## Done by:rahaf alfogaha

نجنجا سيسس

1 The parasympathetic system is most active during: a) Intense exercise b) Digestion and rest c) Sudden stress d) Competitive sports Answer: B

2 Which cranial nerve is NOT part of the parasympathetic outflow? a) Oculomotor (III) b) Vagus (X) c) Hypoglossal (XII) d) Facial (VII) Answer: C

3 Parasympathetic stimulation of the eye causes: a) Pupil dilation (mydriasis) b) Lens flattenin g (far vision) c) Pupil constriction (miosis) d) Inhibition of tear production Answer : C

4 The vagus nerve (X) supplies all EXCEPT: a) Bronchodilation b) Increased gastric secretion c) Decreased heart rate d) Gallbladder contraction Answer : D

5 Organs with dual autonomic innervation typically exhibit: a) Identical effects from both systems b) Antagonistic effects (e.g., heart rate) c) Sympathetic dominance only d) No parasympathetic supply Answer : A



- 6. Sacral parasympathetic outflow is responsible for:
- a) Ejaculation
- b) Stress responses
- c) Urinary bladder contraction
- d) Sweat gland activation
- e) Pupil dilation
- Answer: c
- 7. Which organ receives ONLY sympathetic innervation?
- a) Heart ventricles
- b) Urinary bladder
- c) Sweat glands
- d) Bronchial muscles
- e) Pancreas
- Answer: C
- 8. Parasympathetic effects on the GI tract include:
  a) Increased motility and secretion
  b) Decreased blood flow
  c) Sphincter contraction
  d) Inhibition of digestion
  e) Glycogenolysis
- Answer : a
- 9. The "rest-and-digest" response includes: a) Increased blood pressure b) Bronchodilation c) Enhanced nutrient absorption d) Pupil dilation e) Sweat production Answer:c

10. Which neurotransmitter is primarily released by parasympathetic fibers?

- a) Norepinephrine
- b) Acetylcholine
- c) Dopamine
- d) Serotonin Answer : B



 The function of the oculomotor (3rd cranial) nerve in parasympathetic outflow includes:
 A. Pupil dilation and lens flattening
 B. Pupil constriction and increased lens power
 C. Pupil dilation and decreased lens power
 D. Pupil constriction and decreased lens power

12. Which of the following cranial nerves stimulates true secretion in the parotid gland? A. Oculomotor nerve B. Facial nerve C. Glossopharyngeal nerve D. Vagus nerve answer c.

Vagal stimulation of the gastrointestinal tract results in:
 A. Relaxation of intestinal walls and contraction of sphincters
 B. Inhibition of all secretions
 C. Contraction of walls and relaxation of sphincters

D. No change in motility

14. Which of the following is a parasympathetic effect on the lunas?

A. Bronchodilation and vasoconstriction

B. Bronchoconstriction and vasodilation

C. Bronchodilation and vasodilation

D. Bronchoconstriction and vasoconstriction answer:b

15. Which organ is supplied only by the parasympathetic system? A. Skin

B. Dilator pupillae muscle

C. Constrictor pupillae muscle

D. Ventricles of the heart

answer:c



16. Sacral parasympathetic outflow contributes to all of the following except:
A. Micturition
B. Defecation
C. Erection
D. Ejaculation
Answer: D

17. Parasympathetic stimulation of the gall bladder causes: A. Relaxation of its wall and contraction of sphincter of Oddi B. Contraction of its wall and relaxation of sphincter of Oddi C. Inhibition of bile secretion D. No effect Answer: B

18. Which of the following best describes the parasympathetic effect on the heart?
A. Increased heart rate and contractility
B. No effect
C. Inhibition of atrial muscle properties
D. Stimulation of ventricular muscle
Answer:c

19.) Cutting of the pelvic nerve may lead to:
A. Infertility in males
B. Complete loss of urinary continence
C. Genital impotence without infertility
D. Increased rectal tone
Answer:c

20.) A patient with damaged vagus nerve may suffer from: A. Bronchodilation and reduced GI motility B. Increased heart rate and defecation C. Increased bile secretion D. Enhanced gall bladder contraction Answer : a



## Done by:rahaf alfogaha

لجنگی میں الاست ان

- 1. Which hypothalamic nucleus is primarily responsible for synthesizing
- Antidiuretic Hormone (ADH)?
- A) Paraventricular nucleus
- B) Suprachiasmatic nucleus
- C) Supraoptic nucleus
- D) Ventromedial nucleus
- E) Dorsomedial nucleus
- Answer: C)
- 2. Stimulation of the posterior and lateral hypothalamic nuclei results in:
- A) Parasympathetic effects (e.g., bradycardia)
- B) Sympathetic effects (e.g., tachycardia)
- C) Increased ADH secretion
- D) Sleep induction
- E) Decreased body temperature
- Answer: B)
- 3. The "satiety center" for food intake regulation is located in the:
- A) Lateral hypothalamus
- B) Suprachiasmatic nucleus
- C) Ventromedial nucleus
- D) Paraventricular nucleus
- E) Mamillary body
- Answer: C)
- 4. Which hypothalamic nucleus is critical for regulating circadian rhythms?
   A) Supraoptic nucleus
   B) Suprachiasmatic nucleus
- C) Preoptic nucleus
- D) Dorsomedial nucleus
- E) Tuberal nucleus
- Answer: B)
- 5. Damage to the amygdala would most likely result in: A) Hyperphagia and obesity B) Loss of fear responses (e.g., approaching snakes) C) Excessive rage reactions D) Persistent sleepiness E) Inability to regulate body temperature Answer: B)



- 6. The "heat loss center" of the hypothalamus is located in the:
- A) Posterior nuclei
- B) Anterior nuclei
- C) Lateral nuclei
- D) Ventromedial nuclei
- E) Suprachiasmatic nuclei
- Answer: B
- 7. Which of the following is a function of the reward center in the anteromedial hypothalamic nuclei?
  A) Induces pain and fear
  B) Promotes avoidance behaviors
  C) Generates feelings of satisfaction
  D) Stimulates sympathetic responses
  E) Inhibits feeding behavior
- Answer: C)
- 8. Sham rage reactions are caused by lesions in the:
  A) Amygdala
  B) Ventromedial nucleus
  C) Supraoptic nucleus
  D) Suprachiasmatic nucleus
  E) Paraventricular nucleus
  Answer: B)
- 9. The hypothalamus controls the posterior pituitary through the:
- A) Hypothalamo-hypophyseal portal system
- B) Hypothalamo-hypophyseal tract
- C) Autonomic nervous system
- D) Circadian rhythm pathways
- E) Limbic system connections

Answer: B)

10. Stimulation of the anterior hypothalamus is most likely to cause:

- A) Increased heart rate
- B) Sleep induction
- C) Hypertension
- D) Hyperphagia
- E) Sweating

Answer:B



11. A 45-year-old male is brought to the emergency department after a car accident with severe head trauma. Imaging reveals damage to the ventromedial nucleus of the hypothalamus. Which of the following clinical findings is most likely to be observed in this patient?

A) Profound anorexia (refusal to eat)

- B) Hyperphagia and obesity
- C) Persistent bradycardia and hypotension
- D) Excessive sweating and heat intolerance
- E) Insomnia and hyperactivity
- Answer: B) Hyperphagia and obesity

12. A 60-year-old woman presents with frequent urination, excessive thirst, and dehydration. Lab tests show hypernatremia (high serum sodium) and dilute urine. Which hypothalamic structure is most likely dysfunctional?

A) Suprachiasmatic nucleus

- B) Paraventricular nucleus
- C) Supraoptic nucleus
- D) Mamillary body
- E) Lateral nucleus
- Answer: C) Supraoptic nucleu



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نجني سنسسابيه

1 Where is Wernicke's area typically located? a) Frontal lobe b) Occipital lobe c) Posterior part of the superior temporal gyrus d) Cerebellum e) Brainstem Answer: c) Posterior part of the superior temporal gyrus

2 Which type of memory involves unconscious recall, such as skills and habits?

a) Declarative memory

b) Immediate memory

c) Reflexive (implicit) memory

d) Secondary memory

e) Primary memory

Answer: c) Reflexive (implicit) memory

3 What is the main function of Broca's area?

a) Understanding written language

b) Producing spoken language

c) Processing visual information

d) Regulating sleep cycles

e) Controlling muscle movements

Answer: b) Producing spoken language

4 Which stage of sleep is characterized by rapid eye movements and vivid dreams?

a) Non-REM Stage 1

b) Non-REM Stage 4

c) REM sleep

d) Drowsiness stage

e) Awakening stage

Answer: c) REM sleep

5 A patient can hear but cannot understand spoken words. This condition is called:

a) Visual aphasia

b) Auditory aphasia

c) Broca's aphasia

d) Agraphia

e) Global aphasia

Answer: b) Auditory aphasia



- 6 Which of the following is a characteristic of Non-REM sleep?
- a) Rapid eye movements
- b) Vivid dreams that are easily remembered
- c) Decreased heart rate and blood pressure
- d) High muscle activity
- e) Difficulty in awakening

Answer: c) Decreased heart rate and blood pressure

7 What happens if the general interpretative area in the dominant hemisphere is damaged?

- a) Inability to speak
- b) Inability to understand written or spoken words
- c) Loss of motor control
- d) Visual hallucinations
- e) Enhanced memory recall
- Answer: b) Inability to understand written or spoken words
- 8 Which type of declarative memory lasts for years or a lifetime?
- a) Immediate memory
- b) Primary memory
- c) Secondary memory
- d) Reflexive memory
- e) Sensory memory
- Answer: c) Secondary memory
- 9 A patient with damage to area 44 would most likely exhibit:
- a) Inability to understand spoken language
- b) Inability to write
- c) Inability to speak despite intact speech muscles
- d) Visual hallucinations
- e) Loss of long-term memory
- Answer: c) Inability to speak despite intact speech muscles
- 10 Which of the following is NOT a physiological significance of sleep?
- a) Memory consolidation
- b) Restoration of body systems
- c) Increased cell division
- d) Suppression of hormonal homeostasis
- e) Physical and mental rest
- Answer: d) Suppression of hormonal homeostasis



11 In which stage of Non-REM sleep is it most difficult to awaken a person?

- a) Stage 1
- b) Stage 2
- c) Stage 3
- d) Stage 4
- e) REM sleep
- Answer: d) Stage 4

12 Which type of aphasia results from a combination of damage to both sensory and motor speech areas? a) Wernicke's aphasia

- b) Broca's aphasia
- c) Global aphasia
- d) Agraphia
- e) Visual aphasia
- Answer: c) Global aphasia

11. A 65-year-old right-handed patient is brought to the clinic by his family. They report that he speaks fluently but his sentences are nonsensical and contain incorrect words (e.g., "The sky is boiling with happiness"). He does not seem to understand questions asked of him. MRI reveals a lesion in the left superior temporal gyrus. What is the most likely diagnosis?

- a) Broca's aphasia
- b) Wernicke's aphasia
- c) Global aphasia
- d) Agraphia
- e) Visual aphasia
- Answer: b) Wernicke's aphasia

12. A 50-year-old patient with a history of stroke has difficulty forming complete sentences. His speech is slow, effortful, and lacks grammar (e.g., "Food... eat... hungry"). However, he can comprehend written and spoken language. Which brain area is most likely affected?

- a) Wernicke's area
- b) Broca's area
- c) General interpretative area
- d) Occipital lobe
- e) Cerebellum

Answer: b) Broca's area



13. A dental student pulls an all-nighter studying for an exam. The next day, he struggles to recall information he memorized the previous night. Which type of memory was most affected due to lack of sleep?

a) Reflexive (implicit) memory

b) Immediate (sensory) memory

c) Primary (short-term) memory

d) Secondary (long-term) memory consolidation

e) Procedural memory

Answer: d) Secondary (long-term) memory consolidation

14.A patient reports frequent awakenings at night and unrefreshing sleep. Polysomnography shows reduced REM sleep duration. Which of the following is most likely impaired due to this deficit?

a) Physical muscle restoration

b) Emotional regulation and memory processing

c) Hormonal balance during deep sleep

d) Basic metabolic functions

e) Reflexive motor skills

Answer: b) Emotional regulation and memory processing

15. A 70-year-old patient with Alzheimer's disease can still ride a bicycle despite forgetting recent events.
Which type of memory is preserved in this patient?
a) Declarative (explicit) memory
b) Episodic memory
c) Semantic memory
d) Reflexive (implicit) memory
e) Immediate memory

Answer: d) Reflexive (implicit) memory

