What is the main function of neuropharmacology

- A. To study how drugs affect the nervous system
- B. To study plant genetics
- C. To develop new cooking techniques
- D. To analyze climate patterns

What are neurotransmitters and how do they work in the brain

- A. Hormones that regulate sleep
- B. Chemicals that help transmit signals in the brain
- C. Vitamins that improve memory
- D. Proteins that build brain cells

Name two types of drugs that act on the central nervous system.

- A. Chemotherapy drugs, Muscle relaxants
- B. Antibiotics, Antihistamines
- C. Cholesterol medication, Insulin
- D. Opioids, Stimulants

How do psychoactive drugs affect brain function

- A. By reducing brain activity
- B. By enhancing memory function
- C. By altering neurotransmitter levels and communication in the brain
- D. By increasing blood flow to the brain

What is the blood-brain barrier and why is it important in neuropharmacology

- A. It is a barrier that enhances the delivery of drugs to the brain.

- B. It is a term used to describe brain hemorrhages.
- C. It is a protective barrier that prevents harmful substances from entering the brain.
- D. It is a type of blood test that measures brain function.

What is the difference between agonists and antagonists in neuropharmacology

- A. Agonists and antagonists have the same function in neuropharmacology.
- B. Agonists inhibit receptors, while antagonists activate receptors.
- C. Agonists and antagonists are interchangeable terms in neuropharmacology.
- D. Agonists activate receptors, while antagonists inhibit receptors.

How do drugs like SSRIs work to treat depression

- A. Decrease dopamine levels in the brain
- B. Increase serotonin levels in the brain
- C. Target specific regions of the brain
- D. Affect adrenaline production in the body

What are the potential side effects of long-term use of neuropharmacological drugs

- A. Drowsiness
- B. Dependence
- C. Nausea
- D. Headache

Explain the concept of drug tolerance and how it develops in the brain.

- A. Drug tolerance is caused by decreased drug metabolism in the liver.
- B. Drug tolerance develops in the brain by increasing the drug's effectiveness.
- C. Drug tolerance is when the body becomes more sensitive to a drug over time.
- D. Drug tolerance is when the body becomes less responsive to a drug over time, requiring higher

doses to achieve the same effect.

What is the role of dopamine in reward pathways in the brain

- A. Regulates feelings of pleasure and reward
- B. Regulates sleep patterns
- C. Maintains body temperature
- D. Controls motor function

How do drugs like opioids affect pain perception in the brain

- A. They increase pain signals in the brain
- B. They only mask pain temporarily
- C. They have no effect on pain perception
- D. They block pain signals in the brain

What is the function of GABA in the brain and how do drugs like benzodiazepines af

- A. GABA has no role in brain function. Benzodiazepines have no effect on GABA activity.
- B. GABA is an inhibitory neurotransmitter that reduces neuronal activity in the brain. Benzodiazepines enhance GABA activity.
- C. GABA is a hormone that regulates sleep. Benzodiazepines disrupt GABA production.
- D. GABA is an excitatory neurotransmitter that increases neuronal activity in the brain. Benzodiazepines block GABA activity.

How do antipsychotic medications like haloperidol work to treat schizophrenia

- A. Stimulate serotonin production
- B. Block dopamine receptors
- C. Inhibit glutamate release
- D. Increase dopamine levels

What is the difference between a drug's therapeutic effect and its side effects

- A. Therapeutic effect treats the condition, side effects are unwanted effects
- B. Therapeutic effect is temporary, side effects are permanent
- C. Therapeutic effect is beneficial, side effects are harmful
- D. Therapeutic effect is stronger, side effects are weaker

How do drugs like caffeine and nicotine affect neurotransmitter release in the brain

- A. Have no effect on neurotransmitter release
- B. Destroy neurotransmitter release
- C. Stimulate neurotransmitter release
- D. Inhibit neurotransmitter release

What is the role of glutamate in excitatory neurotransmission and how do drugs like

- A. Ketamine decreases glutamate activity.
- B. Ketamine increases glutamate activity.
- C. Glutamate is an inhibitory neurotransmitter.
- D. Glutamate is a primary excitatory neurotransmitter in the brain.

How do drugs like LSD and psilocybin affect perception and consciousness

- A. Increase blood pressure and heart rate
- B. Cause permanent brain damage
- C. Induce hallucinations and delusions
- D. Alter neural pathways and neurotransmitter activity

What is the role of the endocannabinoid system in the brain and how do drugs like T

- A. Causing hallucinations and paranoia

- B. Inducing sleepiness and drowsiness
- C. Increasing heart rate and blood pressure
- D. Regulating mood, memory, appetite, and pain perception

Describe the process of drug metabolism in the liver and its impact on drug efficacy

- A. Liver metabolizes drugs which can affect their efficacy.
- B. Drug efficacy is not affected by liver metabolism.
- C. The process of drug metabolism does not impact drug efficacy.
- D. Liver does not play a role in drug metabolism.

How do drugs like amphetamines and cocaine affect neurotransmitter reuptake in th

- A. Decrease neurotransmitter reuptake
- B. Have no effect on neurotransmitter reuptake
- C. Destroy neurotransmitter reuptake
- D. Increase neurotransmitter reuptake