

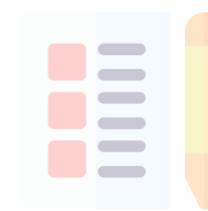
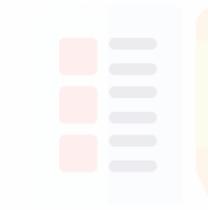
Test Bank



Subject:
CNS-Mid 018



Collected by:
Lina Abdulhadi
Samia Simrin



بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

CNS-Mid 018

1- All of the following statement regarding the sick role are correct, EXCEPT?

- a. A person in the sick role is not obliged to seek medical help
- b. Other people are obliged to take over their duties
- c. Other people are obliged to be kind to him
- d. Exemption from usual social and occupational responsibilities
- e. A person in the sick role is not expected to get well without being cared of

2-Which of the following is TRUE combination ?

- a. Accommodation for near vision: The ciliary muscle relaxes and the lens decreases its power .
- b. In Myopia: The near point (minimal distance) is further than normal and people see clearly far objects .
- c. During dark adaptation: The sensitivity of photoreceptors is reduced so that the image appears dim .
- d. A visual acuity of 6/60 means: Can resolve a test figure at 60 meters using a + 6 diopters lens .
- e. Color vision: Various ratios of stimulation of the three cones in response to different wave lengths of light.

3-Which of the following is NOT a suitable combination ?

- a. Loss of pain, temperature, and touch sensation on the right side of the face : A lesion of the trigeminothalamic tract on the left
- b. Amorphosynthesis (unilateral neglect) : A lesion in the auditory or visual association cortexes
- c. Slow pain : Poorly localized sensation runs through C fibers
- d. Myocardial infarction in females : Referred pain to sternum and left upper limb
- e. Astereognosis : Inability to identify familiar object form and texture by hand when eyes are closed.

4-Which of the following statements describe the endogenous analgesia system?

- a. It uses endogenous opiates (endorphins , dynorphins or enkephalins)
- b. It decreases pain transmission at the dorsal horn cells through stimulating the release of substance p
- c. It is an ascending system pathway
- d. It takes origin from the cerebellar nuclei and red nucleus of the brain stem
- e. It is contralateral pathway

5-Regarding disc herniation , all of the following are true EXCEPT:

- a. If the disc between L4 / L5 is herniated sensory changes will likely occur at the medial border of leg
- b. Si spinal nerve is tested by asking the patient to stand on his tiptoes
- c. If the spinal nerve L4 is compressed by a herniated disc knee jerk will be lost
- d. If the spinal nerve S1 is compressed by a herniated disc gastrocnemius muscle will be weakened
- e. It may cause low back pain radiating to the gluteal region and the back of the thigh

6-Regarding a transverse section through the caudal part of pons , all of the following are true EXCEPT :

- a. Medial longitudinal fasciculus is located beneath the floor of the fourth ventricle
- b. Basal part of pons is located anterior to trapezoid body
- c. Facial nucleus is located anterior to the lateral part of the medial lemniscus
- d. Spinal nucleus of trigeminal is located on the anteromedial aspect of inferior cerebellar peduncle
- e. Medial vestibular nucleus is located lateral to the abducent nucleus

7-Which of the following is true regarding immunity in the central nervous system (CNS)?

- a. Microglia and complement proteins are immune components found in the brain parenchyma
- b. Concentration of antibodies in the CSF is higher than in serum

- c. Polymorphonuclear cells are abundant within the CSF (> 100 cells / microliter)
- d. Pathogen access to the brain parenchyma is not restricted by immunological barriers
- e. The bacterial microbiota in the CSF is important in maturity of the immune system

8-Which of the following is true about the mechanism of action of local anesthetic?

- a. Local anesthetics block the outer gate of the Na⁺ channels
- b. None of the other options are true
- c. Local anesthetics block the inner gate of the k⁺ channels.
- d. Local anesthetics block the inner gate of the Na⁺ channels
- e. Local anesthetic block the inner gate of the glutamate channels

9-The sense of smell is perceived in the

- a. Limbic system
- b. Occipital lobe of the cerebral cortex
- c. Parietal lobe of the cerebral cortex
- d. Temporal lobe of the cerebral cortex
- e. Insular part of the cortex

10-Regarding slow pain , all of the following are true EXCEPT :

- a. Slow pain is mostly arises from superficial structures
- b. Slow pain due to gallstones can be felt up in the shoulders
- c. It is transmitted by c fibers
- d. Cingulate gyrus brings about an emotional response to slow pain
- e. First order neuron synapses with second order neuron in Lamindel and II

11-Which of the following is true about Inhalation Anesthetic Drugs?

- a. Unlike other anesthetics, nitrous oxide and ketamine do have an actions on GABAA receptors
- b. The precise mechanism of action for these agents and specific receptors with which these agents interact are known
- c. These agents are administered as high molecular weight solutions
- d. All of the other options are not true

e. The standard for anesthetic dosing is the Blood concentration

12-Which of the following statements is true about intelligence ?

- a. The first to assess intelligence through test is Durkheim in 1890
- b. Intelligence changes overtime while growing up
- c. Environment has no effect on intelligence
- d. Most people score between 90 - 110 in Wechsler intelligence scale
- e. The average correlation between parents IQ and their children is 90

13-All of the following are complications of trans-tentorial herniation except :

- a. Compression of the anterior cerebral artery .
- b. Impaired ocular movement
- c. linear bleedings in the midbrain .
- d. Ischemic injury to the visual cortex .
- e. Duret hemorrhage.

14-Which of the following statements best defines psychology ?

- a. The science of behavior and mental processes .
- b. The science of studying social problems .
- c. The study of cerebral hemispheres physiology.
- d. The science of nervous system anatomy .
- e. The study of human society and culture.

15-Regarding Extrapyramidal tracts, choose the WRONG statement:

- a. Vestibulospinal tract facilitates the activity of antigravity muscles
- b. Rubrospinal tract mainly supply the distal extensors muscles with little effect on the proximal muscles
- c. Tectospinal tract is responsible for reflex movement of head & neck in response to visual stimuli
- d. Medullary reticulospinal tracts runs in the lateral white column
- e. Pontine reticulospinal tract is tonically active

16-An excitatory neurotransmitter that leaks to the cytosol to be converted to another neurotransmitter, can be recycled through a presynaptic neuron transporter and degraded by the liver or presynaptic enzymes is :

- a. Gama-aminobutyric acid
- b. Glycine
- c. Epinephrine
- d. Serotonin
- e. Acetylcholine

17-Regarding posterior white column medial lemniscal pathway, choose the WRONG statement :

- a. Sensory fibers used in this system are faster than those used in the anteriolateral system (ALS)
- b. Fasciculus cuneatus transmits information coming from areas inferior to T6
- c. Lesion of this tract will result in loss of discriminative touch below the level of the lesion on the ipsilateral side of the body
- d. This system employs most receptors except free nerve endings
- e. Nucleus gracilis and nucleus cuneatus represent the location of the cell body of the second order neurons

18-Visual transduction involves the following molecular feature :

- a. Ca^{2+} ions bind to rhodopsin kinase and inhibit it
- b. Retinal plasma membrane is very fluidic easing molecular interactions
- c. Amplification involves activation of CGMP phosphodiesterase by G proteins
- d. Arrestin binding to rhodopsin activate its phosphorylation
- e. During adaptation to the dark, recoverin is mainly localized to the inner segment

19-Thanks to we can distinguish sweet, salty, bitter, sour, and umami tastes .

- a. Locations on the tongue where each taste is processed .
- b. The presence of five categories of taste buds .
- c. Specialized receptor potential for each one of them.

- d. A high concentration of salty and sweet receptors .
- e. Specialized taste receptors.

20-Regarding Corticospinal tracts, choose the WRONG statement :

- a. The vast majority of fibers will decussates to the opposite side in the lower part of medulla forming the lateral corticospinal tract
- b. In the midbrain they pass through the middle three fifths of the basis pedunculi of the midbrain
- c. It passes through the basilar part of the pons
- d. The anterior corticospinal tract acts on the proximal (axial) muscles
- e. 55% of lateral corticospinal tract fibers synapse in the thoracic region

21-Choose the incorrect statement regarding epidural hematoma

- a. The accumulated blood is arterial in origin .
- b. Blood accumulates between the dura and the skull
- c. Associated with skull fracture
- d. Bleeding appears crescentic in shape on CT scan .
- e. Caused by ruptured middle meningeal artery

22-During a neurological examination, a patient cannot tell with his eyes closed whether the neurologist flexed or extended his toe, there is likely damage to

- a. The anterolateral spinothalamic system pathway .
- b. The precentral gyrus of the cerebral cortex.
- c. The ventral (anterior) of the spinal cord.
- d. The dorsal column medial lemniscal pathway .
- e. Central canal of the spinal cord enlargement (syringomyelia).

23-Symmetrical ascending motor weakness, areflexia, and mild-to- moderate sensory abnormalities are likely to occur following an infection with one of the following pathogens :

- a. *Streptococcus pneumoniae*

- b. *Escherichia coli*
- c. *Clostridium botulinum* .
- d. *Campylobacter jejuni* .
- e. Herpes simplex type-1 virus.

24-All of the following are characteristics of lower motor neuron lesion EXCEPT :

- a. Flaccid paralysis
- b. Hypertonia
- c. Clasp knife reaction
- d. Hyporeflexia
- e. Muscle atrophy

25-A patient is found to have tunnel vision (bitemporal hemianopia) due to a pituitary tumor. Where might this lesion be?

- a. Left optic nerve
- b. Optic chiasm
- c. Right optic nerve .
- d. Left optic tract
- e. Right lateral geniculate nucleus

26-The big five personality dimensions include the following, EXCEPT ?

- a. Agreeableness
- b. Recklessness
- c. Emotional stability
- d. Extraversion
- e. Openness

27-A 65 years old man with a history of hypertension and smoking brought to neurology clinic. The neurologic examination reveals loss of pain and temperature sensation from the right side of the body, loss of pain and temperature sensation from the left side of the face, loss of taste from the left half of the tongue and hoarseness, which of the following arteries is likely affected in this patient ?

- a. Posterior inferior cerebellar artery
- b. Anterior inferior cerebellar artery
- c. Anterior cerebral artery
- d. Middle cerebral artery
- e. Anterior spinal artery

28-Regarding Syringomyelia affecting C4 to C5 levels, choose the WRONG statement :

- a. If it extends to include one anterior horn, it will cause an ipsilateral weakness of the upper extremity
- b. Discriminative touch will be affected
- c. Symptoms of syringomyelia occur due to the damage of fibers crossing in the anterior white commissure in both directions
- d. It occurs due to cavitation of the central region of the spinal cord
- e. Loss of pain and thermal sensation will include both shoulders and extend down to nipple level

29-A 33-year-old healthy man underwent a surgical operation, after which he started having symmetric muscle weakness in the legs followed by arm weakness.

The symptoms resolved within 4 weeks. This patient most likely has :

- a. Chronic inflammatory demyelinating polyneuropathy
- b. An attack of multiple sclerosis .
- c. Central pontine myelinolysis .
- d. Guillian Barrie syndrome .
- e. Distal symmetric sensorimotor polyneuropathy

30-All of the following are symptoms of the Syndrome of the midpontine base EXCEPT :

- a. Ataxia
- b. Ipsilateral paralysis of the masticatory muscles
- c. Ipsilateral loss of pain and thermal sense

- d. Contralateral dilatation of pupil
- e. Contralateral hemiparesis

31-The following combinations are true except :

- a. Multiple scleross and oligoclonal bands .
- b. Central pontine myelinolysis and rapid correction of hyponatremia
- c. Quiescente plaques in multiple sclerosis and gliosis
- d. Neuromylitis optica and aquaporin 4 antibodies
- e. Multiple sclerosis and grey matter plaques

32-Inability to hear by one ear which is beyond any means of correction can be due to a lesion located at:

- a. Unilateral inferior colliculus .
- b. Unilateral superior temporal cortex .
- c. Unilateral basilar membrane involving its organs of Corti .
- d. Unilateral superior olivary nucleus .
- e. Unilateral lateral lemniscus.

33-Regarding the parasympathetic nuclei of the brainstem, all are true EXCEPT :

- a. Fibers from the inferior salivatory nucleus synapse in the pterygopalatine ganglion
- b. The dorsal vagal nucleus is located underneath the floor of the 4th ventricle
- c. Fibers from the superior salivatory nucleus synapse in the submandibular gangilion
- d. The Edinger-Westphal nucleus supplies the constrictor pupillae muscle
- e. Superior salivatory nucleus supplies the sublingual salivary gland

34-Which of the following is true of stress ?

- a. The initial response of stress enhances the immune system .
- b. Glutamate is the neurotransmitter involved in stress physiology .
- c. Stress contributes to the onset of both physical and psychological disorders.
- d. Stress is associated with increased salivation.
- e. The use of the term stress is restricted to the social factors that disrupt homeostasis.

35-Which of the following statements regarding nonverbal communication is correct ?

- a. Nonverbal communication expresses inner feelings better than verbal communication .
- b. Image is not part of nonverbal communication.
- c. Nonverbal communication is less important than verbal communication .
- d. Interpretation of nonverbal communication is not culture-dependent
- e. Non-verbal communication is conscious.

36-A patient complains of dry skin and poor vision at night. You diagnose the patient with vitamin deficiency. Which molecule is NOT present in sufficient amount in the eye of vitamin A deficiency .

- a. Retinal.
- b. Opsin .
- c. Transducin .
- d. Phosphodiesterase .
- e. Cyclic GMP.

37-You examined a 44-year-old man who suffers from multiple skin nodules and pigmented patches. The biopsy from the skin nodules showed non-encapsulated lesion composed of proliferation of Schwann cells, fibroblasts and mast cells. The patient had an optic glioma removed 1 year ago. Which of the following is INCORRECT about his condition ?

- a. He has a defect in contact inhibition
- b. He has an autosomal dominant syndrome
- c. His children might develop learning disabilities .
- d. He inherited a mutation in neurofibromin gene .
- e. He has an increased risk of developing malignant peripheral nerve sheath tumor.

38-While examining a histologic slide from the brain tissue of a 77-year-old woman who died after suffering from a road traffic accident you noted shrunk neurons

with intense eosinophilic cytoplasm and pyknotic nuclei. You also found occasional extracellular amyloid plaques. Her brain weight was larger than normal with narrow sulci and wide gyri. Which of the following conclusions about her condition is CORRECT ?

- a. Prior to the accident, this lady most likely suffered from dementia .
- b. The intense eosinophilia in the neurons is a result of increased Nissl substance .
- c. She died within less than an hour of the accident .
- d. The narrow sulci and wide gyri suggest that she definitely had a history of hypertension.
- e. The neurons described are a consequence of hypoxic damage and the brain weight supports this assumption.

39-A 7-year-old male presented to the emergency department with severe headache and fever of a few hours' duration. On physical examination, the patient had a stiff neck, and a positive Kernig's sign. Lumbar puncture was performed followed by empiric antibiotic therapy. Gram staining of CSF demonstrated gram negative diplococci. Which of the following is true regarding this case ?

- a. The causative agent can colonize the upper respiratory tract.
- b. A CSF acid fast stain should be ordered due to high suspicion of Tuberculous meningitis .
- c. Initiation of antibiotic therapy should have been done before lumbar puncture.
- d. A positive kerning's sign indicates involvement of brain parenchyma and meningoencephalitis .
- e. This condition is self-limiting with low mortality and morbidity.

40-Which of the following statements concerning the sense of hearing is true:

- a. The outer hair cells of the organ of Corti are the main receptors and their number is less than the inner hair cells .
- b. Contraction of tensor tympani and stapedius muscles (attenuation reflex) increases transmission low frequency sound through middle ear .

- c. Actual conversion of sound waves into electrical potentials occur at the level of middle ear ossicles .
- d. High intensity sound waves result in vibration of the basilar membrane close to the oval window .
- e. Low frequency sound results in vibration of the basilar membrane far from the oval window.

Answers

1	A	11	D	21	D	31	E
2	E	12	D	22	D	32	C
3	B	13	A	23	D	33	C
4	A	14	A	24	C	34	C
5	A	15	B	25	B	35	A
6	C	16	C	26	B	36	A
7	A	17	C	27	A	37	A
8	D	18	B	28	B	38	E
9	A	19	E	29	D	39	A
10	A	20	E	30	D	40	E

اذكرونا بدعوة. ✨