heat, shock proteins
- 2: Fibrillar proteins
- 3: GFAP
- 4: Globulins

462-: Spike in action potential of a nerve is due to which ions

- 1: K+
- 2: Na+
- 3: Cl-
- 4: All of the above

463-: During the dark phase of visual cycle, which form of vitamin A combines with opsin to make Rhodopsin

- 1: All trans-Retinaldehyde
- 2: All trans-retinol
- 3: 11-cis-Retinaldehyde
- 4: 11-cis-Retinol

464-: Which of the following are inactive during normal respiration?

- 1: Pre-Botzinger complex
- 2: Dorsal respiratory group of neurons (DRG)

- 3: Ventral respiratory group of neurons (VRG)
- 4: Pneumotaxic Centre

465-: Puff of smoke appearance on contrast CT angiography is seen -

- 1: Moya Moya Disease
- 2: Acrodermatitis Enterohepatica
- 3: Neuromyelitis Optica
- 4: Kasbach Meritt Syndrome

466-: Renshaw cell inhibition

- 1: Feedback inhibition
- 2: Feed forward inhibition
- 3: Feed forward facilitation
- 4: Feedback facilitation

467-: Semicircular canals are stimulated by

- 1: Gravity
- 2: Linear acceleration
- 3: Rotation
- 4: Sound

468-: Treatment of infantile spasm includes all except-

- 1: Corticosteroids
- 2: Phenytoin
- 3: ACTH
- 4: Vigabatrin

469-: A CSF/serum glucose ratio of <0.4 is highly suggestive of:

- 1: Bacterial Meningitis
- 2: Viral Meningitis
- 3: Carcinomatous Meningitis
- 4: None of the above

470-: Major neurotransmitter in afferents in nucleus tractus solitarius to regulate cardiovascular system is

- 1: Serotonin
- 2: Glutamine
- 3: Glycine
- 4: Norepinephrine

471-: Posterior pituitary secrets-

- 1: GH
- 2: TSH
- 3: ADH
- 4: FSH

472-: A 28-year-old man begins a program of vigorous body building. After 6 months, his biceps would be expected to exhibit which of the following adaptive cellular changes?

- 1: Hyperplasia of type I fibers
- 2: Hyperplasia of type II fibers
- 3: Hypertrophy of type I fibers
- 4: Hypertrophy of type II fibers

473-: A 2-week-old female infant has a head circumference of 40 cm (>98%), with a large, tense fontanelle and downward deviation of the eyes. She has been vomiting her formula and she is irritable. Common cause of her symptoms include all EXCEPT:

- 1: Intraventricular hemorrhage
- 2: Brain tumor
- 3: Meningitis
- 4: Aqueductal stenosis

474-: A 60-year-old man who had been treated for lung cancer com- plains of a rash on his chest and pain in his upper arms and calves. He cannot raise his arms and climbs the stairs only with difficulty. A muscle biopsy shows perivascular infiltrates of lymphocytes and plasma cells extending in between the muscle fibers. Immunofluorescence reveals immune complexes in the walls of intramuscular blood vessels. Which of the following is the most likely diagnosis?

- 1: Becker muscular dystrophy
- 2: Dermatomyositis
- 3: Lambert-Eaton myasthenic syndrome
- 4: Myasthenia gravis
- 475-: Which of the following hormone is released from hypothalamus?
 - 1: Coisol releasing hormone
 - 2: Neuropeptide
 - 3: Orexin
 - 4: Ghrelin

476-: A 50-year-old man presents with a "staggering" gait and "lightning pain" in his hands and legs. His past medical history is significant for an aortic aneurysm and aortic insufficiency. Neurologic examination reveals impaired senses of vibration, as well as touch and pain in the lower extremities. The patient subsequently dies of pneumonia. Autopsy discloses obliterative endarteritis of meningeal blood vessels and atrophy of the posterior columns of the spinal cord. What is the appropriate diagnosis?

- 1: Amyotrophic lateral sclerosis
- 2: Friedreich ataxia
- 3: Huntington disease
- 4: Tabes dorsalis

477-: Homer Wright rossete is seen in?

- 1: Neuroblastoma
- 2: Nephroblastoma
- 3: Ependymoma
- 4: Rhabdomyosarcoma
- 478-: Myelomeningocele most commonly involves which region of spine:
 - 1: Cervico-dorsal
 - 2: Dorsolumbar
 - 3: Lumbosacral
 - 4: Sacro-coccygeal

479-: The nucleus involved in Papez circuit is

- 1: Pulvinar
- 2: Intralaminar
- 3: VPL nucleus
- 4: Anterior nucleus of Thalamus

480-: Which does not pass from the superior cerebellar peduncle?

- 1: Dentatorubral tract
- 2: Anterior spinocerebellar tract

- 3: Posterior spinocerebellar tract
- 4: Tectocerebellar tract

481-: Inability to perform rapid alternating movement

- 1: Past-pointing
- 2: Dysdiadokokinesia
- 3: Dysmetria
- 4: None

482-: Management of epidural abscess is:-

- 1: Immediate surgical evaluation
- 2: Conservative management
- 3: Antibiotics
- 4: Aggressive debridement

483-: Membrane potential of hair cell is

- 1: -20mV
- 2: -40mV
- 3: -60mV
- 4: -80mV

484-: Most of the afferents from lateral geniculate body terminate in which layer of the visual coex

- 1: Layer 1
- 2: Layers 2 & 3
- 3: Layer 4

4: Layers 5 & 6

485-: Ventrolateral cordotomy for the relief of pain in the left lower limb is effective due to the cutting of

- 1: Left ventral spinothalamic tract
- 2: Left lateral spinothalamic tract
- 3: Right ventral spinothalamic tract
- 4: Right lateral spinothalamic tract

486-: A 62-year-old man with a history of poorly controlled hypertension and diabetes presents with sudden onset of weakness. His blood pressure is 200/115 mm Hg, and his pulse is 80 per minute. An X-ray film of the chest demonstrates cardiomegaly and pulmonary edema. A CT scan of the brain reveals intra-parenchymal hemorrhage. The patient becomes unresponsive and eventually expires. Which of the following was the most likely site for cerebral hemorrhage in this patient?

- 1: Basal ganglia/thalamic area
- 2: Frontal lobe cortex (cortical layers IV through VI)
- 3: Medulla
- 4: Midbrain

487-: Globus pallidus, putamen are present in

- 1: Pons
- 2: Basal ganglia
- 3: Thalamus
- 4: Cerebellum

488-: An 87-year-old woman is referred to you for evaluation of lower back pain. It is exacerbated by walking or prolonged standing and occa-sionally made better by bending over. Physical examination reveals a thin, elderly woman who walks with a cane with her lower back moderately flexed. Motor power in her lower extremities is normal, but she has impaired sensation to light touch and vibration below the L4 dermatome bilaterally. Deep tendon reflexes are normal in her upper extremities but absent in both lower extremities. You refer her for magnetic resonance imaging (MRI) of the lumbosacral spine. What will be the most likely finding on this study?

- 1: Lumbar spinal stenosis
- 2: A fracture of the odontoid process
- 3: A herniated L3-L4 disk causing unilateral compression of the L4 root
- 4: Spinal cord compression at the level of L1 veebra level

489-: Appetite is stimulated by all of the following peptides, except

- 1: Agouti Related Peptide (AGRP)
- 2: Melanocyte stimulating hormone (MSH
- 3: Melanin concentrating hormone (MCH)
- 4: Neuropeptide Y

490-: Spongiform changes in astrocytic tumor with neuronal loss is seen in?

- 1: Prion disease
- 2: Alzehimer's disease
- 3: Parkinson's disease
- 4: Amyloidosis

491-: The processing of sho-term memory to long-term memory is done in

- 1: Prefrontal coex
- 2: Hippocampus
- 3: Neocoex
- 4: Amygdala

492-: A child presented with mental retardation and spastic limbs with h/o perinatal distress. Diagnosis:

- 1: Cerebral palsy
- 2: HIE
- 3: Down's syndrome
- 4: Edward syndrome

493-: A 50-year-old woman who is a known diabetic and hypeensive has developed vesicular eruption on the trunk in T6 dermatome. Dermatologist confirmed it as Herpes Zoster. She is complaining severe pain and increased sensitivity to touch. Which of the following receptors sense sustained pressure?

- 1: Pacinian corpuscle
- 2: Merkel cells
- 3: Ruffini corpuscles
- 4: Meissner's corpuscles

494-: Lesions of lateral cerebellar coex causes all except

- 1: Incoordination
- 2: Intentional tremors
- 3: Akinesia
- 4: Ataxia

495-: A 12-year-old boy is rushed to the emergency room in a coma after falling from an upper story window of his home. MRI shows a subdural hematoma over the left hemisphere. What is the most likely source of intracranial bleeding in this patient?

- 1: Bridging veins
- 2: Charcot-Bouchard aneurysm
- 3: Internal carotid artery

4: Middle meningeal artery

496-: Second-order neuron

- 1: Optic nerve
- 2: MGB
- 3: LGB
- 4: Layer of retina

497-: Fibers more susceptible to hypoxia are:

- 1: Preganglionic
- 2: Postganglionic
- 3: Both
- 4: None

498-: Chang staging is used for:

- 1: Retinoblastoma
- 2: Medulloblastoma
- 3: Ewing's sarcoma
- 4: Rhabdomyosarcoma

499-: Events occurring in the past one week is an example of

- 1: Recent memory
- 2: Remote memory
- 3: Working memory
- 4: Delayed memory

500-: Autonomic fibres are rich in which type of neurotransmitter

- 1: Acetylcholine
- 2: Noradrenaline
- 3: GABA
- 4: Epinephrine

501-: Neuro fibrillary tangles is seen in

- 1: Parkinsonism
- 2: Alzheimer's disease
- 3: Multiple sclerosis
- 4: Perivenous encephalomyelitis

502-: Ascending pain pathway is inhibited in dorsal midbrain by

- 1: 5-HT (serotonin)
- 2: Noradrenaline 1
- 3: Substance P
- 4: Glutamate

503-: A 45-year-old man presents with weakness and wasting of the muscles of his right hand for 8 months. Physical examination shows fasciculations of the hand. The patient's speech is impaired, and 6 years later, he dies of respiratory insufficiency. Autopsy shows atrophy of ventral roots in the spinal cord. Which of the following is the most likely diagnosis?

- 1: Amyotrophic lateral sclerosis
- 2: Gerstman Straussler-Scheinker disease
- 3: Huntington disease
- 4: Multiple infarct dementia

504-: Substrate P, actions all except

- 1: Vasoconstriction
- 2: Pain transmission
- 3: Axon reflex
- 4: Peristalsis

505-: Which of the following are Chemoreceptors?

- 1: Rods
- 2: Cones
- 3: Taste buds
- 4: Muscle spindle

506-: All of following are neural tube defects except:

- 1: Myelomeningocele
- 2: Anencephaly
- 3: Encephalocele
- 4: Holoprosencephaly

507-: Coicospinal tract lesion leads to

- 1: Spaticity
- 2: Extensor plantar response
- 3: Exaggerated tendon reflexes
- 4: All of the above

508-: Slow conduction velocity is seen with which of the following nerve fibers

1: Preganglionic autonomic nerve fibers

- 2: Postganglionic autonomic nerve fibers
- 3: Sympathetic nerve fibers
- 4: Motor nerves
- 509-: Brain pa resistant to hypoxia is
 - 1: Cerebral coex
 - 2: Basal ganglia
 - 3: Thalamus
 - 4: Structures in brainstem
- 510-: Kuru plaques are seen in which of the following neurodegenerative disorders?
 - 1: Alzheimer disease
 - 2: Creutzfeldt-Jakob Disease (CJD)
 - 3: Parkinson disease (PD)
 - 4: Multiple system atrophy (MSA)
- 511-: All are true about brown sequard syndrome except
 - 1: Contralateral loss of joint sensation
 - 2: Ipsilateral loss of pain & temperature
 - 3: Segmental sign are bilateral
 - 4: All of the above
- 512-: Frequency of Beta waves
 - 1: 5-10 Hz
 - 2: 10-15 Hz
 - 3: 13-30 Hz

4: None

513-: A 6 years old boy has been complaining of headache, ignoring to see the objects on the sides for four months. On examination, he is not mentally retarded, his grades at school are good, and visual acuity is diminished in both the eyes. Visual chaing showed significant field defect. CT scan of the head showed suprasellar mass with calcification. Which of the following is the most probable diagnosis?

- 1: Astrocytoma
- 2: Craniopharyngioma
- 3: Pituitary adenoma
- 4: Meningioma

514-: The characteristics feature of a frontal lobe tumor is:

- 1: Abnormal gait
- 2: Aphasia
- 3: Distractibility
- 4: Antisocial behavior

515-: Which of the following is not a Sarcolemmal proteins?

- 1: Sarcoglycan
- 2: Dystrophin
- 3: Dystroglycan
- 4: Perlecan 1

516-: All the following are features of Pick's disease except:(2004)

- 1: Knife blade atrophy
- 2: Walnut brain
- 3: Ballooning degeneration

4: Hirano bodies

517-: An anterolateral cordotomy relieving pain in right leg is effective because it interrupts the

- 1: Left dorsal column
- 2: Left ventral spinothalmic tract
- 3: Left lateral spinothalmic tract
- 4: Right lateral spinothalmic tract

518-: M/c glial tumor-

- 1: Ependymomas
- 2: Astrocytoma
- 3: Meningioma
- 4: Neurofibroma

519-: Phagocytosis in brain is caused by

- 1: Astrocytes
- 2: Microglia
- 3: oligodendrocytes
- 4: Ependymal cells

520-: A child presented to the casualty with seizures. On examination an oval hypopigmented macules were noted on the trunk, along with sub-normal IQ. Probable diagnosis of the child is:

- 1: Neurofibromatosis
- 2: Sturge-Weber syndrome
- 3: Tuberous Sclerosis

4: Incontinentia Pigmenti

521-: Which of the following steps involved in formation of CSF?

- 1: Ultrafiltration and active secretion
- 2: Passive secretion
- 3: Active secretion and passive filtration
- 4: None

522-: Macrophage is CNS

- 1: Fibrous Astrocyte
- 2: Microglia
- 3: Oligodendrocyte
- 4: Protoplasmic astrocyte

523-: Hyperventilation of lungs is prevented by

- 1: Hering Breuer reflex
- 2: Irritation reflex
- 3: Cushing reflex
- 4: Bainbridge reflex

524-: 1 month old baby brought by the mother complaining of a mass on back associated with wetness and inability of both legs to move ever since birth. Possible diagnosis?

- 1: Pilonidal cyst
- 2: Spina bifida
- 3: Meningomyelocele
- 4: Sacrococcygeal teratoma

- 525-: Posterior column lesion which of the following is not affected
 - 1: Vibration
 - 2: Temperature
 - 3: Fine touch
 - 4: Crude sense

526-: Absence seizures are seen in?

- 1: Grand mal epilepsy
- 2: Myoclonic epilepsy
- 3: Petit mal epilepsy
- 4: Hyperkinetic child

527-: In which type of memory are basal ganglia involved?

- 1: Conditioning
- 2: Procedural
- 3: Explicit
- 4: None

528-: Widened neural foramina is frequently seen in:

- 1: Neurofibromatosis
- 2: Tuberous sclerosis
- 3: Sturge Weber syndrome
- 4: Klipple Fiel syndrome

529-: The fibers from contralateral nasal retina project to the following layers of lateral geniculate nucleus

1: 2,3,5 2: 1,4,6 3: 1,2,3 4: 4,5,6

530-: Midpontine section with bilateral vagotomy causes

- 1: Deep and slow breathing
- 2: Apneustic breathing
- 3: Irregular and gasping breathing
- 4: None of the above

531-: Which of the following is not seen in fetal alcohol syndrome?

- 1: Microcephaly
- 2: Macrocephaly
- 3: Holoprosencephaly
- 4: Thinning of corpus callosum
- 532-: Which of these is a neural tube defect?
 - 1: Spina bifida occulta
 - 2: Encephalocele
 - 3: Dermal sinus
 - 4: All of these are NTD

533-: Type of nerve fiber most susceptible to local anaesthetic

1: A

2: B

3: C

4: All are equally susceptible

534-: Dysmetria

- 1: Cerebellum
- 2: Cerebrum
- 3: Basal ganglia
- 4: Premotor coex

535-: The conversion of sho-term memory to long-term memory occurs in

- 1: Prefrontal coex
- 2: Neocoex
- 3: Hippocampus
- 4: Amygdala

536-: Which of the following is false about peripheral nerve injury?

- 1: Neuropraxia is irreversible
- 2: Epineurium is intact in axonotmesis
- 3: Neurotmesis is the most severe form of injury
- 4: Wellerian generation starts in axonotmesis

537-: Kernicterus is associated with:

- 1: Choreoathetoid cerebral palsy
- 2: Hearing abnormalities

- 3: Upward gaze palsy
- 4: All of the above

538-: All of the following are features of brain tumor except:-

- 1: Pin point pupil
- 2: Seizures
- 3: Headache
- 4: Focal neurological deficit

539-: Phagocytic cells in the CNS are

- 1: Oligodendrocytes
- 2: Schwanncells
- 3: Astrocytes
- 4: Microglial cells
- 540-: Pseudo tumour cerebri is caused by all except:
 - 1: Hypervitaminosis A
 - 2: Outdated tetracycline
 - 3: Nalidixic acid
 - 4: Digoxin
- 541-: Commonest intracranial tumour is?
 - 1: Astrocytoma
 - 2: Medulloblastoma
 - 3: Meningioma
 - 4: Secondaries

- 542-: Ganglion of tendons is an example of:
 - 1: Neural neoplasm
 - 2: Malformation
 - 3: Amyloid deposition
 - 4: Mucoid degeneration

543-: Knife edge pattern of neuronal atrophy is associated with which of the degenerative disease of the coex

- 1: Alzheimer's disease
- 2: Frontotemporal dementia
- 3: Pick's disease
- 4: Progressive supranuclear palsy

544-: Posture is maintained by

- 1: Crossed extensor reflex
- 2: Stretch reflex
- 3: Golgi tendon reflex
- 4: None
- 545-: Which of the following carcinoma most frequently metastasizes to brain
 - 1: Small cell carcinoma lung
 - 2: Prostate cancer
 - 3: Rectal carcinom
 - 4: Endometrial cancer

546-: Melatonin is secreted from which cells of pineal gland

- 1: Glial cells
- 2: Pinealocytes
- 3: Oncocytes
- 4: Zymogen cells

547-: The refractory power of eye is normally 59 diopters. Two-thirds of this is contributed by

- 1: Anterior surfaceofthe lens
- 2: Posterior surface of the lens
- 3: Anterior surface of the cornea
- 4: Aqueous humor and vitreous humor combined

548-: Medulloblastoma most commonly metastasize to

- 1: Lung
- 2: CSF
- 3: Liver
- 4: Bone

549-: Triple H therapy for subarachnoid hemorrhage consists of all except:-

- 1: Hypeension
- 2: Hypervolemia
- 3: Hemodilution
- 4: Hypothermia

550-: A 17-year-old male presents with 3-month history of headache, weight gain, decreased concentration, polyuria, and polydypsia. His headaches are mostly in morning

and involves the frontal region. On examination he was found to have bitemporal visual field defect and no facial hair. MRI scan revealed a suprasellar paially calcified cystic lesion with displacement of optic chiasm. The most likely pathology is:

- 1: Giant aneurysm of carotid aery
- 2: Pituitary macroadenoma
- 3: Glioblastoma multiforme
- 4: Craniopharyngioma

551-: A man loses his right hand in a farm accident, four years later, he has episodes of severe pain in the missing hand (phantom limb pain). A detailed PET scan study of his cerebral coex might be expected to show

1: Expansion of the right hand area in his right somatic sensory area I (SI)

2: Expansion of the right hand area in his left SI

3: Projection of fibre from neighboring sensory areas into the right hand area of his right SI.

4: Projection of fibers from neighbouring sensory areas into the right hand area of his left SI

552-: The vanity of mesencephalic brain vesicle is

- 1: Lateral ventricle
- 2: Third ventricle
- 3: Fouh ventricle
- 4: Cerebral aqueduct

553-: Circadian rhythm is regulated by

- 1: Dorsomedial
- 2: Ventromedial
- 3: Supraoptic

4: Suprachiasmatic

554-: Which of the following is true about medulloblastoma-

- 1: Radiosensitive tumor
- 2: Spreads through CSF
- 3: Surgical Rx not done
- 4: Occurs in young age group

555-: The representational hemisphere (cerebral) is better than the categorical hemisphere at

- 1: Language functions
- 2: Recognition of objects by their form
- 3: Understanding oprinted words
- 4: Mathematical calculation

556-: Sympathetic postganglionic neurotransmitter in sweat gland

- 1: Epinephrine
- 2: Nor- epinephrine
- 3: Serotonine
- 4: Acetylcholine

557-: Sleep spindles are seen in which stage

- 1: Stage 1
- 2: Stage 2
- 3: Stage 3
- 4: Stage 4

558-: The hyperkinetic features of the Huntington's disease are due to the loss of

- 1: Nigrostriatal dopaminergic system
- 2: Intrastriatal cholinergic system
- 3: GABA-ergic and cholinergic system
- 4: Intrastriatal GABA-ergic and cholinergic system

559-: Delta waves are seen in

- 1: Deep sleep
- 2: REM sleep
- 3: Awake state
- 4: Stage I NREM sleep

560-: A 36-year-old man who had been healthy all his life now has progressive, symmetric muscular weakness. A year ago, he noted weakness in the area of the head and neck, which caused difficulty with speech, eye movements, and swallowing. In the past year, the weakness in the upper and lower extremities has increased, and he can no longer stand, walk, or feed himself. His mental function remains intact. Which of the following cells is most likely being destroyed in this man?

- 1: Ependymal cell
- 2: Lower motor neuron
- 3: Microglial cell
- 4: Oligodendrocyte

561-: Which of the following is not a feature of spinal cord reflex?

- 1: Delay
- 2: Fatigue
- 3: Memory

4: Summation

562-: Most common site of occurrence of Craniopharyngioma is?

- 1: Infrasellar
- 2: Suprasellar
- 3: Posterior fossa
- 4: Nasopharyx

563-: Enamel like superstructure is seen in which CNS lesion

- 1: Craniopharyngioma
- 2: Pituatory tumor
- 3: Astrocytoma
- 4: Glioma

564-: All are true about Decerebrate posture EXCEPT

- 1: Exaggerated gamma motor neuron discharge
- 2: Reticulospinal tract is involved
- 3: Extension of both upper and lower extremity
- 4: Flexion of upper extremity and extension of lower extremity

565-: Sympathetic stimulation causes all except

- 1: Positive chronotropy
- 2: Erection
- 3: Bronchodilatation
- 4: Vasoconstriction

566-: During starvation, the non-protein RQ value is close to

1:1

2: 0.5

3: 0.25

4:0.75

567-: Ganglion cell order of neuron

1: 1st

2: 2nd

- 3: 3rd
- 4: 4th

568-: Which of the following receptor on the neuronal membrane that induces the development of glioma?

1: CD45 2: CD133 3: CD33

4: CD24

569-: Purkinje cells are inhibitory for

- 1: Deep cerebellar nuclei
- 2: Climbing fibers
- 3: Basket cell
- 4: Mossy fibers

570-: A 40yr old male presented with altered mental status, seizures and vomiting. He has no h/o fever, neck stiffness. On CECT and MRI ring enhancing lesion at gray white interface

is seen. General hygiene was poor and he has multiple dental caries. What is the next best step in management of this patient?

- 1: Urgent parenteral antibiotics
- 2: Placement of ICP monitor
- 3: Lumbar puncture
- 4: Craniotomy

571-: Visceral noxious stimuli is mediated by

- 1: A alpha
- 2: A bita
- 3: A y
- 4: C

572-: Associative learning

- 1: Associated with consciousness
- 2: Includes skills and habits
- 3: Relation of one stimulus to another
- 4: Facilitation of recognition of words

573-: The following is not myelinated

- 1: A
- 2: B
- 3: C
- 4: All

574-: Transection at mid pons level results in

- 1: Asphyxia
- 2: Hyperventilation
- 3: Rapid and shallow breathing
- 4: Apneusis

575-: Vagal stimulation causes the following effects except

- 1: Increase in intestinal secretion
- 2: Constriction of intestinal musculature
- 3: Relaxation of bronchial musculature
- 4: Fall in the blood pressure

576-: A 12-year-old boy develops fever, accompanied by occasional headaches, malaise, fatigue, and nausea a month after being bitten by a dog. One day later, he experiences episodes of rigidity, hallucinations, breath-holding, and difficulty swallowing because of uncontrollable oral secretions. Dr. Louis Pasteur is consulted. He writes: "The death of this child appearing to be inevitable, I decided, not without lively and sore anxiety, as may well be believed, to try the method which I had found constantly successful with dogs. Consequently, 60 hours after the bites was inoculated under a fold of skin with half a syringeful of the spinal cord of a rabbit. In the following days, fresh inoculations were made. I thus made 13 inoculations." The boy survives. Which of the following histologic findings in the brain of the dog is most likely to be present?

- 1: Multinucleate giant cells
- 2: Negri bodies
- 3: Perivascular lymphocytes
- 4: Pseudocysts with bradyzoites

577-: A 14-year-old girl is rushed to the emergency room after receiving a gunshot wound to the head and is pronounced dead on arrival. If this child died due to an immediate "blast effect" of the penetrating wound, the autopsy would likely show herniation of the tonsils of the cerebellum into which anatomic space?

1: Aqueduct of Sylvius

- 2: Central spinal canal
- 3: Foramen magnum
- 4: Foramen of Magendie

578-: Brodmann&;s area number for motor area

- 1:4&6
- 2: 1, 2, 3
- 3:5&7
- 4:16 & 18

579-: A child presents to the clinic with history of seizures and mental retardation. Clinical examination reveals multiple hypopigmented macules. What is the likely diagnosis?

- 1: Tuberous sclerosis
- 2: Neurofibromatosis
- 3: Sturge Weber syndrome
- 4: Linear epidermal nevus syndrome

580-: Cervical Synringomyelia All are seen except

- 1: Burning sensation in hands
- 2: hyperophy of abductor pollicis brevis
- 3: Extensor plantar response is present
- 4: Absent biceps refex
- 581-: Most common type of pathological changes seen in Rabies are
 - 1: Meningitis
 - 2: Cranial aeritis

- 3: Ventriculitis
- 4: Brain stem encephalitis

582-: What is/are not a feature(s) of the Encephalotrigeminal syndrome:

- 1: Rail track appearance on CT scan
- 2: Hemiatrophy of the brain
- 3: Convulsion
- 4: Empty sella

583-: Most common cerebellar tumor in children?

- 1: Astrocytoma
- 2: Medulloblastoma
- 3: Ependymoma
- 4: PNET

584-: A 48-year-old man with AIDS is admitted to the hospital with a fever of 38.7degC (103degF), persistent cough, and diarrhea. His CD4 cell count is less than 500/mL. The patient is started on broad-spectrum antibiotics. He has also experienced a recent decline in cognitive function. He is at increased risk of developing which of the following CNS neoplasms?

- 1: Ependymoma
- 2: Glioblastoma
- 3: Lymphoma
- 4: Medulloblastoma

585-: Which of the following statements about Dandy-Walker syndrome are true and which are false? 1 Most common posterior fossa malformation 2 Consists of a cystic expansion of 4th ventricle in the posterior fossa & midline cerebellar hypoplasia 3 Triad of Hypoplasia of vermis + Cephalad rotation of the vermian remnant & cystic dilatation of 4th ventricle

extending posteriorly + Small posterior fossa 4 Most common manifestation is Macrocephaly 5 Managed by shunting the cystic cavity

1: 1-T, 2-T, 3-T, 4-T, 5-T 2: 1-T, 2-T, 3-F, 4-T, 5-T 3: 1-T, 2-F, 3-F, 4-T, 5-T 4: 1-T, 2-T, 3-T, 4-F, 5-F

586-: Window of limbic system

- 1: Amygdala
- 2: Hypothalamus
- 3: Thalamus
- 4: Hippocampus

587-: A female neonate is noted at birth to have a gross deformity of her lower back. Examination of the subcutaneous lesion reveals disorganized neural tissue with entrapment of nerve roots. The parents of the neonate ask about the risks for similar birth defects in their future offspring. You mention that supplementation of the maternal diet can reduce the incidence of neural tube defects. What is this important dietary supplement?

- 1: Folic acid
- 2: Niacin
- 3: Thiamine
- 4: Vitamin B6

588-: Marker of neural tube defects is:

1: PAPPA

2: hCG

3: Estriol

4: Acetylcholinesterase

589-: According to Sherrington model of decerebrate rigidity is characterised by all except

- 1: Rigidity occurs all muscles of the body
- 2: Increased in the rate of discharge of the 'y' efferent neuron
- 3: Increased excitability of the motor neuron pool
- 4: Decerebration produces no phenomenon akin to spinal shock

590-: Small cystic lesions in the lenticular nucleus, thalamus, and internal capsule are most closely associated with

- 1: Hypeension
- 2: Embolism
- 3: A demyelinating disease
- 4: A genetic disease

591-: MRI done in a 28yrs old male suffering from Neurofibromatosis 2 showed ice cream cone appearance. On asking he fuher revealed that it began with ringing sensation in ears which progressed to balance problems and hearing loss. Which of the following is the most likely diagnosis -

- 1: Meningioma
- 2: Ependymoma
- 3: Schwannoma
- 4: Gangioneuroma

592-: Negri bodies are abundant in the following cells except?

- 1: Subcortical white matter
- 2: Purkinje cells
- 3: Hippocampus
- 4: Basal ganglia

593-: Disease or infarction of neurologist tissues causes it to be replaced by

- 1: Fluid
- 2: Neuroglia
- 3: Proliferation of adjacent nerve cells
- 4: Blood vessel
- 594-: Treatment of Guillain-Barre Syndrome (GBS) in a child includes:
 - 1: IV Ig
 - 2: Ventilation
 - 3: Plasmapheresis
 - 4: All of above

595-: Lloyds classification is

- 1: Sensory fiber classification
- 2: Motor fiber classification
- 3: Both
- 4: None

596-: Which of the following carries fast pain:

- 1: A-alfa
- 2: A-delta
- 3: B
- 4: C

597-: Brain infarct is seen in

1: TB

- 2: Aspergillosis
- 3: Toxoplasmosis
- 4: All of the above
- 598-: Strychnine acts by
 - 1: Exciting all the excitatory synapsesinthecord
 - 2: Blocking inhibitory synapses
 - 3: Being incorporated as substitute transmitter in monoaminetgic synapses
 - 4: Directly exciting the skeletalmuscle fibrosis

599-: Which is not true regarding withdrawal (flexion) reflex?

- 1: It has long latency
- 2: Afferents are Ia fibres
- 3: It is a Polysynaptic reflex
- 4: Response is non linear and usually widespread

600-: All of the following are manifestations of hypervitamin- osis A except?

- 1: Loss of hair
- 2: Generalized exfoliation
- 3: Decreased Intracranial pressure
- 4: Muscle pains

601-: Comment on the diagnosis of 1-year-old child?

- 1: Hydranencephaly
- 2: Hydrocephalus

- 3: Lissencephaly
- 4: Encephalocele

602-: Which of the following is not a pathological finding seen in alzhetmer's disease -

- 1: Cortical atrophy
- 2: Neurofibrillary tangles
- 3: Neuritic plaques
- 4: Lewy body

603-: Commonest site of meningocele is:-

- 1: Lumbosacral
- 2: Occipital
- 3: Frontal
- 4: Thoracic

604-: Following is true about medullobastoma:

- 1: It is seen mainly in over 50 age group
- 2: It is radiosensitive tumour
- 3: Only treatment is surgery
- 4: Seen in anterior cranial fossa

605-: 'A' wave in Electro Retinogram corresponds to activity in

- 1: Rods and cones
- 2: Pigment epithelium
- 3: Ganglion cell layer
- 4: Nerve fibre layer

606-: The most common site of Berry aneurysm is:

- 1: Junction of anterior communication aery with anterior cerebral aery
- 2: Junction of posterior communicating aery with internal carotid aery
- 3: Bifurcation of middle cerebral aery
- 4: Veebral aery

607-: Fine, irregular contraction of individual fibers called

- 1: Fasciculations
- 2: Fibrillation
- 3: Tics
- 4: Spasm

608-: Rosenthal fibers are -

- 1: Intranclear inclusions
- 2: intracytoplasmic inclusions
- 3: Present extracellularly
- 4: Pa of cell membrane

609-: Circadian rhythms are maintained by

- 1: Suprachiasmatic nuclei
- 2: Supra optic nuclei
- 3: Posterolateral nucleus
- 4: Ventrolateral nucleus

610-: Nerve ending sensitive to noxious stimuli are present in all except

- 1: Stomach
- 2: Intestine
- 3: Mesentry
- 4: Brain

611-: Erection is associated with all except

- 1: Sacral plexus
- 2: Hypogastric plexus
- 3: Pudendal nerves
- 4: Nervi erigentes
- 612-: Which of the following drugs is not used in Juvenile Myoclonic Epilepsy?
 - 1: Topiramate
 - 2: Zonisamide
 - 3: Carbamazepine
 - 4: Valproate

613-: Which one of the following sensory receptors are found in epidermis

- 1: Merkel disc
- 2: Meissner's corpuscles
- 3: Ruffini ending
- 4: Pacinian corpuscles
- 614-: Not found in cerebral palsy is:
 - 1: Hypotonia
 - 2: Microcephaly

3: Ataxia

4: Flaccid paralysis

615-: Most afferent fibers from the lateral nucleus terminate in the primary visual coex is

1: Layer 1 2: Layer 2 & 3 3: Layer 4 4: Layer 5 & 6

616-: A 25-year-old woman complains of weakness and easy fatigability, which is most pronounced in the late afternoon. She describes difficulty reading and tiredness while watching television. She has problems chewing and swallowing and loses her voice while talking. Physical examination reveals ptosis and diplopia. Laboratory studies would most likely demonstrate serum autoantibodies directed against which of the following proteins?

- 1: Acetylcholine receptor
- 2: Phosphodiesterase
- 3: Desmin
- 4: Dystrophin

617-: A 60-year-old woman has a history of being treated for endometrial cancer with surgery and radiation 5 years ago. She now presents with a large necrotic tumor that follows the course of the sciatic nerve. Which of the following is the most likely diagnosis

- 1: Malignant peripheral nerve sheath tumor
- 2: Solitary neurofibroma
- 3: Neurofibromatosis type 2
- 4: Schwannoma

618-: What is the histological appearance of brain in Creutzfeldt-Jakob disease -

- 1: Neuronophagia
- 2: Spongiform change in brain
- 3: Microabscesses
- 4: Demyelination

619-: Commonest cause of obstructive hydrocephalus in children:

- 1: Acqueductal stenosis
- 2: Aqueductal gliosis
- 3: Subarachnoid hemorrhage
- 4: Tubercular meningitis

620-: A 64-year-old man presents with headache and left-sided upper extremity weakness. The MRI of brain is given below. What does an MRI exhibits ?

1: Lesion is regular in shape.

2: Well demarcated from surrounding brain tissue.

3: Shows a ring pattern of enhancement with intravenous contrast and has a nonenhancing necrotic center.

4: Shows an absence of surrounding white-matter edema.

621-: Which of the following brain tumours do not spread CSF

- 1: Germ cell tumours
- 2: Medulloblastoma
- 3: CNS lymphoma
- 4: Craniopharyngioma

622-: Which of the following nucleus is not involved in Papez circuit?

1: Hippocampus

- 2: Cingulate gyrus
- 3: Caudate nucleus
- 4: Thalamic nuclei

623-: Glioblastoma multiforme may occur in the following except:

- 1: Cerebrum of adult
- 2: Brain stem of child
- 3: Spinal cord of adult
- 4: Adrenal medulla of child

624-: A 41-year-old woman has had diminished hearing for the past 4 months. On physical examination, she has decreased hearing on the left. Sound lateralizes to the right ear on the Weber tuning fork test. A head MRI shows a sharply circumscribed, 4-cm mass adjacent to the left pons that extends toward the left inferior cerebellar hemisphere. A smaller 1-cm lesion is in a similar location on the right. Family screening reveals a similarly affected 38-year-old sibling. An inherited mutation involving which of the following genes is most likely to be present in this patient?

- 1: NF2
- 2: TP53
- 3: PTCH
- 4: TSC1
- 625-: Acetylcholine is secreted in eyes by
 - 1: Bipolar cells
 - 2: Ganglion cells
 - 3: Horizontal cells
 - 4: Amacrine cells

626-: Nerve fibres innervating sweat glands release the following at their ending

- 1: Noradrenaline
- 2: Acetycholine
- 3: Dopamine
- 4: Histamine

627-: In Alzheimer disease, seen are:

- 1: Neurofibrillary tangles
- 2: Neuritic plaques
- 3: Pick's protein
- 4: Amyloid angiopathy

628-: A 20-year-old man complains of increasing difficulty in hearing over the past several years. Physical examination confirms bilateral sensorineural hearing deficits. MRI discloses bilateral cerebellopontine angle tumors, consistent with schwannomas. This patient has a strong family history for benign tumors, including low-grade gliomas and meningiomas on his mother's side of the family. Which of the following is the probable diagnosis?

- 1: Neurofibromatosis type 1
- 2: Neurofibromatosis type 2
- 3: Sturge-Weber syndrome
- 4: Tuberous sclerosis
- 629-: Axonotmesis includes discontinuity in
 - 1: Perineurium
 - 2: Epineurium
 - 3: Endoneurium
 - 4: Axon

630-: Earliest reflex to reappear after spinal shock

- 1: Knee jerk
- 2: Ankle jerk
- 3: Bulbocavernous reflex
- 4: Planter reflex

631-: The genetic mutation most commonly linked with congenital central hypoventilation syndrome is:

- 1: Mutation in sodium channel alpha 1 subunit
- 2: Mutation in paired like homeobox 2B gene
- 3: Mutation in outer dynein arm
- 4: All of the above

632-: NN Nicotinic acetylcholine receptors are present on

- 1: Myocardium
- 2: Motor endplates
- 3: presynaptic glutamate-secreting axon terminals
- 4: Neuromuscular junction

633-: Which marker is increased in amniotic fluid in neural tube defects?

- 1: a fetoprotein
- 2: Acetylcholinesterase
- 3: bhCG
- 4: All of the above

634-: Parasympathetic fibre arise from all the following cranial nerve except

- 1: Abducent
- 2: Oculomotor
- 3: Vagus
- 4: Glossopharyngeal

635-: If the blood flow through a blood vessel is 2 ml/min, how much will it become if its radius is doubled

- 1: Will remain the same
- 2:4 ml/min
- 3:8 ml/min
- 4:16 ml/min

636-: Most common cause of leptomeningeal spread is from which of the following

- 1: Breast
- 2: Thyroid
- 3: Bone
- 4: Liver

637-: A patient has multiple meningiomas, bilateral vestibular schwannomas and early onset cataract. The most likely diagnosis is: -

- 1: Neurofibromatosis type 2
- 2: Tuberous sclerosis
- 3: Von Hippel Lindau (VHL) disease
- 4: Sturge-Weber syndrome

638-: Arnold Chiari malformation is characterized by all except

1: Hypoplasia of cerebellar vermis

- 2: Herniation of cerebellum
- 3: Flattened base of skull
- 4: Adulthood syndrome not associated with hydrocephalus

639-: Spongiform degeneration of cerebral cortex occurs in -

- 1: Creutzfeldt-Jakob disease
- 2: Subacute sclerosing panencephalitis
- 3: Fatal familial insomnia
- 4: Cerebral toxoplasmosis

640-: The CSF findings in TB meningitis include:

- 1: High sugar + low protein
- 2: Low sugar + high protein and lymphocytosis
- 3: High sugar + high chloride
- 4: Low sugar + high protein and lymphopenia

641-: Enzyme that protects the brain from free radical injury is?

- 1: Myeloperoxidase
- 2: Superoxide dismutase
- 3: MAO
- 4: Hydroxylase

642-: Nociception from abdomen is transmitted by

- 1: A gamma
- 2: Aa
- 3: C fibres

4: B

643-: Memory needed for repetitive skills is

- 1: Declarative
- 2: Semantic
- 3: Explicit
- 4: Implicit

644-: A 63-year-old woman presents with a several-week history of headaches and difficulties with speech. A sister who lives with her claims that her language "has recently not been making much sense" and that she is a bit confused. Her condition seems to be deteriorating. On neurologic examination, she has a moderately severe aphasia, with difficulty understanding language and following commands, and she makes frequent paraphasic errors when she speaks. There are no other motor or sensory deficits. An MRI with intravenous contrast reveals the presence of a ring-enhancing mass lesion within the substance of the left temporal lobe. The lesion is approximately 3 cm in great-est diameter, poorly demarcated from the surrounding brain, and surrounded by a moderate amount of cerebral edema. Findings on routine admission tests, including a chest x-ray and serum chemistry, are unremarkable. What is the most likely diagnosis?

- 1: Low-grade cerebral astrocytoma
- 2: Glioblastoma multiforme
- 3: Metastasis to the brain from an occult primary cancer
- 4: Meningioma

645-: In dark adaptation, there occurs

- 1: Decreased perception of vision
- 2: Decreased visual acuity
- 3: Pupillary dilatation
- 4: Breakdown rhodopsin

646-: Ash leaf macules are seen in -

- 1: Von Hippel-Lindau syndrome
- 2: Boumeville's disease
- 3: Neurofibromatosis
- 4: Sturge-weber syndrome

647-: All of the following are visual agnosias arising from a defect in the ventral or &;What Pathway&;, except

- 1: Cerebral Achromatopsia
- 2: Prosopagnosia
- 3: Pure Alexia
- 4: Akinetopsia

648-: A 43-year-old woman has had a headache and fever for the past 2 weeks following a severe respiratory tract infection accompanying bronchiectasis. On physical examination, her temperature is 38.3degC. There is no papilledema. She has no loss of sensation or motor function, but there is decreased vision in the left half of her visual fields. CT scan of the head shows a sharply demarcated, 3-cm, a ring-enhancing lesion in the right occipital region. A lumbar puncture is done, and laboratory analysis of the CSF shows numerous leukocytes, increased protein, and normal glucose levels. What is the most likely diagnosis?

- 1: Cerebral abscess
- 2: Glioblastoma
- 3: Metastatic carcinoma
- 4: Multiple sclerosis

649-: Complications of tubercular meningitis are

- 1: Endaeritis
- 2: Hydrocephalus
- 3: Deafness

4: Venous sinus infarct

650-: Which of the following are signs of tentorial herniation?

- 1: Sunset sign
- 2: Sixth nerve palsy
- 3: Decerebrate rigidity
- 4: All of the above

651-: Vomiting centre

- 1: Area postrema
- 2: Suprachiasmatic
- 3: Medial nuclei
- 4: Laternal nuclei

652-: Perivascular lymphocytes & microglial nodules are seen in -

- 1: Multiple sclerosis
- 2: HIV encephalitis
- 3: CMV meningitis
- 4: Bacterial meningitis

653-: Which of the following sensations is most affected by coical lesions?

- 1: Proprioception
- 2: Temperature
- 3: Itch
- 4: Crude touch

654-: The first reflex to return after recovery from spinal shock is

- 1: Stretch reflex
- 2: Flexor reflex
- 3: Stepping reflex
- 4: Postural antigravity reflex

655-: Phagocytosis in brain is caused by -

- 1: Astrocytes
- 2: Microglia
- 3: Oligodendrocytes
- 4: Ependymal cells

656-: Fine touch and rapidly adapting receptor is

- 1: Meissners corpuscle
- 2: Merkel' s disc
- 3: Pacinian corpuscle
- 4: Ruffini's nerve ending

657-: Froin syndrome is associated with?

- 1: Spinal meningitis
- 2: Coagulation of CSF
- 3: High protein level
- 4: All of the above

658-: Acute lead poisoning in children commonly presents with:

1: Cerebellar ataxia

- 2: Status epilepticus
- 3: Focal neurological deficits
- 4: | ICT and papilledema

659-: Renshaw inhibition

- 1: Feedback facilitation
- 2: Feed forward inhibition
- 3: Feed forward facilitation
- 4: Feedback inhibition

660-: The given lesion is best associated with

- 1: Embolic stroke
- 2: Hypeensive bleed
- 3: Atherosclerotic (ischemie) stroke
- 4: Ruptured berry aneurysm

661-: What is the underlying abnormality in this child with seizures?

- 1: Tuberous sclerosis
- 2: Sturge-Weber syndrome
- 3: McCune Albright syndrome
- 4: Neurofibromatosis

662-: Parasympathetic supply is from

- 1: C234
- 2: T234
- 3: L234

4: S234

663-: Dysmetria is seen in lesion of

- 1: Basal ganglia
- 2: Cerebellum
- 3: Pons
- 4: Midbrain

664-: True statement about metastases of malignant tumors of brain is:

- 1: Drop metastases can occur in the spinal cord
- 2: Lymph node metastases in patients who have had brain surgery
- 3: Metastases through man made shunts
- 4: All of the above

665-: Foix-Alajouanine disease of the spinal cord is a:

- 1: Arteriovenous malformation
- 2: Cavernous malformation
- 3: Capillary telangiectasia
- 4: Venous angioma

666-: True about turcot syndrome

- 1: Mutations in PTEN gene
- 2: CNS tumors
- 3: Non neoplastic polyps
- 4: Congenital hypertrophy of retinal pigment epithelium

667-: Wallerian degeneration is seen in

- 1: part of nerve attached to cell body in a nerve that is cut peripheraly
- 2: cell body that is not attached to the nerve that is cut
- 3: part of nerve not attached to cell body
- 4: cell body that is attached to the nerve that is cut

668-: A 2-year-old child is brought by parents with history of seizures and developmental delay. He has multiple hypopigmented macules over the back. What is the most probable diagnosis:

- 1: Neurofibromatosis type I
- 2: Tuberous sclerosis
- 3: Sturge Weber syndrome
- 4: Linear sebacous nevus syndrome

669-: A 7-days-old neonate present with recurrent seizures. On examination, tachycardia and S3 gallop, bruit in anterior fontanelle. Blood investigations are normal. Neurosonogram shows a hypoechoic lesion. What is the diagnosis?

- 1: Arachoid cyst
- 2: Vein of Galen malformation
- 3: Dilated ventricles
- 4: Intraventricular hemorrhage
- 670-: Drug of choice among these for neonatal seizures:
 - 1: Phenobarbitone
 - 2: Phenytoin
 - 3: Diazepam
 - 4: Clobazam

- 671-: The rate-limiting step in the biosynthesis of catecholamines is catalyzed by
 - 1: Tyrosine hydroxylase
 - 2: Dopa decarboxylase
 - 3: Dopa mine f3 hydroxylase
 - 4: Catechol-O-methyltransferase
- 672-: The only excitatory neuron in the cerebellar coex is
 - 1: Purkinje cell
 - 2: Basket cell
 - 3: Golgi cell
 - 4: Granular cell
- 673-: Which cells are absent in the cerebellar coex
 - 1: Purkinje cells
 - 2: Bipolar cells
 - 3: Granule cells
 - 4: Golgi cells

674-: Sleep spindles and K complexes occur in which phase of the sleep cycle

- 1: REM
- 2: Stage I
- 3: Stage II
- 4: Stage III

675-: Commonly used shunt in hydrocephalus management:

1: Ventriculoatrial

- 2: Ventriculoperitoneal
- 3: Ventriculopericardial
- 4: Ventriculopleural

676-: Most common site for medulloblastoma is-

- 1: Cerebellum
- 2: Pituitary
- 3: Cerebrum
- 4: Pineal gland

677-: In a patient suspected to be diagnosed with Rabies, a sample of corneal smear was taken. Which of the following investigations can be done from the specimen?

- 1: RT PCR
- 2: Immunofluorescence test
- 3: Negri body visualization
- 4: Virus isolation

678-: Regarding Gherlin which is false

- 1: Secreted from oxyntic cells
- 2: Increases fat deposition
- 3: Stimulates appetite
- 4: Secretion increased in anorexia
- 679-: Frontal lobe syndrome is characterised by all except
 - 1: Slowed thinking
 - 2: Decreased curiosity

- 3: Social withdrawal
- 4: Good Judgement

680-: A 30-year-old pregnant woman and her 2-year-old child are residing in high altitude area. The child is sho in stature, has a potbelly and enlarged protruding tongue, and is developmentally delayed. Iodine is prescribed for mother and child, with the hope of preventing mental retardation in the developing fetus. All are true about oxidation of iodide except

- 1: Conversion of iodide to iodine
- 2: Promoted by enzyme peroxidase
- 3: Iodide transpoed to follicular lumen by Na-I sympoer
- 4: Propylthiouracil blocks this step

681-: Initial drug of choice in a child with status epilepticus:

- 1: Lorazepam
- 2: Phenobarbitone
- 3: Valproate
- 4: Phenytoin

682-: Muscle contraction following nerve impulse involves following steps expect

- 1: Action potential across nerve muscle junction (NMJ)
- 2: Dopamine release at NMJ
- 3: Release of calcium form sarcoplasmic reticulum
- 4: Calcium initiates attractive forces between actin and myosin filament
- 683-: Broca's motor speech area is present in
 - 1: Superior temporal gyrus
 - 2: Precentral gyrus

- 3: Post central gyrus
- 4: Inferior frontal gyrus

684-: Which type of adenoma has the highest propensity to undergo dystrophic calcification?

- 1: Somatotroph adenoma
- 2: Coicotroph adenoma
- 3: Lactotroph adenoma
- 4: Thyrotroph adenoma

685-: All of the following functions are associated with myelination except

- 1: Decreases energy expenditure
- 2: Increases speed of conduction
- 3: Provide protective covering for the axon
- 4: Decreases the release of neurotransmitter from the nerve endings

686-: Motor aphasia refers to defect in

- 1: Peripheral speech apparatus
- 2: Verbal expression
- 3: Auditory comprehension
- 4: Verbal comprehension
- 687-: Purkinje cells from cerebellum end in
 - 1: Cranial nerve nuclei
 - 2: Extra pyramidal system
 - 3: Cerebral coex

4: Cerebellar nuclei

688-: Which of the following sensation are transmitted by the Dorsal tract/Posterior column?

- 1: Fine touch
- 2: Pain
- 3: Temperature
- 4: All of the above

689-: A 9 months old previously healthy infant was brought with complaints of fever of 12 hours' duration along with a running nose and an episode of generalized tonic clonic movements lasting for 34 minutes. Child was brought to the emergency within 1 hour. Child was observed in the emergency and was found to be alert active and playful after the fever came down. The most probable diagnosis in this infant is:

- 1: Febrile convulsions
- 2: Transient myoclonic epilepsy
- 3: Hypocalcemia
- 4: Hypernatremia

690-: Efferent's from cerebellum is through

- 1: Golgi cells
- 2: Basket cells
- 3: Purkinje cells
- 4: Bipolar cells

691-: Mitral cells and periglomerular cells are seen in

- 1: Medulla
- 2: Olfactory bulb

- 3: Primary visual coex
- 4: Geniculate body

692-: Wide open anterior fontanelle is found in following diseases except:

- 1: Rickets
- 2: Cretinism
- 3: Osteogenesis imperfecta
- 4: Craniosynostosis

693-: Management of typical febrile seizure include all except:

- 1: Tepid sponging
- 2: Paracetamol
- 3: Intermittent Clobazam prophylaxis
- 4: Prophylactic phenobarbitone

694-: The maintenance of posture in a normal adult | human being depends upon

- 1: Integrity of reflex arc
- 2: Muscle power
- 3: Type of muscle fibers
- 4: Joint movements in physiological range

695-: Lens derives nutrition from

- 1: Vitreous
- 2: Aqueous
- 3: Optic aery
- 4: Ophthalmic aery

696-: Alpha waves are typically seen in which of the following states:

- 1: Deep sleep
- 2: Relaxed awake
- 3: Awake ale
- 4: Highly focused

697-: A 42-year-old man is being followed up for worsening involuntary jerky movements. During the course of his disease, he develops depression and progressive dementia. Within several years he dies, and during an autopsy, bilateral atrophy of the caudate nuclei is found. What is the basic abnormality involved in this individual's disease process

- 1: Acquired enzyme deficiency
- 2: Slow virus infection
- 3: Triple repeat mutation
- 4: DNA repair defect

698-: The most common type of cerebral palsy is?

- 1: Spastic
- 2: Atonic
- 3: Extrapyramidal
- 4: Mixed

699-: The depth of respiration is controlled by

- 1: Pneumotaxic center
- 2: Posterior medulla
- 3: Apneustic center
- 4: Pons

700-: In a monkey temporal lobectomy was done. What is not seen?

- 1: Sexual desire
- 2: Visual agnosia
- 3: Oral tendency
- 4: Fearfulness

701-: The white matter of cerebellum is well myelinated at

- 1:1 month
- 2:3 months
- 3: 6 months
- 4: 12 months

702-: The parvocellular pathway from lateral geniculate body to visual coex carries signals for detection of

- 1: Colour contrast
- 2: Luminance contrast
- 3: Temporal frequency
- 4: Saccadic eye movements

703-: A 37-year-old HIV-positive man has had a relapsing and remitting course of motor and sensory problems for the past year, including difficulty with ambulation as well as symmetric numbness and tingling in all extremities. Nerve conduction studies show findings consistent with demyelination and remyelination. He is treated with plasmapheresis. Which of the following disorders is most likely to cause this man's neurologic disease?

- 1: Bacterial infection
- 2: Carcinoma

- 3: Hyperglycemia
- 4: Immune dysregulation

704-: Content of meningocele?

- 1: Dura mater
- 2: Spinal cord
- 3: Brain mater
- 4: Cauda equina

705-: Landau-Kleffner syndrome is characterized by all of following except

- 1: Seizure
- 2: Loss of language skill
- 3: Normal EEG during sleep
- 4: Normal brain CT scan

706-: 10 year old child with posterior fossa mass. On biopsy following features were seen. What are these dense eosinophilic fibers marked with arrow?

- 1: Rosenthal fibers
- 2: The Alzheimer type II astrocyte
- 3: Corpora amylacea
- 4: None

707-: Pain is carried to

- 1: Ventralhom
- 2: Dorsal horn
- 3: Substantia nigra

4: None of the above

708-: A female neonate is noted at birth to have a gross deformity of her lower back. Examination of the subcutaneous lesion reveals disorganized neural tissue with entrapment of nerve roots. What is the appropriate diagnosis?

- 1: Meningocele
- 2: Meningomyelocele
- 3: Rachischisis
- 4: Spina bifida occulta

709-: Cystic supratentorial tumor is?

- 1: Craniopharyngioma
- 2: Ependymoma
- 3: Medulloblastoma
- 4: None of the above

710-: Gamma motor neurons are mainly influenced by

- 1: Vestibulospinal tract
- 2: Rubrospinal tract
- 3: Anterior coicospinal tract
- 4: Tectospinal tract

711-: Type of inheritance in Tuberous sclerosis -

- 1: Autosomal dominant
- 2: Autosomal recessive
- 3: X-linked dominant
- 4: X-linked recessive

712-: The primary respiratory regulatory centre is located at

- 1: Dorsal medulla
- 2: Aponeurotic centre
- 3: Pneumotaxic center
- 4: Ventral medulla

713-: Sympathetic stimulation has following effect on insulin release

- 1: Stimulation
- 2: Inhibition
- 3: Inhibition followed by stimulation
- 4: No effect

714-: The usual voltage of alpha rhythm is

- 1:5 mv
- 2: 10 mv
- 3: 50 mv
- 4: 100 mv

715-: Chromosomes involved in early onset Alzheimer's disease:

1: 1,14,21 2: 1,13,22 3: 3, 14, 20

4: 3, 14, X

716-: Most common site for medulloblastoma is:

- 1: Medulla
- 2: Cerebellum
- 3: Cerebrum
- 4: Pineal gland

717-: A 2-year-old boy is brought to the physician by his parents, who complain that their son continually loses his balance. They also report that his speech seems more slurred. Physical examination confirms the truncal ataxia and wide-based gait. The child appears lethargic, and there is bobbing of the head while he is sitting. Muscle tone is normal. This patient may have a midline tumor in which anatomic portion of the brain?

- 1: Cerebellum
- 2: Corpus callosum
- 3: Frontal lobes
- 4: Hypothalamus

718-: Neuronal degeneration is seen in all of the following except

- 1: Crush nerve injury
- 2: Fetal development
- 3: Senescence
- 4: Neuropraxia
- 719-: Dent disease is due to defect of?
 - 1: Sodium channel
 - 2: Potassium channel
 - 3: Chloride channel
 - 4: Calcium channel

720-: Cutaneous vasoconstriction is mediated by

- 1: Sympathetic adrenergic nerves
- 2: Sympathetic cholinergic nerves
- 3: Parasympathetic cholinergics
- 4: Somatic nerves
- 721-: Bruxism occurs in _____ phase of sleep
 - 1: ReM
 - 2: NREM I
 - 3: NREM II
 - 4: NREM III

722-: Striatum damage affects priming

- 1: Procedural memory
- 2: Sho term memory
- 3: Long term memory
- 4: Explicit memory

723-: A newborn baby has severe facial abnormalities, as shown below. What could be the underlying CNS abnormality in this baby?

- 1: Lissencephaly
- 2: Dandy walker malformation
- 3: Holoprosencephaly
- 4: Iniencephaly

724-: Minimum separable distance for two-point threshold test is greatest at?

1: Lips

- 2: Palm of hand
- 3: Back of scapula
- 4: Dorsum of hand

725-: Which of the following tumors is characterized histologically by pseudopalisading, necrosis, endoneural proliferation, hypercellularity, and atypical nuclei?

- 1: Schwannoma
- 2: Medulloblastoma
- 3: Oligodendroglioma
- 4: Glioblastoma multiforme

726-: All of the following are true about Berry aneurysm except:

- 1: Most common type of intracranial aneurysm
- 2: Most common site is anterior communicating aery-anterior cerebral junction
- 3: Rupture of aneurysm usually occurs at the apex or dome
- 4: Surgical clipping is preferred over endovascular coil occlusion
- 727-: Which of the following are pathological hallmark of Alzheimer&;s disease
 - 1: Intercellular Lewy Bodies
 - 2: Intracellular Pick's Bodies
 - 3: Extracellular Beta Amyloid Plaques
 - 4: Extracellular Neurofibrillary Tangles
- 728-: Mechanism of analgesia is by
 - 1: Nocioeptin stimulation
 - 2: Nooistatln stimulation

- 3: Nicotinic & cholinergic receptors
- 4: Anadumide receptors

729-: Moderate exercise tachypnea is due to stimulation of which of the following receptor?

- 1: Proprioceptors
- 2: J receptors
- 3: Lung receptors
- 4: Baroreceptors

730-: Painless burn in hand is a characteristic feature of?

- 1: Thalamic syndrome
- 2: Syringomyelia
- 3: Cord compression
- 4: SLE

Answers

Question No	Answer Option	Answer
1	2	В
2	4	Tay-Sachs disease
3	1	Neuropraxia
4	3	Head's paradoxical reflex
5	3	Abnormal elongation of the medulla and lower cranial nerves
6	2	Veical
7	2	Toxoplasmosis
8	4	Lateral coicospinal tract
9	2	J receptors
10	1	Oligodendroglioma
11	1	Striatum
12	1	А
13	3	Involves opponent colour cells
14	2	Neurofibromatosis
15	3	36 months
16	3	Hypothalamus
17	3	95% cure rate following treatment
18	3	Start oxygen by face mask, immobilize cervical spine and transfer to a tertiary center accompanied by doctor
19	1	A higher chloride concentration
20	3	Layers 1,4 & 6.
21	3	-70mV

22	4	Subcoical leukoencephalopathy
23	4	Boil over face
24	3	Intradural; Extramedullary
25	1	Personality
26	2	Glutamic acid
27	2	Flocculonodular lobe
28	1	Arm
29	4	All of the above
30	3	Anandamine
31	3	Berry aneurysm
32	3	Decreased stimulation of Baroreceptors
33	3	Axons
34	2	Lateral spinothalamic tract
35	4	Group C fibers
36	4	Median age at presentation is more than 80 years
37	1	Color contrast
38	1	Hopping and placing reflex
39	4	Ganglion cells
40	2	С
41	4	Hurler disease
42	2	Liquefactive necrosis
43	2	Initial segment
44	4	Inferior frontal gyrus
45	4	All
46	4	Caudate nuclei

47	2	Frontal lobe
48	3	Chronic subdural hemorrhage
49	3	Cerebellum
50	1	Temporal lobe
51	2	Angular acceleration
52	4	Lovastatin
53	1	Creutzfeldt-Jakob disease
54	1	Arnold Chiari malformation
55	3	CK +LDH
56	3	Amacrine cells
57	4	Inhibition by large myelinated fibres
58	3	Hippocampus
59	1	Ependymoma
60	1	Gamma-aminobutyric acid
61	1	Aggregation of Ab peptide
62	1	Pain loss in the opposite side of lesion
63	3	S1 S2
64	2	Influx of Na ions
65	1	Conditional response
66	3	Brain
67	2	Norepinephrine
68	3	Ad
69	1	Tuberous sclerosis
70	2	Procedural memory
71	3	Vestibular nucleus

72	3	A herniated nucleus pulposus
12	3	A nermated nucleus pulposus
73	3	6-Mar
74	4	Medulloblastoma
75	3	Schwannoma
76	2	Endoplasmic reticulum
77	1	Oligodendrocyte
78	1	Holoprosencephaly
79	3	Cause muscles to relax and be unable to contract
80	1	Oligodendrocyte
81	1	Pressure
82	3	Small, hyperchromatic cells and rare neuroblastic rosettes
83	3	Junction of anterior cerebral artery and anterior communicating artery
84	4	Radiation
85	2	Hypeension
86	1	Mean aerial pressure - Intracranial pressure
87	3	Most common primary site is breast cancer
88	3	Floculomodular lobe
89	1	An axon can conduct impulse in one direction only
90	4	Crossed extensor reflex
91	2	Corpus striatum
92	1	Pyramidal tract
93	4	Negri bodies
94	2	It arises from the malignant degeneration of an astrocytoma

95	1	Radiosensitive tumor
96	1	Normal saline guaze
97	1	Alzheimer's disease
98	2	Color vision, shape and fine details
99	1	Emotion
100	1	Increased capacitance
101	1	Astrocytoma
102	1	Tropomyosin
103	1	BERA
104	3	Lambert-Eaton myasthenic syndrome
105	3	Arachnoid cysts
106	2	Acetyl Choline
107	4	Upper motor neuron
108	3	Calcification is seen in 60-65% cases
109	1	Cl-and k+exchanger
110	4	Rupture of an intracranial berry aneurysm
111	2	Neuron 2012-13
112	1	Serotonin
113	3	Stretch receptor
114	2	Contralateral loss of Proprioception
115	3	Dystrophin
116	1	Normal saline
117	4	All
118	1	Putamen
119	2	Nucleus cuneatus

120	4	Inferior frontal gyrus
121	3	Hippocampus
122	1	Acetylcholine
123	1	Alzheimer's disease
124	4	Spinal cord and optic nerve
125	4	Inclusion bodies
126	1	2
127	1	Genitofemoral nerve
128	1	Change in muscle length
129	3	Suprachiasmatic nucleus
130	1	Fat embolism
131	3	Duramater
132	3	Defect in fusion of veebral arches
133	3	1.37
134	4	Thecoma
135	2	Cerebellum
136	3	Proprioception
137	1	Dale
138	3	1-F, 2-T, 3-F, 4-T, 5-T, 6-T, 7-T, 8-T
139	3	Obesity
140	2	Extra dural hemorrhage
141	1	Dopamine
142	1	Increased speed of conduction
143	1	Normal tone
144	4	Retinal ganglion layer

145	2	Encephalofacial angiomatosis
146	1	Neuroblastoma
147	4	6 months
148	4	All
149	3	Schwannoma
150	1	Glioblastoma multiforme
151	1	Cerebrum
152	4	Proprioception
153	4	All of the above
154	4	Sturge-Weber syndrome
155	3	Vistibular reflex
156	2	Bilateral & sign of anterior cranial fossa fracture
157	1	aFP
158	3	Trigeminal (V)
159	1	Sympathetic preganglionic
160	2	Cerebellum
161	2	Pseudonipolar
162	2	Motor response
163	2	Bell-Magendie's law
164	4	All of above
165	3	Plate ending
166	2	Hypothalamus
167	2	CMV
168	4	Meissner corpuscles
169	3	Tuberculous meningitis

1701Tractus cuneatus1711Duchenne muscular dystrophy1724Thromboembolic phase is present1731Cerebral hamartoma1744Apneusis1753Pupillary dilatation1762Lumbar meningomyelocele1772Tecto cerebellar tract1781Nucleus Basalis of Meyne1791Acute infarct1804Vestibular poion of the acoustic nerve1813Recruitment by multiplication of neurons1821Rigidity occurs in all muscles of body1843Dorsal column pathway]
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183 2 Alzheimer's disease	
184 3 Dorsal column pathway	
1854Daily head ache with vomiting upon walking in the morning, improves when the child is out of the bed	
186 3 Lateral hypothalamic area	
187 3 Vasopressin	
188 3 Tight endothelial function	
189 1 Narrowing of ventricles	
190 1 Color contrast	
191 4 All are true	
192 2 Corpus striatum	
193 4 C fiber	

194	4	Suprachiasmatic
195	1	Alpha waves
196	1	Homer Wright rosette
197	4	Premalignant condition
198	2	Smell
199	1	Law of projection
200	4	Hypertension
201	3	Axon hillock
202	2	Procedural
203	4	Males have stronger sense of olfaction
204	1	Antony A with verocay body
205	4	Ependymoma
206	3	CIDP
207	1	Biceps jerk C5, C6
208	2	Leri Ossificans
209	1	Left inferior frontal gyrus
210	1	Contraction of skeletal muscle
211	1	Amygdala
212	1	Sabre skin
213	1	Hypothalamus
214	4	Repetitions is preserved
215	3	Glioblastoma with edema
216	1	Eye opening to pain, making incomprehensive sounds and has flexion as best motor response
217	2	Concussion

218	3	Cerebellum
210	5	Cerebenum
219	1	Surgical excision
220	2	Metastatic lesion
221	4	Hyperpolarization
222	3	Lung Ca
223	3	Krabbe disease
224	4	Basal ganglia
225	3	Guillain-Barre syndrome
226	4	All of the above
227	2	Associated with fast pain
228	4	subcortical leukoencephalopathy
229	2	Weakness of lower limbs
230	3	Congenital aqueductal stenosis
231	1	Glioblastoma multiforme
232	1	Anencephaly
233	4	Neurofibrillary tangles
234	1	Acts with the cardiovagal centre to maintain B.P.
235	1	Acetylcholine
236	3	Typical absence seizure
237	2	Skilled movements
238	2	Degeneration of media
239	1	Arteriolar fibrinoid necrosis
240	4	Perception of an ordinarily non noxious stimulus as severe pain
241	4	Epidural hemorrhage

242	3	Destruction of receptors by antibody
243	2	Superoxide dismutase
244	4	Theta
245	2	Vasodilatation
246	2	Hyper albunemia
247	4	A d
248	3	Anplastic
249	1	Autosomal recessive
250	3	Acts along with the cardiovagal centre (CVC) to maintain blood pressure
251	4	High BP and low hea rate
252	2	Frontal lobe
253	4	Carbamazepine
254	4	Segmental demyelination
255	1	Amygdala
256	1	Cerebral infarct
257	2	Fatigue
258	4	All of the above
259	1	Distal to injury
260	3	NF-1
261	3	Full recovery is rare even after the treatment
262	4	Radiotherapy 35-40 Gy was given to the whole craniospinal axis
263	1	Stimulation of touch receptors
264	2	Medulloblastoma
265	3	Coicospinal tract

		2/3 of blood glucose
267 4	4	All of the above
268 4	4	Creatine kinase
269 4	4	Arsenic intoxication
270 4	4	Contralateralparietal lobe lesions
271 4	4	Serotonin
272 1	1	Synringomyelia
273 4	4	Microglial nodules
274 2	2	Hyperventilation often precipitates an attack
275 1	1	Antibody- and complement-mediated injury to the microvasculature
276 1	1	Stage 1 sleep
277 3	3	Meningioma
278 1	1	Hydrocoisone
279 2	2	Trigeminal neuralgia
280 4	4	Holoprosencephaly
281 4	4	Microglia
282 4	4	120
283 4	4	Progressive multiple encephalopathy
284 2	2	Type II Chiari malformation is associated with syringomyelia of cervical canal
285 1	1	Word formation
286 1	1	Type A fibres
287 2	2	Vision
288 1	1	A alpha fibers
289 3	3	Desensitization

290	3	Neurofibromatosis
291	2	Conduction deafness in both ears
292	1	a waves
293	4	2500 per sec
294	1	CMR-1
295	2	Superior temporal gyrus
296	1	Pontocerebellar
297	1	A-alfa
298	2	Vein of Galen malformation
299	1	Ciliary body
300	4	Trunk
301	4	Purkinje layer of cerebellum
302	3	Pineal gland
303	1	Alzheimer's disease
304	1	Alpha-rhythm
305	1	Apnea
306	2	Dysdiadochokinesia
307	1	Dandy walker malformation
308	4	Dense core granules
309	4	Hippocampus
310	2	Ganglionic cells
311	1	Touch
312	1	AD
313	1	Signal transduction
314	4	Awake/ale state

315	3	Layers 1,4,6
316	1	Surgical excision
317	1	Ventromedial nucleus of hypothalamus
318	3	Entrapment with compression
319	4	Pre-Botzinger complex
320	2	Accomodation
321	1	Type c fibers
322	4	Temporal lobe
323	4	Lung
324	2	Lateral sinus thrombosis
325	2	Ptery gopalatine ganglion
326	4	Xeroderma pigmentosum
327	3	Glycine
328	1	Metastatic tumours
329	4	Dentate
330	2	Intracytoplasmic inclusions
331	4	HIV encephalitis
332	3	Guillain-Barre syndrome
333	3	Serotonin
334	1	Bipolar cells
335	2	NF2
336	1	Chorea
337	2	Antony A pattern - Verocay bodies
338	1	Cranial USG
339	4	Decoicate rigidity
	1	

340	3	All the sides
341	3	Acetylcholine
342	1	Signal transduction
343	2	Retina
344	2	Spongiform change in brain
345	1	Cytomegalovirus
346	3	150 ml
347	3	Vasculitis
348	1	Astrocytoma
349	2	7
350	4	Subarachnoid hemorrhage
351	4	Medulla
352	3	Distension
353	1	Alzhiemer's disease
354	2	Leptin
355	4	All of the above
356	3	Cries to pain
357	1	Dopamine
358	2	Glucocoicoids should be given before biopsy to reduce the risk of edema
359	1	Putamen
360	2	Planning & programming of movement
361	2	Irregular and gasping
362	2	HMB-45
363	2	Midbrain

364	2	Corachobrachialis
365	1	Narrowing of ventricles
366	1	Tachycardia
367	4	Lymphoma
368	3	Tolosa-Hunt syndrome
369	3	Hypothyroidism
370	3	Color processing
371	1	Syringomyelia
372	4	None
373	4	Increases in breath - holding time
374	1	Pulmonary Interstitium
375	4	Immediate surgical treatment is required to prevent meningitis in all patients
376	3	Rigidity is less pronounced than decerebrate rigidity
377	2	Degeneration of media / muscle cell layer
378	1	Hydrocephalus
379	3	Febrile seizures lasting more than 30 minutes
380	1	Supraoptic nuclei
381	1	Optic nerve glioma
382	1	Alzheimer disease
383	4	560nm
384	1	Pre- Botzinger complex
385	3	Decreased sound localization
386	4	Plaque and tangles
387	4	Filiform papillae have taste buds at tip

388	1	Transcranial USG
389	2	Increase contraction of hea
390	2	Ependymal cells are involved in phagocytic functions
391	2	Left lateral spinothalamic tract
392	1	Primary visual coex
393	1	Low back pain and right sciatica
394	4	Any of the above
395	2	A whorled pattern and rare psammoma bodies
396	4	Hyperpolarization
397	2	Relative or absolute refractoriness
398	3	Primary CNS lymphoma
399	2	Hypercapnia
400	1	Type C fibers
401	1	CCS
402	3	Microglial cells
403	4	19
404	3	Associated with raised ICT in all the cases
405	1	Basal nucleus of Meyernet
406	3	It occurs due to inhibition of release of neurotransmitter from presynaptic terminal
407	1	Reticulin staining is done
408	2	Cerebellum
409	2	Medulla
410	3	Resting tremors
411	1	Amacrine cells

412	2	Relaxed awake
413	2	Tabes dorsalis
414	4	Neocerebellum
415	4	Radiotherapy is the main treatment modality
416	3	Choroidal plexus
417	1	Mass reflex
418	3	Increased rigidity alpha motor neurons
419	1	Holoprosencephaly
420	1	Base of the brain
421	2	NF2
422	1	Carcinoma lung
423	3	Representative hemisphere, right
424	4	The depolarization travels in opposite directions
425	3	Evacuation should be done in all the cases
426	4	Merkels disc
427	4	Vasoconstriction of skin and mucus membranes
428	1	BERA
429	1	Pituitary stalk
430	1	Correlates with hea rate
431	1	Acetylcholine receptor antibody positivity
432	4	Dentate rubro thalamic tract
433	3	Fibroblast
434	2	Sympathetic system
435	1	Gullian Barre syndrome
436	4	Hypothalamus

437	1	Cannot be inherited
438	2	Congenital myopathy
439	4	GAA repeats in the frataxin gene
440	2	3, 1, 2
441	3	Pars nervosa
442	1	Plexiform neurofibroma
443	1	N. meningitis
444	2	Motor planning
445	2	Chromosome 17
446	1	100 million
447	1	Synapse
448	1	ICF
449	3	756 ml/min
450	1	Superior temporal gyrus
451	2	Stimulus required is very small
452	2	Vasospasm
453	1	Febrile convulsions
454	3	Posterior pa of calcarine sulcus
455	1	Pituitary adenoma
456	4	Hypothalamus
457	1	Acetylcholine
458	1	Perivascular pseudorosette
459	4	Proteins
460	1	Aerial thrombosis
461	3	GFAP

462	2	Na+
463	3	11-cis-Retinaldehyde
464	3	Ventral respiratory group of neurons (VRG)
465	1	Moya Moya Disease
466	1	Feedback inhibition
467	3	Rotation
468	2	Phenytoin
469	1	Bacterial Meningitis
470	2	Glutamine
471	3	ADH
472	4	Hypertrophy of type II fibers
473	2	Brain tumor
474	2	Dermatomyositis
475	1	Coisol releasing hormone
476	4	Tabes dorsalis
477	1	Neuroblastoma
478	3	Lumbosacral
479	4	Anterior nucleus of Thalamus
480	3	Posterior spinocerebellar tract
481	2	Dysdiadokokinesia
482	1	Immediate surgical evaluation
483	3	-60mV
484	3	Layer 4
485	4	Right lateral spinothalamic tract
486	1	Basal ganglia/thalamic area

487	2	Basal ganglia
488	1	Lumbar spinal stenosis
489	2	Melanocyte stimulating hormone (MSH
490	1	Prion disease
491	2	Hippocampus
492	1	Cerebral palsy
493	3	Ruffini corpuscles
494	3	Akinesia
495	1	Bridging veins
496	1	Optic nerve
497	1	Preganglionic
498	2	Medulloblastoma
499	1	Recent memory
500	1	Acetylcholine
501	2	Alzheimer's disease
502	1	5-HT (serotonin)
503	1	Amyotrophic lateral sclerosis
504	1	Vasoconstriction
505	3	Taste buds
506	4	Holoprosencephaly
507	4	All of the above
508	2	Postganglionic autonomic nerve fibers
509	4	Structures in brainstem
510	2	Creutzfeldt-Jakob Disease (CJD)
511	4	All of the above

512	3	13-30 Hz
513	2	Craniopharyngioma
514	4	Antisocial behavior
515	4	Perlecan 1
516	4	Hirano bodies
517	3	Left lateral spinothalmic tract
518	2	Astrocytoma
519	2	Microglia
520	3	Tuberous Sclerosis
521	1	Ultrafiltration and active secretion
522	2	Microglia
523	1	Hering Breuer reflex
524	3	Meningomyelocele
525	2	Temperature
526	3	Petit mal epilepsy
527	2	Procedural
528	1	Neurofibromatosis
529	2	1,4,6
530	2	Apneustic breathing
531	2	Macrocephaly
532	4	All of these are NTD
533	3	С
534	1	Cerebellum
535	3	Hippocampus
536	1	Neuropraxia is irreversible

537	4	All of the above
538	1	Pin point pupil
539	4	Microglial cells
540	4	Digoxin
541	4	Secondaries
542	4	Mucoid degeneration
543	3	Pick's disease
544	2	Stretch reflex
545	1	Small cell carcinoma lung
546	2	Pinealocytes
547	3	Anterior surface of the cornea
548	2	CSF
549	4	Hypothermia
550	4	Craniopharyngioma
551	4	Projection of fibers from neighbouring sensory areas into the right hand area of his left SI
552	4	Cerebral aqueduct
553	4	Suprachiasmatic
554	1	Radiosensitive tumor
555	2	Recognition of objects by their form
556	4	Acetylcholine
557	2	Stage 2
558	3	GABA-ergic and cholinergic system
559	1	Deep sleep
560	2	Lower motor neuron

561	3	Memory
562	2	Suprasellar
563	1	Craniopharyngioma
564	4	Flexion of upper extremity and extension of lower extremity
565	2	Erection
566	1	1
567	2	2nd
568	2	CD133
569	1	Deep cerebellar nuclei
570	1	Urgent parenteral antibiotics
571	4	С
572	3	Relation of one stimulus to another
573	3	С
574	4	Apneusis
575	3	Relaxation of bronchial musculature
576	2	Negri bodies
577	3	Foramen magnum
578	1	4 & 6
579	1	Tuberous sclerosis
580	2	hyperophy of abductor pollicis brevis
581	4	Brain stem encephalitis
582	4	Empty sella
583	1	Astrocytoma
584	3	Lymphoma

585	2	1-T, 2-T, 3-F, 4-T, 5-T
586	1	Amygdala
587	1	Folic acid
588	4	Acetylcholinesterase
589	1	Rigidity occurs all muscles of the body
590	1	Hypeension
591	3	Schwannoma
592	1	Subcortical white matter
593	2	Neuroglia
594	4	All of above
595	1	Sensory fiber classification
596	2	A-delta
597	4	All of the above
598	2	Blocking inhibitory synapses
599	2	Afferents are Ia fibres
600	3	Decreased Intracranial pressure
601	2	Hydrocephalus
602	4	Lewy body
603	1	Lumbosacral
604	2	It is radiosensitive tumour
605	1	Rods and cones
606	1	Junction of anterior communication aery with anterior cerebral aery
607	2	Fibrillation
608	2	intracytoplasmic inclusions

600	1	Suprachiagmatic nuclei
609	1	Suprachiasmatic nuclei
610	4	Brain
611	3	Pudendal nerves
612	3	Carbamazepine
613	1	Merkel disc
614	4	Flaccid paralysis
615	3	Layer 4
616	1	Acetylcholine receptor
617	1	Malignant peripheral nerve sheath tumor
618	2	Spongiform change in brain
619	1	Acqueductal stenosis
620	3	Shows a ring pattern of enhancement with intravenous contrast and has a nonenhancing necrotic center.
621	4	Craniopharyngioma
622	3	Caudate nucleus
623	4	Adrenal medulla of child
624	1	NF2
625	4	Amacrine cells
626	2	Acetycholine
627	2	Neuritic plaques
628	2	Neurofibromatosis type 2
629	4	Axon
630	3	Bulbocavernous reflex
631	2	Mutation in paired like homeobox 2B gene
632	3	presynaptic glutamate-secreting axon terminals
	1	

633	1	a fetoprotein
634	1	Abducent
635	4	16 ml/min
636	1	Breast
637	1	Neurofibromatosis type 2
638	1	Hypoplasia of cerebellar vermis
639	1	Creutzfeldt-Jakob disease
640	2	Low sugar + high protein and lymphocytosis
641	2	Superoxide dismutase
642	3	C fibres
643	4	Implicit
644	2	Glioblastoma multiforme
645	3	Pupillary dilatation
646	2	Boumeville's disease
647	4	Akinetopsia
648	1	Cerebral abscess
649	1	Endaeritis
650	4	All of the above
651	1	Area postrema
652	2	HIV encephalitis
653	1	Proprioception
654	2	Flexor reflex
655	2	Microglia
656	1	Meissners corpuscle
657	4	All of the above

658	1	Cerebellar ataxia
659	4	Feedback inhibition
660	3	Atherosclerotic (ischemie) stroke
661	2	Sturge-Weber syndrome
662	4	S234
663	2	Cerebellum
664	4	All of the above
665	1	Arteriovenous malformation
666	2	CNS tumors
667	3	part of nerve not attached to cell body
668	2	Tuberous sclerosis
669	2	Vein of Galen malformation
670	1	Phenobarbitone
671	1	Tyrosine hydroxylase
672	4	Granular cell
673	2	Bipolar cells
674	3	Stage II
675	2	Ventriculoperitoneal
676	1	Cerebellum
677	2	Immunofluorescence test
678	2	Increases fat deposition
679	4	Good Judgement
680	3	Iodide transpoed to follicular lumen by Na-I sympoer
681	1	Lorazepam
682	2	Dopamine release at NMJ

683	4	Inferior frontal gyrus
684	3	Lactotroph adenoma
685	4	Decreases the release of neurotransmitter from the nerve endings
686	2	Verbal expression
687	4	Cerebellar nuclei
688	1	Fine touch
689	1	Febrile convulsions
690	3	Purkinje cells
691	2	Olfactory bulb
692	4	Craniosynostosis
693	4	Prophylactic phenobarbitone
694	1	Integrity of reflex arc
695	2	Aqueous
696	2	Relaxed awake
697	3	Triple repeat mutation
698	1	Spastic
699	1	Pneumotaxic center
700	4	Fearfulness
701	1	1 month
702	1	Colour contrast
703	4	Immune dysregulation
704	1	Dura mater
705	3	Normal EEG during sleep
706	1	Rosenthal fibers

707	2	Dorsal horn
708	2	Meningomyelocele
709	1	Craniopharyngioma
710	2	Rubrospinal tract
711	1	Autosomal dominant
712	1	Dorsal medulla
713	2	Inhibition
714	3	50 mv
715	1	1,14,21
716	2	Cerebellum
717	1	Cerebellum
718	4	Neuropraxia
719	3	Chloride channel
720	1	Sympathetic adrenergic nerves
721	3	NREM II
722	1	Procedural memory
723	3	Holoprosencephaly
724	3	Back of scapula
725	4	Glioblastoma multiforme
726	4	Surgical clipping is preferred over endovascular coil occlusion
727	3	Extracellular Beta Amyloid Plaques
728	1	Nocioeptin stimulation
729	1	Proprioceptors
730	2	Syringomyelia