

Exam 2 break down: updated 2/17/25

Ch 4 part 1 – remainder of chapter – 13 questions

9 on monoamine neurotransmitters (serotonin, dopamine) & drugs that affect it (SSRI's, MAO-I A and MAO-I B, cocaine)

1 on how erectile dysfunction drugs work

3 on GABA, glycine, and glutamate

Epinephrine signaling with adrenergic receptors will be covered as part of Ch 4 part 3 (see below)

Ch 4 part 2 (CNS) – 20 questions

1 on brain regions: (cerebrum, diencephalon, midbrain, pons, medulla, cerebellum)

3 on cerebral lobes (frontal, parietal, temporal, occipital, insula). Which have what cortexes, where are broca's and wernike's areas)

1 on cerebral basal nuclei for motor control (caudate nucleus, claustrum, putamen, globus pallidus)

1 on cerebral basal nuclei for emotions (amygdala, cingulate gyrus, septal nuclei)

2 on midbrain functions & neurons (superior colliculus, inferior colliculus, red nucleus, substantia nigra)

1 on aphasia (broca's and wernike's)

5 on hypothalamic neurons

> supraoptic

> paraventricular

> anterior

> ventromedial

> lateral

> preoptic

> suprachiasmatic

2 on reticular activating system (+ ACh, norepinephrine, dopamine, hypocretin, - GABA)

1 on sleep and neurotransmitters

3 on brain imaging techniques (x-ray, CT scan, MRI, PET scan, EEG)

Ch 4 part 3 (PNS) – 17 questions

6 on nerve pairs involved in parasympathetic (vagus and sacral) and sympathetic (thoracic and lumbar) responses

6 on epinephrine & its adrenergic receptors (beta 1, beta 2, and alpha) & sympathetic (fight/flight) responses. Be aware that I might use Greek symbols for receptors (α , β_1 , and β_2)

5 on adrenergic drugs (propranolol, atenolol, dobutamine, isoproterenol, and albuterol)