**PHA 308**

**NEUROPHARMACOLOGY**

**Mock test**

**Fill in the gaps with the most appropriate answer(s)**

1. The two barrier systems in the brain are blood brain barrier and blood CSF brain system
2. Neurotransmission processes are neurotransmitters synthesis, neurotransmitters packaging, neurotransmitters release, neurotransmitters binding and stopping chemical signal.
3. GABA receptors and glutamate NMDA are examples of ionotropic receptors.
4. The inhibitory neurotransmitters glycine and GABA opens Cl- channels, resulting in post synaptic target hyperpolarization.
5. The neurotransmitter which causes psychosis in excess and Alzheimer’s disease when lacking is acetylcholine
6. The neurotransmitter which causes psychosis in excess and Parkinson’s disease when lacking is dopamine
7. Tyrosine-derived neurotransmitters are norepinephrine and dopamine
8. A disease characterized by an imbalance between dopaminergic and cholinergic system in the brain is Parkinson disease
9. Sedative is a drug that reduces excitement and produces calming effect without inducing sleep, while Hypnotic is a drug that induces and/or maintains sleep
10. Pharmacological action of benzodiazepines includeskeletal muscle relaxants, anticonvulsant,.amnestic, sedative, hypnotic and anti anxiety.
11. The monoamine theory of depression states that ….depression is caused by a deficiency of deficit of the monoamine transmitters, noradrenaline and 5-hydroxytryptamine (5-HT)at certain sites in the brain.

**Indicate “TRUE/T” or “FALSE/F” in front of each statement contained in letter A-D**

1. Centrally acting drugs act via the following broad mechanisms
2. Transmitter-specific action T
3. Neuron-specific action T
4. Signal-specific action T
5. All of the above T
6. These targets is/are of significance in the treatment of depression
7. Selective serotonin reuptake inhibitors T
8. Serotonin-noradrenaline reuptake inhibitors T
9. NMDA receptor antagonists F
10. Calcium channel blockers F
11. Match the following antidepressants with their respective groups
12. Tricyclic antidepressant e.g. amitriptyline T
13. Irreversible monoamine oxidase inhibitor e.g. mianserin F
14. Monoamine receptor antagonist e.g. phenelzine T
15. Tricyclic antidepressant e.g. imipramine T
16. The differences between brain and peripheral capillary bed includes:
17. Brain capillaries have tight junctions while peripheral capillaries have fenestrated junctions T
18. Brain capillaries have fenestrated junctions while peripheral capillaries have tight junctions F
19. Brain capillaries have fewer mitochondria than peripheral capillaries F
20. Brain capillaries have more mitochondria than peripheral capillaries T